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Check List of the Lepidoptera of Canada and the United States of America

PART II

MICROLEPIDOPTERA

by J. McDUNNOUGH, Ph.D.

Los Angeles, California Issued July 15, 1939

Southern California Academy of Sciences

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INTRODUCTION

IN this second and final portion of the "List", dealing with the so-called "Microlepidoptera" practically no attempt has been made, as was done in Part I, to study the genitalia of the genotypes and base the arrangement of the species in the genera and the genera in the families or subfamilies on similarities found in these organs. The impossibility of securing sufficient material for such a study and furthermore the lack of knowledge on the part of the writer of many of the groups, rendered such a course inadvisable. In the main, therefore, the latest revisions of the various groups have been pretty closely followed and in cases where no revision has been made since the publication of the 1917 Check List the arrangement of genera and species remains much the same as in this list, although it is fully recognized that in certain families, notably in the Pyralidoidea, there is considerable need for revision.

Every effort has been made, by a comprehensive study of the literature, to bring the sequence of families in accord with the latest views on the subject and to include all species published to the end of 1938; just how far this effort has been successful remains for the specialists to decide.

A list of corrections to Part I is inserted and it is hoped that any further errors discovered from time to time will be brought to the author's attention. The general arrangement of the present Part follows that of the previous one.

Superfamily **ZYGAENOIDEA**

LIMACODIDAE

Sibine H. S.

5230 stimulea *Clem.*
ephippiatus Harr.

Parasa Moore

5231 indetermina *Bdv.*
vernata Pack.

5232 chloris *H. S.*
viridis Reak.
fraterna Grt.
a huachuca *Dyar*

Euclea Hbn.

5233 nanina *Dyar*
‡*nana* Dyar

5234 delphinii *Bdv.*
strigata Bdv.
quercicola H. S.
tardigrada Clem.
ferruginea Pack.
argentatus Weth.
form querceti *H. S.*
bifida Pack.
form interjecta *Dyar*
form viridiclava *Wlk.*
monitor Pack.
form ellioti *Pears.*
form paenulata *Clem.*
excisa Wlk.

5235 incisa *Harv.*
mira Dyar

5236 flava *B. & McD.*

5237 dolliana *Dyar*
a spadicis *Grossb.*

Monoleuca G. & R.

5238 subdentosa *Dyar*

5239 angustilinea *Dyar*

5240 semifascia *Wlk.*
a sulfurea *Grt.*

5241 obliqua *Hy. Edw.*

5242 erectifascia *Dyar*

5243 occidentalis *B. & McD.*

5244 fieldi *B. & B.*

5245 disconcolorata *B. & B.*

Adoneta Clem.

5246 spinuloides *H. S.*
voluta Clem.
ferrigera Wlk.
ruptilinea Wlk.
nebulosus Weth.
form leucosigma *Pack.*

5247 bicaudata *Dyar*

5248 pygmaea *G. & R.*

5249 gemina *Dyar*

Sisyrosea Grt.

5250 textula *H. S.*
inornata G. & R.

5251 schaefferana *Dyar*

Natada Wlk.

5252 nasoni *Grt.*
daona Druce
rude Hy. Edw.

5253 nigripuncta *B. & McD.*

Phobetron Hbn.

5254 pithecium *A. & S.*
abbotana Hbn.
nigricans Pack.
hyalinus Walsh
tetradactylus Walsh
nondescriptus Weth.

5255 dyari *B. & B.*

Isochaetes Dyar

5256 beutenmuelleri *Hy. Edw.*

Cryptophobetron Dyar

5257 oropeso *Barnes*

Alarodia Moesch.

5258 slossoniae *Pack.*

Cnidocampa Dyar

5259 flavescens *Wlk.*

Prolimacodes Schaus

5260 badia *Hbn.*
scapha Harr.
undifera Wlk.
a argentimacula *B. & McD.*

5261 trigona *Hy. Edw.*
telligii Barnes
filifera Dyar

Limacodes Latr.

5262 biguttata *Pack.*
tetraspilaris Wlk.

5263 rectilinea *G. & R.*
a latomia *Harv.*

5264 y-inversa *Pack.*
a parallela *Hy. Edw.*

5265 maxima *Dyar*

Lithacodes Pack.

5266 fasciola *H. S.*
laticlavia Clem.
divergens Wlk.
a belfragei *Dyar*

5267 gracea *Dyar*

5268 fiskeana *Dyar*

5269 graefi *Pack.*

Packardia G. & R.

5270 elegans *Pack.*
nigripunctata Goodell
a fusca *Pack.*

5271 ceanothi *Dyar*

5272 geminata *Pack.*

5273 albipunctata *Pack.*
goodelli Grt.
a ocellata *Grt.*

Heterogenea Knoch

5274 shurtleffi *Pack.*

Kronaea Reak.

5275 minuta *Reak.*

Slossonella Dyar

5276 tenebrosa *Dyar*

Tortricidia Pack.

5277 flexuosa *Grt.*
form caesonia *Grt.*

5278 pallida *H. S.*
a flavula *H. S.*

5279 testacea *Pack.*
a crypta *Dyar*

Epiperola Dyar

5279, 1 perornata *Dyar*

MEGALOPYGIDAE

Norape Wlk.

5280 ovina *Sepp*
cretata Grt.

5281 virgo *Butl.*

5282 tener *Druce.*
achriogelos Dyar

Megalopyge Hbn.

5283 opercularis *A. & S.*
lanuginosa Clem.
subcitrina Wlk.

5284 bissesa *Dyar*

5285 lapena *Schaus*
a heteropuncta *B. & McD.*

Lagoa Harris

5286 crispata *Pack.*
ab. grisea *B. & McD.*

5287 laceyi *B. & McD.*

5288 pyxidifera *A. & S.*

5289 immaculata *Cass.*

Trosia Hbn.

5290 obsolescens *Dyar*

DALCERIDAE

Dalcerides N. & D.

5291 ingenita *Hy. Edw.*

EPIPYROPIDAE

Epipyrops Westw.

5292 barberiana *Dyar*

Oedonia Kirby

5292, 1 exigua *Hy. Edw.*

ZYGAENIDAE

Malthaca Clem.

5293 dimidiata *H. S.*
perlucidula Clem.

5294 centralis *Wlk.*
notha Hy. Edw.

5295 rata *Hy. Edw.*

5296 fusca *Hy. Edw.*
landia Druce

5297 marteni *Frch.*
barnea Druce

Tetraclonia Jordan

5298 latercula *Hy. Edw.*

5299 dyari *Jord.*
‡*laterculae* Dyar

Triprocris Grt.

5300 smithsonianus *Clem.*

5301 yampai *Barnes*

Acoloithus Clem.

5302 falsarius *Clem.*
sanborni Pack.
ruficollis Druce

5303 novarius *B. & McD.*

5304 rectarius *Dyar*

Seryda Wlk.

5305 constans *Hy. Edw.*
form sancta *N. & D.*

5306 basirei *Druce*

Harrisina Pack.

5307 americana *Guer.*
a texana *Stretch*
b australis *Stretch*

5308 metallica *Stretch*

5309 coracina *Clem.*
nigrina Graef

5310 brillians *B. & McD.*

5311 lustrans *Beut.*

5312 cyanea *B. & McD.*

5313 aversus *Hy. Edw.*

Superfamily **PYRALIDOIDEA**

THYRIDIDAE

Thyris Lasp.

5314 maculata *Harris*
perspicua Wlk.

5315 lugubris *Bdv.*
sepulchralis Bdv.
margaritana Clem.
nevadae Oberth.

Dysodia Clem.

5316 vitrina *Bdv.*

5317 oculatana *Clem.*
plena Wlk.
fasciata G. & R.
montana Hy. Edw.
aurea Pag.

5318 granulata *Neum.*
a igualensis *Dyar*

5319 speculifera *Sepp*
aequalis Wlk.

5320 flagrata *Wlk.*
floridana Hlst.

Hexeris Grt.

5321 enhydris *Grt.*
reticulina Beut.

Belnoptera H. S.

5322 fratercula *Pag.*

Meskea Grt.

5323 dyspteraria *Grt.*

Thyridopyralis Dyar

5324 gallaerandialis *Dyar*

PYRALIDAE

GLAPHYRIINAE

Glaphyria Hbn.

5325 glaphyralis *Gn.*
stipatalis Wlk.
albolineata G. & R.

5326 sesquistrialis *Hbn.*
dimotalis Wlk.

5327 invisalis *Gn.*
lentiflualis Zell.

5328 psychialis *Hlst.*

5329 reluctalis *Hlst.*
form remellalis *Druce*

5330 fulminalis *Led.*

5331 peremptalis *Grt.*

5332 basiflavalis *B. & McD.*

5333 dualis *B. & McD.*

5334 periculosalis *Dyar*

Scybalista Led.

5335 restionalis *Led.*

Egesta Rag.
Symphysa Hamp.

5336 reniculalis *Zell.*

5337 simplicialis *Kft.*

5338 eripalis *Grt.*
a salutalis *Hlst.*
ochralis Haim.

5339 minutalis *Walt.*

Lipocosma Led.

5340 sicalis *Wlk.*
perfusalis Wlk.

5341 diabata *Dyar*

5342 fuliginosalis *Fern.*

5343 intermedialis *B. & McD.*

5344 adelalis *Kft.*

5345 albibasalis *B. & McD.*

Chalcoela Zell.

5346 iphitalis *Wlk.*
aurifera Zell.

Dicymolomia Zell.

5347 julianalis *Wlk.*
decora Zell.

5348 opuntialis *Dyar*

5349 metalliferalis *Pack.*
sauberi Hed.

5350 pegasalis *Wlk.*
principalis Wlk.
egressalis Wlk.
robinsoni Grt.

PYRAUSTINAE

Sufetula Wlk.

5351 diminutalis *Wlk.*
dematrialis Druce

5352 philogelos *Dyar*

Hymenia Hbn.

5353 perspectalis *Hbn.*

5354 fascialis *Cram.*
recurvalis Fabr.

Desmia West.

5355 funeralis *Hbn.*
maculalis West.
♀*subdivisalis* Grt.
nominabilis Her.

5356 tages *Cram.*
propinqualis Moesch.

Synclera Led.

5357 traducalis *Zell.*
jarbusalis Wlk.
cottalis Wlk.

Ercta Wlk.

5358 ornatalis *Dup.*

5359 desmialis *B. & McD.*
kaeberalis Haim.

Marasmia Led.

5360 cochrusalis *Wlk.*
azionalis Wlk.
ruptalis Wlk.

5361 trapezalis *Gn.*
creonalis Wlk.
bifurcalis Snell.

5362 floridalis *Fern.*

Anania Hbn.

5363 florella *Cram.*

Eurrhyparodes Snell.

5364 lygdamis *Druce*

Samea Gn.

5365 ecclesialis *Gn.*
castellalis Gn.
luccusalis Wlk.
disertalis Wlk.

5366 multiplicalis *Gn.*
discessalis Wlk.
nicaeusalis Wlk.

Diastictis Hbn.

5367 argyralis *Hbn.*
form ventralis *G. & R.*

5368 fracturalis *Zell.*

5369 caecalis *Warr.*

5370 talis *Grt.*
florepicta Dyar

Pilocrocis Led.

5371 ramentalis *Led.*
perfuscalis Hlst.

5372 tripunctata *Fabr.*
campalis Gn.
cubanalis Gn.
memmialis Wlk.

5373 plumbicostalis *Grt.*

5374 inguinalis *Gn.*
thoasalis Wlk.
anticostalis Grt.
levalis Hlst.

5375 tristigmalis *Hamp.*

Conchylodes Gn.

5376 diphteralis *Gey.*

5377 salamisalis *Druce*

5378 ovulalis *Gn.*
concinnalis Hamp.

Dichogama Led.

5379 redtenbacheri *Led.*

5380 amabilis *Moesch.*

5381 bergi *Moesch.*

Lamprosema Hbn.

5382 lunulalis *Hbn.*

5383 victoriae *Dyar*

5384 subbasalis *Dyar*

Hedylepta Led.

5385 indicata *Fabr.*
vulgalis Gn.
connexalis Wlk.

5386 futilalis *B. & McD.*

Blepharomastix Led.

5387 ebulealis *Gn.*

5388 aplicalis *Gn.*
xeniolalis Hlst.

5389 rehamalis *Dyar*

5390 acutangulalis *Snell.*
santatalis B. & McD.

5391 magualis *Gn.*
medealis Wlk.
belusalis Wlk.
curtalis Wlk.

5392 ranalis *Gn.*
archasialis Wlk.
ofellusalis Wlk.
olliusalis Wlk.
strictalis Wlk.
gracilis G. & R.
a datisalis *Druce*
occidentalis Haim.

5393 stenialis *Gn.*
acestealis Wlk.
phaerusalis Wlk.

Nacoleia Wlk.

5394 hampsoni *B. & McD.*

Asciodes Gn.

5395 gordialis *Gn.*
quietalis Wlk.
confusalis Hlst.

5396 anormalis *Gn.*
alvinalis Gn.
helcitalis Wlk.
orphnealis Wlk.
dracusalis Wlk.
subaequalis Wlk.

Pantographa Led.

5397 limata *G. & R.*

Sylepta Hbn.

5398 penumbralis *Grt.*

5399 fluctuosalis *Led.*

5400 silicalis *Gn.*
sublutalis Druce

5401 obscuralis *Led.*

5402 masculinalis *B. & McD.*

5403 brumalis *B. & McD.*

5404 elevata *Fabr.*

5405 miamialis *Dyar*

5406 pimalis *B. & B.*

Lygropia Led.

5407 rivulalis *Hamp.*
nymphulalis Haim.

5408 stictigramma *Hamp.*

5409 chromalis *Gn.*
principalis Led.

Agathodes Gn.

5410 designalis *Gn.*
floridalis Hlst.

5411 monstralis *Gn.*

Glyphodes Gn.

5412 pyloalis *Wlk.*

Paradosis Zell.

5413 flegia *Cram.*
phantasmalis Gn.
villosalis Zell.

Diaphania Hbn.

5414 olealis *Feld.*

5415 nitidalis *Stoll*
vitralis Hbn.
fumosalis Gn.
praxialis Druce

5416 infimalis *Gn.*

5417 arguta *Led.*

5418 hyalinata *Linn.*
marginalis Stoll
lucernalis Hbn.
ab. niveocilia *Hamp.*

5419 quadristigmalis *Gn.*

5420 sibillalis *Wlk.*
batesi Feld.
alitalis Hlst.

Metrea Grt.

5421 ostreonalis *Grt.*
urticaloides Fyles

Ommatospila Led.

5422 narcaeusalis *Wlk.*
nummulalis Led.

Hellula Gn.

5423 undalis *Fabr.*
rogatalis Hlst.

5424 phidilealis *Wlk.*

5425 aqualis *B. & McD.*

Sameodes Snell.

5426 subcostalis *Hamp.*

5427 elealis *Wlk.*
taedialis Wlk.
phyllisalis Wlk.
adipaloides G. & R.

5428 trimaculalis *Grt.*

5429 mopsalis *Wlk.*

Mimorista Warr.

5430 flavidissimalis *Grt.*

Terastia Gn.

5431 meticulosalis *Gn.*
subjectalis Led.
coeligenalis Hlst.

Laniifera Hamp.

5432 cyclades *Druce*

Evergestis Hbn.

5433 funalis *Grt.*

5434 insulalis *B. & McD.*

5435 obliqualis *Grt.*

5436 subterminalis *B. & McD.*

5437 triangulalis *B. & McD.*

5438 simulatalis *Grt.*
brunneogrisea Hy. Edw.

5439 vinctalis *B. & McD.*

5440 eurekalis *B. & McD.*

5441 obscuralis *B. & McD.*

5442 rimosalis *Gn.*

5443 consimilis *Warr.*

5444 aridalis *B. & McD.*

5445 lunulalis *B. & McD.*

5446 straminalis *Hbn.*
eunusalis Wlk.

Azochis Wlk.

5447 rufidiscalis *Hamp.*

Crocidophora Led.

5448 serratissimalis *Zell.*
subdentalis Grt.

5449 pustuliferalis *Led.*

5450 palindialis *Gn.*
dyaralis Fern.

5451 tuberculalis *Led.*

Stenophyes Led.

5452 huronalis *Gn.*
zinghalis Wlk.
serinalis Wlk.

Polygrammodes Gn.

5453 capitalis *Grt.*

5454 hirtalis *Gn.*
lybialis Wlk.
amatalis Wlk.

Nomophila Hbn.

5455 noctuella *D. & S.*

Pachyzancla Meyr.

5456 periusalis *Wlk.*

5457 bipunctalis *Fabr.*
detritalis Gn.
lycialis Wlk.

5458 repetitalis *Grt.*

5459 phaeopteralis *Gn.*
cellatalis Wlk.

Loxostege Hbn.

5460 dasconalis *Wlk.*

5461 coloradensis *G. & R.*
pergilvalis Hlst.

5462 chortalis *Grt.*

5463 aureolalis *Hlst.*
cyralis Druce

5464 obliteralis *Wlk.*
marculenta G. & R.

5465 kearfottalis *Walt.*

5466 unipunctalis *Walt.*

5467 mancalis *Led.*

5468 helvialis *Wlk.*
thycesalis Wlk.
apertalis Wlk.
citrina G. & R.

5469 bifidalis *Fabr.*
inornatalis Wlk.

5470 flavalis *Fern.*

5471 similalis *Gn.*
licealis Gn.
crinisalis Wlk.
diotimealis Wlk.
communis Grt.
caffreii F. & M.
form rantalis *Gn.*
siriusalis Wlk.
murcialis Wlk.
intractella Wlk.
posticata G. & R.
occidentalis Pack.

5472 typhonalis *B. & McD.*

5473 allectalis *Grt.*
perplexalis Fern.

5474 lepidalis *Hlst.*

5475 terpnalis *B. & McD.*

5476 plana *Grt.*
roseiterminalis B. & McD.

5477 baccatalis *Hlst.*

5478 sticticalis *Linn.*

5479 commixtalis *Wlk.*
indotatellus Wlk.
cereralis Zell.

5480 offumalis *Hlst.*

5481 thrallophyllalis *Hlst.*

5482 indentalis *Grt.*

5483 albiceralis *Grt.*
a floridalis *B. & McD.*

5484 oberthuralis *Fern.*

5485 labeculalis *Hlst.*

5486 annaphilalis *Grt.*

5487 anartalis *Grt.*
a lulualis *Hlst.*

5488 albertalis *B. & McD.*

5489 saxicolalis *B. & McD.*

5490 flavifimbrialis *Warr.*

5491 succandidalis *Hlst.*
simplex Warr.

5492 ophionalis *Wlk.*
nasonialis Zell.

5493 sesquialteralis *Zell.*

5494 vibicalis *Zell.*

5495 parvipicta *B. & McD.*

5496 unilinealis *B. & McD.*

Sericoplaga Warr.

5497 maclurae *Riley*
externalis Warr.

Diasemia Hbn.

5498 ramburialis *Dup.*
leodocusalis Wlk.

5499 nigralis *Fern.*

5500 janassialis *Wlk.*
hariolalis Hlst.

5501 plumbosignalis *Fern.*

5502 zephyralis *B. & McD.*

5503 roseopennalis *Hlst.*
chromaphila Dyar

5504 magdalena *Fern.*

5505 elegantalis *Warr.*
argalis Fern.

5506 disputalis *B. & McD.*

5507 leucosalis *B. & McD.*

5508 alaskalis *Gibs.*

Gonocausta Led.

5509 sabinalis *Dyar*

Antigastra Led.

5510 catalaunalis *Dup.*

Liopasia Moesch.

5511 teneralis *Led.*

Condylorrhiza Led.

5512 vestigialis *Gn.*
a tritealis *Wlk.*
mestoralis Wlk.
oratalis Hlst.

Microcausta Hamp.

5513 flavipunctalis *B. & McD.*

5514 bipunctalis *B. & McD.*

Tholeria Hbn.

5515 reversalis *Gn.*

5516 pyraustalis *Dyar*

Calamochrous Led.

5517 straminea *Warr.*

Boeotarcha Meyr.

5518 demantrialis *Druce*

5519 stigmosalis *Warr.*

Cybalomia Led.

5520 extorris *Warr.*
quadristrigalis Fern.

Gyros Hy. Edw.

5521 muiri *Hy. Edw.*
rubralis Warr.

5522 atripennalis *B. & McD.*

Autocosmia Warr.

5523 concinna *Warr.*

5524 nexalis *Hlst.*

Maroa B. & McD.

5525 unicoloralis *B. & McD.*

Edia Dyar

5526 semiluna Sm.
bidentalis B. & McD.
microstagma Dyar

5527 minutissima *Sm.*
coolidgei Dyar

Orenaia Dup.

5528 coloradalis *B. & McD.*

5529 trivialis *B. & McD.*

Titanio Hbn.

5530 pollinalis *Schiff.*
flavinotalis Grt.

5531 ephippialis *Zett.*

5532 alticolalis *B. & McD.*

5533 subargentalis *B. & McD.*

5534 dapalis *Grt.*

5535 proximalis *Fern.*

5536 triumphalis *Grt.*

5537 immerens *Harv.*

5538 helianthialis *Murt.*

5539 murmuralis *Dyar*

5540 belialis *Druce*

5541 lutosalis *B. & McD.*

5542 laetalis *B. & McD.*

Chrismania B. & McD.

5543 pictipennalis *B. & McD.*

Polingia B. & McD.

5544 quaestoralis *B. & McD.*

Perispasta Zell.

5545 caeculalis *Zell.*
♀ *immixtalis* Grt.

Phlyctaenia Hbn.

5546 rubigalis *Gn.*
oblunalis Led.
harveyana Grt.

5547 profundalis *Pack.*

5548 desistalis *Wlk.*

5549 inquinatalis *Zell.*
glacialis Pack.

5550 nordeggensis *McD.*

5551 sheppardi *McD.*

5552 rusticalis *B. & McD.*

5553 itysalis *Wlk.*
variegata Wlk.
turmalis Grt.
hyperborealis Moesch.
tillialis Dyar

5554 saxifragae *McD.*

5555 washingtonalis *Grt.*
invinctalis Hlst.

5556 angustalis *B. & McD.*

5557 berberalis *B. & McD.*

5558 radiosalis *Moesch.*

5559 indistinctalis *Warr.*

5560 acutella *Wlk.*
venalis Grt.

5561 terrealis *Tr.*
mysippusalis Wlk.
humilalis Led.

5562 extricalis *Gn.*
dionalis Wlk.
nisoeecalis Wlk.
intricatalis Led.
oppilalis Grt.

5563 helvalis *Wlk.*
oscitalis Grt.
gyralis Hlst.
botys Strand

5564 tertialis *Gn.*
plectilis G. & R.
syringicola Pack.

Cindaphia Led.

5565 bicoloralis *Gn.*
julialis Wlk.
incensalis Led.
amiculatalis Berg.
pulchripictalis Hamp.

5566 augustalis *F. & R.*

Epicorsia Hbn.

5567 mellinalis *Hbn.*
oedipodalis Gn.
butyrosa Butl.

Pyrausta Schrank

5568 sartoralis *B. & McD.*

5569 pilatealis *B. & McD.*

5570 napaealis *Hlst.*

5571 linealis *Fern.*

5572 ochreicostalis *B. & McD.*

5573 zonalis *B. & McD.*

5574 galactalis *Dyar*

5575 vacunalis *Grt.*

5576 pertextalis *Led.*
genitalis Grt.
thesealis Zell.

5577 fissalis *Grt.*

5578 aeglealis *Wlk.*
quinquelinealis Grt.

5579 thestealis *Wlk.*
magistralis Grt.
gulosalis Hlst.

5580 abdominalis *Zell.*

5581 theseusalis *Wlk.*
feudalis Grt.

5582 langdonalis *Grt.*

5583 oxydalis *Gn.*

5584 flavidalis *Gn.*
lacoalis Wlk.
cinctipedalis Wlk.

5585 fuscimaculalis *Grt.*
flavicoloralis Grt.
confovealis Hlst.

5586 submedialis *Grt.*
dissectalis Grt.
pilalis Hlst.

5587 gracilalis *Hlst.*
atrisquamalis Hamp.

5588 haedulalis *Hlst.*

5589 illibalis *Hbn.*

5590 arsaltealis *Wlk.*
euphaesalis Wlk.
guttulosa Wlk.
fascialis Wlk.
subjectalis Led.
magniferalis Wlk.

5591 pseudoranalis *B. & McD.*

5592 potentalis *B. & McD.*

5593 venalalis *Hlst.*

5594 penitalis *Grt.*
nelumbialis Sm.

5595 ainsliei *Heinr.*

5596 obumbratalis *Led.*

5597 beddeci *Dyar*

5598 fumalis *Gn.*
orasusalis Wlk.
badipennis Grt.

5599 fumipennis *Warr.*

5600 inconcinnalis *Led.*
crocotalis Grt.
festalis Hlst.

5601 futilalis *Led.*
erectalis Grt.

5602 fumoferalis *Hlst.*

5603 singularis *Led.*

5604 octosignalis *Hlst.*

5605 mustelinalis *Pack.*
catenulalis Grt.
monulalis Hlst.

5606 luscitialis *B. & McD.*

5607 unifascialis *Pack.*
obnigralis Hlst.
a subolivalis *Pack.*
hircinalis Grt.

5608 torvalis *Moesch.*
gelida McLach.

5609 fodinalis *Led.*
socialis Grt.

5610 semirubralis *Pack.*

5611 achroalis *Hamp.*

5612 perrubralis *Pack.*
a scurralis *Hlst.*
postrubralis Hamp.

5613 phoenicealis *Hbn.*
flegialis Wlk.
noraxalis Wlk.

5614 taeniolalis *Gn.*

5615 onythesalis *Wlk.*

5616 acrionalis *Wlk.*
acuphisalis Wlk.
proceralis Led.
sumptuosalis Wlk.
haruspica G. & R.
form rufifimbrialis *Grt.*

5617 pythialis *B. & McD.*

5618 inveterascalis *B. & McD.*

5619 rubricalis *Hbn.*
similalis Led.
nescalis Wlk.
californicalis Pack.

5620 tatalis *Grt.*

5621 borealis *Pack.*
madetesalis Wlk.
efficitalis Wlk.
repletalis Wlk.

5622 subsequalis *Gn.*
insequalis Gn.
matronalis Grt.
a plagalis *Haim.*

5623 orphisalis *Wlk.*

5624 generosa *G. & R.*

5625 ochosalis *Dyar*

5626 tuolumnalis *B. & McD.*

5627 flavofascialis *Grt.*

5628 laticlavia *G. & R.*
form cinerosa *G. & R.*

5629 tyralis *Gn.*
erosnealis Wlk.
diffissa G. & R.
bellulalis Hlst.

5630 coccinea *Warr.*

5631 costimaculalis *Fern.*

5632 inornatalis *Fern.*
rosa Druce

5633 signatalis *Wlk.*
vinulenta G. & R.

5634 volupialis *Grt.*

5635 corinthalis *B. & McD.*

5636 augustalis *Grt.*

5637 liopasialis *Dyar*

5638 nicalis *Grt.*
uxorculalis Hlst.

5639 subnicalis *Warr.*

5640 morenalis *Dyar*

5641 atropurpuralis *Grt.*

5642 lethalis *Grt.*

5643 unimacula *G. & R.*

5644 versicolor *Warr.*

5645 marginalis *Wlk.*
stenopteralis Grt.

5646 niveicilialis *Grt.*

5647 funebris *Strom.*
octomaculata Linn.
glomeralis Wlk.

Loxostegopsis Dyar

5648 xanthocrypta *Dyar*

5649 merrickalis *B. & McD.*

5650 emigralis *B. & McD.*

5651 polle *Dyar*

5652 curialis *B. & McD.*

Eustixia Hbn.

5653 pupula *Hbn.*

5654 octonalis *Zell.*
sexmaculalis Grt.

Cornifrons Led.

5655 simalis *Grt.*
a sideralis *Dyar*
b praeia *Dyar*

5656 pulveralis *Warr.*

5657 phasma *Dyar*
a chlorophasma *Dyar*

5658 actualis *B. & McD.*

Noctuelia Gn.

5659 rufofascialis *Steph.*
thalialis Wlk.
a novalis *Grt.*
form decorata *Druce*
b nuchalis *Grt.*

5660 castanealis *Hlst.*
jativa Barnes

5661 elautalis *Grt.*
magnalis Hlst.

5662 puertalis *B. & McD.*

5663 palmalis *B. & McD.*

5664 commortalis *Grt.*
minima Dyar

5665 pandoralis *B. & McD.*

5666 aridalis *B. & B.*

5667 virula *B. & McD.*

5668 bububattalis *Hlst.*
tectalis B. & McD.

5669 achemonalis *B. & McD.*
a pulcharalis *B. & B.*

5670 rhea *Druce*

5671 costipunctalis *B. & McD.*

5672 unicoloralis *B. & McD.*

Lineodes Gn.

5673 contortalis *Gn.*

5674 integra *Zell.*

5675 interrupta *Zell.*

5676 triangulalis *Moesch.*

Stenoptycha Zell.

5677 solanalis *B. & McD.*

Chlorobapta B. & McD.

5678 rufistrigalis *B. & McD.*

Scissolia B. & McD.

5679 harlequinalis *B. & McD.*

NYMPHULINAE

Nymphula Schrank

5680 maculalis *Clem.*
seminivella Wlk.
dispar Grt.
ab. ♂ foeminalis *Dyar*
ab. ♀ masculinalis *Dyar*

5681 allionealis *Wlk.*
aptalis Led.
plenilinealis Grt.
ab. itealis *Wlk.*
cretacealis Led.

5682 obscuralis *Grt.*

5683 semінealis *Wlk.*
tedyuscongalis Clem.

5684 badiusalis *Wlk.*
curviferalis Wlk.
albalis Rob.

5685 vittatalis *Dyar*

5686 obliteralis *Wlk.*
obscuralis Moesch.
proprialis Fern.

5687 nomophilalis *Dyar*

5688 gyralis *Hlst.*
dentilinea Hamp.

5689 serralinealis *B. & B.*

5690 nebulosalis *Fern.*

5691 icciusalis *Wlk.*
faulalis Wlk.
formosalis Clem.
genuialis Led.
pacalis Grt.

5692 ekthlipsis *Grt.*

Ambia Wlk.

5693 striatalis *Dyar*

Cataclysta Hbn.

5694 brunnildalis *Dyar*

5695 bifascialis *Rob.*
a kearfottalis *Dyar*

5696 drumalis *Dyar*

5697 claudialis *Wlk.*
a medicinalis *Grt.*

5698 slossonalis *Dyar*

5699 magnificalis *Hbn.*
lamialis Wlk.
helopalis Clem.

5700 fulicalis *Clem.*
? angulatalis Led.

5701 confusalis *Wlk.*

5702 cronialis *Druce*

5703 schaefferalis *Dyar*

5704 avernalis *Grt.*
confusalis B. & McD.

5705 daemonalis *Dyar*

5706 cryptalis *Druce*

5707 imitabilis *Dyar*

5708 satanalis *Dyar*

5709 truckeealis *Dyar*

5710 cancellalis *Dyar*

5711 irroratalis *Dyar*

5712 plevie *Dyar*

5713 longipennis *Hamp.*

Oxyelophila Forbes

5714 callista *Forbes*

Hydropionea Hamp.

5715 oblectalis *Hlst.*
eumoros Dyar

5716 fenestralis *B. & McD.*

Geshna Dyar

5717 cannalis *Quaint.*

5718 primordialis *Dyar*

Diathrausta Led.

5719 reconditalis *Wlk.*
minualis Wlk.
octomaculalis Fern.
a harlequinalis *Dyar*
montana Haim.

5720 daeckealis *Haim.*

Steniodes Snell.

5721 gelliasalis *Wlk.*
lutealis Snell.

Piletocera Led.

5722 bufalis *Gn.*
stercoralis Moesch.

5723 simplicialis *B. & McD.*

Eurrhypara Hbn.

5724 urticata *Linn.*

SCOPARIINAE

Scoparia Haw.

5725 centuriella *D. & S.*
caecalis Wlk.
caliginosalis Wlk.
a ninguidalis *Hlst.*

5726 normalis *Dyar*

5727 delphusa *Druce*

5728 tricoloralis *Dyar*

5729 torniplagalis *Dyar*

5730 rectilinea *Zell.*
refugalis Hlst.

5731 commortalis *Dyar*

5732 expallidalis *Dyar*

5733 rigidalis *B. & McD.*

5734 penumbralis *Dyar*

5735 strigalis *Dyar*

5736 cinereomedia *Dyar*

5737 truncatalis *McD.*

5738 schwarzalis *Dyar*

5739 leucophthalma *Dyar*

5740 echo *Dyar*

5741 bronzalis *B. & B.*

5742 lugubralis *Wlk.*
nominatalis Hlst.

5743 spaldingalis *B. & McD.*

5744 denigata *Dyar*

5745 albertalis *Dyar*

5746 phycitinalis *Dyar*

5747 basalis *Wlk.*
biplagialis Wlk.
libella Grt.
a palloralis *Dyar*
b fernaldalis *Dyar*
c obispalis *Dyar*
d pacificalis *Dyar*

5748 alaskalis *B. & B.*

5749 cervalis *McD.*

5750 alialis *B. & McD.*

5751 sabura *Druce*

PYRALINAE

Aglossa Latr.

5752 cuprealis *Hbn.*
domalis Gn.
enthealis Hlst.

5753 cuprina *Zell.*

5754 acallalis *Dyar*

5755 baba *Dyar*

5756 gigantalis *B. & B.*

5757 furva *Heinr.*

Pyralis Linn.

5758 farinalis *Linn.*

5759 costiferalis *Wlk.*
costigeralis Wlk.

5760 disciferalis *Dyar*

5761 electalis *Hlst.*

5762 cacamica *Dyar*

5763 manihotalis *Gn.*

Hypsopygia Hbn.

5764 costalis *Fabr.*
fimbrialis D. & S.
a hyllalis *Wlk.*

Herculia Wlk.

5765 planalis *Grt.*
anniculalis Hlst.
occidentalis Hlst.

5766 intermedialis *Wlk.*
sodalis Wlk.
squamealis Grt.

5767 phoezalis *Dyar*

5768 cohortalis *Grt.*

5769 florencealis *Blkmre.*

5770 thymetusalis *Wlk.*
devialis Grt.

5771 binodulalis *Zell.*

5772 sordidalis *B. & McD.*

5773 infimbrialis *Dyar*

5774 olinalis *Gn.*
trentonalis Led.
ab. himonialis *Zell.*

Uscodys Dyar

5775 cestalis *Hlst.*

5776 atalis *Dyar*

Omphalocera Led.

5777 cariosa *Led.*

5778 dentosa *Grt.*

5779 occidentalis *B. & B.*

Galasa Wlk.

5780 nigrinodis *Zell.*

5781 nigripunctalis *B. & McD.*
fulvusana Haim.

Negalasa B. & McD.

5782 fumalis *B. & McD.*

5783 rubralis *B. & McD.*

Tosale Wlk.

5784 oviplagalis *Wlk.*
nobilis Grt.
anthoecioides G. & R.

5785 similalis *B. & B.*

5786 aucta *Hamp.*

Lepidomys Gn.
Chalinitis Rag.

5787 irrenosa *Gn.*
olealis Rag.

Anemosella Dyar

5788 viridalis *B. & McD.*

5789 obliquata *Hy. Edw.*
albistrigalis B. & McD.

5790 polingalis *B. & B.*

5791 nevalis *B. & B.*

Salobrena Wlk.

5792 sincera *Zell.*

Clydonopteron Riley

5793 tecomae *Riley*

Xantippides Dyar

5794 descansalis *Dyar*

Arta Grt.

5795 statalis *Grt.*

5796 epicoenalis *Rag.*

5797 olivalis *Grt.*

Heliades Rag.

5798 mulleolella *Hlst.*
huachucalis Haim.

Caphys Wlk.

5799 bilinea *Wlk.*

Satole Dyar

5800 ligniperdalis *Dyar*

Xantippe Rag.

5801 uranides *Dyar*

5802 beatifica *Dyar*

Parachma Wlk.
Artopsis Dyar

5803 ochracealis *Wlk.*
auratalis Wlk.
a culiculalis *Hlst.*
nua Dyar

5804 borregalis *Dyar*

Acallis Rag.

5805 gripalis *Hlst.*
fernaldi Rag.
angustipennis Warr.

5806 centralis *Dyar*

5807 mitchelli *Dyar*

Polloccia Dyar

5808 alticolalis *Dyar*

Condylolomia Grt.

5809 participialis *Grt.*

Penthesilea Rag.

5810 sacculalis *Rag.*

SCHOENOBIINAE

Patissa Moore

5811 xantholeucalis *Gn.*
fasciella Fern.

5812 flavicostella *Fern.*

5813 flavifascialis *B. & McD.*

5814 parthenialis *Dyar*

5815 chrysozona *Dyar*

5816 sordidalis *B. & McD.*

5817 vestaliella *Zell.*

Topeutis Hbn.
Scirpophaga Tr.

5818 perstrialis *Hbn.*
semiradiellus Wlk.
macrinellus Zell.

5819 repugnatalis *Wlk.*
consortalis Dyar

Rupela Wlk.
Storteria B. & McD.

5820 nivea *Wlk.*

5821 tinctella *Wlk.*
holophaealis Hamp.
unicolor B. & McD.

5822 segrega *Heinr.*

5823 sejuncta *Heinr.*

Schoenobius Dup.

5824 sordidellus *Zinck.*

5825 unipunctellus *Rob.*

5826 tripunctellus *Rob.*

5827 melinellus *Clem.*
a dispersellus *Rob.*
b albicostellus *Fern.*
c uniformellus *Dyar*

5828 clemensellus *Rob.*
‡*aquilellus* Clem.

5829 pallulellus *B. & McD.*

5830 forficellus *Thun.*
longirostrellus Clem.

5831 amblyptepennis *Dyar*

5832 roscidellus *Dyar*

5833 nitidellus *Dyar*

5834 uxorialis *Dyar*

5835 maximellus *Fern.*

CRAMBINAE

Surattha Wlk.

5836 santella *Kft.*

5837 indentella *Kft.*

Mesolia Rag.

5838 baboquivariella *Kft.*

5839 oraculella *Kft.*

5840 huachucaella *Kft.*

Prionapteryx Steph.

5841 nebulifera *Steph.*

5842 achatina *Zell.*

5843 cuneolalis *Hlst.*

5844 serpentella *Kft.*

Eugrotea Fern.

5845 incertella *Zinck.*
dentella Fern.

5846 olivella *Grt.*

5847 yavapai *Kft.*

Pseudoschoenobius Fern.

5848 opalescalis *Hlst.*
griseosparsa Hamp.
saganella Hlst.

Raphiptera Hamp.

5849 minimella *Rob.*

5850 argillaceella *Pack.*

Crambus Fabr.

5851 satrapellus *Zinck.*
aculeilellus Wlk.
elegantellus Wlk.

5852 hastiferellus *Wlk.*

5853 quinquareatus *Zell.*
extorralis Hlst.

5854 occidentalis *Grt.*
agricolellus Dyar

5855 hamellus *Thun.*
ensigerella Hbn.

5856 cypridalis *Hlst.*

5857 pascuellus *Linn.*
floridus Zell.

5858 lyonsellus *Haim.*

5859 daeckellus *Haim.*

5860 girardellus *Clem.*
nivihumellus Wlk.

5861 leachellus *Zinck.*
pulchellus Zell.

5862 unistriatellus *Pack.*
exesus Grt.

5863 praefectellus *Zinck.*
involutellus Clem.

5864 carpenterellus *Pack.*

5865 oslarellus *Haim.*

5866 youngellus *Kft.*

5867 bidens *Zell.*

5868 labradoriensis *Christ.*

5869 dissectus *Grt.*

5870 tutillus *McD.*

5871 dumetellus *Hbn.*
pratella Hbn.

5872 trichusalis *Hlst.*

5873 cockleellus *Kft.*

5874 alboclavellus *Zell.*

5875 carolinellus *Haim.*

5876 agitatellus *Clem.*
saltuellus Zell.

5877 awemellus *McD.*

5878 myellus *Hbn.*
latiradiellus Wlk.
interruptus Grt.

5879 luctuellus *H. S.*

5880 laqueatellus *Clem.*
semifusellus Wlk.

5881 gausapalis *Hlst.*

5882 multilinellus *Fern.*

5883 hortuellus *Hbn.*
a topiarius *Zell.*
b vachellellus *Kft.*

5884 albellus *Clem.*

5885 pusionellus *Zell.*

5886 biguttellus *Forbes*

5887 innotatellus *Wlk.*
sericinellus Zell.
inornatellus Clem.

5888 turbatellus *Wlk.*
bipunctellus Zell.

5889 elegans *Clem.*

5890 immunellus *Zell.*
a minor *Forbes*

5891 polingi *Kft.*

5892 vulgivagellus *Clem.*
aurifimbrialis Wlk.
chalybirostris Zell.

5893 plumbifimbriellus *Dyar*

5894 dorsipunctellus *Kft.*

5895 ruricolellus *Zell.*
a canadellus *Haim.*

5896 teterrellus *Zinck.*
camurellus Clem.
terrellus Zell.

5897 decorellus *Zinck.*
polyactinellus Zell.
goodellianus Grt.
bonusculalis Hlst.

5898 coloradellus *Fern.*

5899 bolterellus *Fern.*

5900 hulstellus *Fern.*

5901 attenuatus *Grt.*

5902 biothanatalis *Hlst.*
behrensellus Fern.

5903 albilineellus *Fern.*

5904 truncatellus *Zett.*
abtrusellus Wlk.
rufinalis Wlk.

5905 trichostomus *Christ.*
albisinuatella Pack.

5906 paganellus *McD.*

5907 oregonicus *Grt.*

5908 bartellus *B. & McD.*

5909 bonifatellus *Hlst.*

5910 mutabilis *Clem.*
fuscicostellus Zell.

5911 murellus *Dyar*

5912 hemiochrellus *Zell.*

5913 haytiellus *Zinck.*

5914 intermedius *Kft.*

5915 nevadellus *Kft.*

5916 undatus *Grt.*

5917 ericellus *B. & McD.*

5918 anceps *Grt.*

5919 trisectus *Wlk.*
interminellus Wlk.
exsiccatus Zell.
biliturellus Zell.

5920 inornatellus *Wlk.*

5921 laciniellus *Grt.*

5922 edmontellus *McD.*

5923 simpliciellus *Kft.*

5924 dimidiatellus *Grt.*

5925 caliginosellus *Clem.*

5926 modestellus *B. & McD.*

5927 zeellus *Fern.*
refotalis Hlst.

5928 luteolellus *Clem.*
duplicatus Grt.
a ulae *Ckll.*

5929 chiloidellus *B. & McD.*

5930 angulatus *B. & McD.*
diegonellus Dyar

5931 costalipartella *Dyar*

5932 tripsacas *Dyar*

Thaumatopsis Morr.

5933 magnificus *Fern.*

5934 pexellus *Zell*
♀ *macropterellus* Zell.
longipalpus Morr.
a coloradellus *Kft.*

5935 gibsonellus *Kft.*

5936 edonis *Grt.*

5937 fernaldellus *Kft.*
a nortellus *Kft.*

5938 floridellus *B. & McD.*

5939 lagunellus *Dyar*

5940 atomosellus *Kft.*

5941 fieldellus *B. & McD.*

5942 repandus *Grt.*

5943 crenulatellus *Kft.*

5944 striatellus *Fern.*

5945 daeckeellus *Kft.*

5946 pectinfer *Zell.*

5947 actuellus *B. & McD.*

Loxocrambus Forbes

5948 canellus *Forbes*

5949 mohaviellus *Forbes*

5950 awemensis *McD.*

Eufernaldia Hlst.

5951 cadarella *Druce*
argenteonervella Hlst.

Ommatopteryx Kirby

5952 texana *Rob.*
ocellea Auct.
californicalis Pack.

5953 virescens *Hlst.*

Argyria Hbn.

5954 nivalis *Dru.*
argentata Emm.
microchrysella Wlk.
nummulalis Zell.

5955 argentana *Martyn*
nummulalis Hbn.
subaenescens Wlk.
fuscipes Zell.

5956 rileyella *Dyar*

5957 auratella *Clem.*
pulchella Wlk.
critica Forbes

5958 lacteella *Fabr.*
pussillalis Hbn.
rufisignella Zell.

Iesta Dyar

5959 lisetta *Dyar*

Diatraea Guild.

5960 saccharalis *Fabr.*

5961 evanescens *Dyar*
sobrinalis Schaus

5962 crambidoides *Grt.*
zeacolella Dyar
tripsacicola Dyar

5963 venosalis *Dyar*

5964 grandiosella *Dyar*

Hemiplatytes B. & B.

5965 epia *Dyar*
damon B. & McD.

Haimbachia Dyar

5966 placidella *Haim.*

5967 squamulella *Zell.*

5968 prosenes *Dyar*

Alamogordia Dyar & Heinr.

5969 parallela *Kft.*

Diatraenopsis Dyar & Heinr.

5970 differentialis *Fern.*

5971 idalis *Fern.*

Chilo Zinck.

5972 multipunctellus *Kft.*

5973 puritellus *Kft.*
dinephalalis Dyar

5974 opinionellus *Dyar*

5975 loftini *Dyar*

5976 plejadellus *Zinck.*
sabulifera Wlk.
prolatella Grt.
oryzaeellus Riley

5977 forbesellus *Fern.*

5978 fernaldalis *Dyar & Heinr.*

Occidentalia Dyar & Heinr.

5979 comptulatalis *Hlst.*

Platytes Gn.

5980 punctilineella *B. & McD.*

5981 multilineatella *Hlst.*

5982 acerata *Dyar*

5983 panalope *Dyar*

5984 vobisne *Dyar*

5985 aenigmatica *Heinr.*

5986 alleni *Fern.*

Eoreuma Ely

5987 densellus *Zell.*

Xubida Schaus

5988 dentilineatella *B. & McD.*

GALLERIINAE

Galleria Fabr.

5989 mellonella *Linn.*
cereana Linn.
obliquella Wlk.

Aphomia Hbn.

5990 sociella *Linn.*
colonella Linn.
tribunella D. & S.

Paralipsa Butl.

5991 terrenella *Zell.*
furellus Zell.

5992 fulminalis *Zell.*

5993 decorella *Hlst.*

Melissoblaptes Zell.

5994 fuscolimbellus *Rag.*

Achroia Hbn.

5995 grisella *Fabr.*
cinereola Hbn.

Corcyra Rag.
Tineopsis Dyar

5996 cephalonica *Staint.*
theobromae Dyar

MACROTHECINAE

Macrotheca Rag.

5997 interalbicalis *Rag.*
vulnifica Dyar

5998 bilinealis *B. & McD.*

5999 angulalis *B. & McD.*

6000 unicoloralis *B. & McD.*

6001 unipuncta *Dyar*

6002 ponda *Dyar*

6003 nigrocinereella *Hlst.*

6004 flexilinealis *Dyar*

6005 leucocope *Dyar*

6006 lecerfialis *B. & B.*

Alpheias Rag.

6007 vicarilis *Dyar*

6008 transferens *Dyar*

6009 querula *Dyar*

6010 oculiferalis *Rag.*

Alpheioides B. & McD.

6011 parvulalis *B. & McD.*

Decaturia B. & McD.

6012 pectinalis *B. & McD.*

EPIPASCHIINAE

Macalla Wlk.

6013 thyrsisalis *Wlk.*

Epipaschia Clem.

6014 superatalis *Clem.*
borealis Grt.
olivalis Hlst.

6015 albomedialis *B. & B.*

6016 zelleri *Grt.*

Cacozelia Grt.

6017 basiochrealis *Grt.*

6018 alboplagialis *Dyar*

Jocara Wlk.

6019 incrustalis *Hlst.*

6020 perseella *B. & McD.*

6021 breviornatalis *Grt.*

6022 trabalis *Grt.*
adulatalis Hlst.

6023 interruptella *Rag.*
dentilineella Hlst.

6024 elegans *Schaus*

Oneida Hlst.

6025 lunulalis *Hlst.*

6026 luniferella *Hlst.*
a pallidalis *B. & B.*

Tallula Hlst.

6027 atrifascialis *Hlst.*

6028 watsoni *B. & McD.*

6029 baboquivarialis *B. & B.*

6030 fieldi *B. & McD.*

Tetralopha Zell.

6031 robustella *Zell.*
diluculella Grt.

6032 scortealis *Led.*

6033 slossoni *Hlst.*

6034 melanogrammos *Zell.*

6035 texanella *Rag.*

6036 callipeplella *Hlst.*

6037 speciosella *Hlst.*

6038 floridella *Hlst.*

6039 subcanalis *Wlk.*
taleolalis Hlst.
querciella B. & McD.

6040 militella *Zell.*
platanella Clem.

6041 asperatella *Clem.*
expandens Wlk.
form nephelotella *Hlst.*
clemensalis Dyar

6042 aplastella *Hlst.*

6043 spaldingella *B. & B.*

6044 dolorosella *B. & B.*

6045 provoella *B. & B.*

6046 arizonella *B. & B.*

6047 thoracicella *B. & B.*

6048 griseella *B. & B.*

6049 fuscolotella *Rag.*

6050 tiltella *Hlst.*

6051 humerella *Rag.*
formosella Hlst.

6052 tertiella *Dyar*

6053 baptisiella *Fern.*

6054 euphemella *Hlst.*
variella Rag.
melanographella Rag.

Dyaria Neum.

6055 singularis *Neum.*

ENDOTRICHIINAE

Neodavisia B. & McD.
‡*Davisia* B. & McD.

6056 singularis *B. & McD.*

PHYCITINAE

Trachycera Rag.

6057 pallicornella *Rag.*

Myelois Hbn.

6058 transitella *Wlk.*
notatalis Wlk.

6059 duplipunctella *Rag.*

6060 fragilella *Dyar*

6061 piazzella *Dyar*

6062 subtetricella *Rag.*

6063 obnupsella *Hlst.*

6064 minutularia *Hlst.*

6065 oporedestella *Dyar*

6066 zonulella *Rag.*

6067 bistriatella *Hlst.*
bilineatella Rag.

6068 immundella *Hlst.*

6069 grossipunctella *Rag.*

6070 alatella *Hlst.*
rectistrigella Rag.

6071 coniella *Rag.*

6072 caliginoidella *Dyar*

Rhodophaea Gn.

6073 hystriculella *Hlst.*

6074 annuliferella *Dyar*

6075 intransitella *Dyar*

6076 exsulella *Zell.*

6077 bicolorella *B. & McD.*

Acrocaula Hlst.

6078 comacornella *Hlst.*

Acrobasis Zell.

6079 kearfottella *Dyar*

6080 feltella *Dyar*

6081 caryalbella *Ely*

6082 juglandis *Le Bar*
palliolella Rag.
albocapitella Hlst.

6083 secundella *Ely*

6084 ostryella *Ely*

6085 hebescella *Hlst.*

6086 evanescentella *Dyar*

6087 caryivorella *Rag.*

6088 minimella *Rag.*
nigrosignella Hlst.

6089 stigmella *Dyar*

6090 aurorella *Ely*

6091 angusella *Grt.*
eliella Dyar

6092 demotella *Grt.*

6093 malipennella *Dyar*

6094 sylviella *Ely*

6095 irrubriella *Ely*

6096 latifasciella *Dyar*

6097 normella *Dyar*

6098 coryliella *Dyar*

6099 dyarella *Ely*

6100 caryae *Grt.*

6101 betulella *Hlst.*

6102 cunulae *Dyar*

6103 rubrifasciella *Pack.*
alnella McD.

6104 comptoniella *Hlst.*

6105 myricella *B. & McD.*

6106 peplifera *Dyar*

6107 septentrionella *Dyar*

6108 slossonella *Hlst.*
tenuella B. & McD.

6109 cirroferella *Hlst.*

Mineola Hlst.

6110 scitulella *Hlst.*

6111 tricolorella *Grt.*

6112 amplexella *Rag.*

6113 caliginella *Hlst.*
comptella Rag.

6114 vaccinii *Riley*

6115 indigenella *Zell.*
nebulo Walsh
zelatella Hlst.

6116 grossbecki *B. & McD.*

Ulophora Rag.

6117 grotei *Rag.*

6118 tephrosiella *Dyar*

Eucardinia Dyar

6119 caricae *Dyar*

Sarasota Hlst.

6120 plumigerella *Hlst.*

6121 subrufella *Hlst.*

6122 filiolella *Hlst.*

Nasutes Hamp.

6123 venata *Hamp.*

Phycitopsis Rag.

6124 flavicornella *Rag.*

Dioryctria Zell.

6125 clarioralis *Wlk.*
brunneella Dyar

6126 auranticella *Grt.*
a miniatella *Rag.*

6127 xanthoenobares *Dyar*

6128 erythropasa *Dyar*

6129 abietella *D. & S.*
abietivorella Grt.
a elegantella *Hlst.*

6130 ponderosae *Dyar*

6131 reniculella *Grt.*

6132 actualis *Hlst.*

Pinipestis Grt.

6133 zimmermanni *Grt.*
austriana Cosens

6134 delectella *Hlst.*

6135 amatella *Hlst.*

6136 pygmaeella *Rag.*

6137 cambiicola *Dyar*

6138 albovittella *Hlst.*

6139 gulosella *Hlst.*

Bertelia B. & McD.

6140 grisella *B. & McD.*

Monoptilota Hlst.

6141 pergratialis *Hlst.*
nubilella Hlst.
grotella Rag.

Tacoma Hlst.

6142 feriella *Hlst.*

6143 texanella *Hlst.*
dulciella Hlst.

6144 submedianella *Dyar*

Dasypyga Rag.

6145 alternosquamella *Rag.*
a stictophorella *Rag.*

Promylea Rag.

6146 lunigerella *Rag.*

6147 glendella *Dyar*

Glyptocera Rag.

6148 consobrinella *Zell.*
busckella Dyar

Ortholepis Rag.

6149 jugosella *Rag.*

Polopeustis Rag.

6150 annulatella *Zett.*
altensis Wocke
a arctiella *Gib.*

Acroncosa B. & McD.

6151 albiflavella *B. & McD.*
a castrella *B. & McD.*

6152 similella *B. & McD.*

Ambesa Grt.

6153 walsinghami *Rag.*

6154 monodon *Dyar*

6155 mirabella *Dyar*

6156 laetella *Grt.*

6157 niviella *Hlst.*

6158 denticulella *Rag.*

6159 columbiella *McD.*

Nephopteryx Hbn.

6160 lallatalis *Hlst.*
a brucei *Hlst.*

6161 scobiella *Grt.*
decimerella Hlst.

6162 decipientella *Dyar*

6163 ovalis *Pack.*
♀ *latifasciatella* Pack.
modestella Hlst.
a geminipunctella *Rag.*

6164 crataegella *B. & McD.*

6165 rhypodella *Hlst.*

6166 curvatella *Rag.*

6167 fasciolalis *Hlst.*

6168 hypochalciella *Rag.*

6169 rubrisparsella *Rag.*
rufibasella Rag.
croceella Hlst.

6170 crassifasciella *Rag.*

6171 inquilinella *Rag.*

6172 gilvibasella *Hlst.*
lacteella Hlst.

6173 rubescentella *Hlst.*

6174 nyssaecolella *Dyar*

6175 subtinctella *Rag.*

Anegcephalesis Dyar

6176 catheretes *Dyar*

Tlascala Hlst.

6177 finitella *Wlk*
melanella Hlst.

6178 umbripennis *Hlst.*
gillettella Dyar

6179 oregonella *B. & McD.*

6180 reductella *Wlk.*
gleditschiella Fern.

Emmerita Hamp.

6181 mirandella *Rag.*

Meroptera Grt.

6182 cviatella *Dyar*

6183 uvinella *Rag.*

6184 pravella *Grt.*

6185 nebulella *Riley*
unicolorella Hlst.
leucophaeella Hlst.

6186 canescentella *Hlst.*

Immyrla Dyar

6187 nigrovittella *Dyar*

6188 bumeliella *B. & McD.*

6189 pasadamia *Dyar*

Salebria Zell.

6190 pumilella *Rag.*

6191 nubiferella *Rag.*

6192 heinrichalis *Dyar*

6193 funerella *Dyar*

6194 yuconella *Dyar*

6195 engeli *Dyar*

6196 turpidella *Rag.*

6197 annulosella *Rag.*

6198 ademptandella *Dyar*

6199 tenebrosella *Hlst.*
quercicolella Rag.

6200 afflictella *Hlst.*
liquidambarella Dyar

6201 nigricans *Hlst.*

6202 ochripunctella *Dyar*

6203 fructetella *Hlst.*
rectistrigella Dyar

6204 carneella *Hlst.*

6205 virgatella *Clem.*
quinquepunctella Grt.
a subcaesiella *Clem.*
contatella Grt.
b inconditella *Rag.*

6206 celtidella *Hlst.*

6207 levigatella *Hlst.*

6208 pudibundella *Rag.*

6209 basilaris *Zell.*

6210 georgiella *Hlst.*

6211 robustella *Dyar*

6212 semiobscurella *Hlst.*

6213 subfuscella *Rag.*

6214 bifasciella *Hlst.*

6215 nogalesella *Dyar*

6216 furciferella *Dyar*

6217 aliculella *Hlst.*
oberthuriella Rag.

6218 yumaella *Dyar*

6219 odiosella *Hlst.*

6220 bakerella *Dyar*

Passadena Hlst.

6221 flavidorsella *Rag.*
constantella Hlst.

6222 cinctella *Hlst.*

Myrlaea Rag.

6223 tarmitalis *Hlst.*

6224 vetustella *Dyar*

6225 delassalis *Hlst.*
purpurella Hlst.

6226 fernaldi *Rag.*

Laodamia Rag.

6227 fusca *Haw.*
moestella Wlk.
prosellariana Wlk.
cacabella Hlst.
triplagiella Dyar
a frigidella *Pack.*

Elasmopalpus Blanch.

6228 decoloralis *Wlk.*
metagrammalis Wlk.

6229 petrellus *Zell.*
rubiginella Wlk.
rufinalis Wlk.
hapsella Hlst.
obsipella Hlst.

6230 furfurellus *Hlst.*
floridellus Hlst.

6231 lignosellus *Zell.*
angustellus Blanch.
form incautellus *Zell.*
form tartarellus *Zell.*
carbonellus Hlst.

Selagia Hbn.

6232 australella *Hlst.*

6233 lithosella *Rag.*
luteella Hlst.

Psammia Hamp.

6234 flavipicta *Hamp.*

Pyla Grt.

6235 scintillans *Grt.*

6236 metalicella *Hlst.*

6237 aeneoviridella *Rag.*

6238 bistriatella *Hlst.*

6239 hanhamella *Dyar*

6240 incorruscella *Hlst.*

6241 criddlella *Dyar*

6242 aeneella *Hlst.*

6243 rainierella *Dyar*

6244 fasciella *B. & McD.*

6245 viridisuffusella *B. & McD.*

6246 sylphiella *Dyar*

6247 feella *Dyar*

6248 blackmorella *Dyar*

Epischnia Hbn.

6249 ruderella *Rag.*

6250 parkerella *Schaus*

6251 boisduvaliella *Gn.*
a albiplagiatella *Pack.*

6252 fosterella *Hlst.*

6253 fulvirugella *Rag.*

6254 albocostalialis *Hlst.*

6255 subcostella *Rag.*

6256 vividella *McD.*

6257 incanella *Hlst.*

6258 granitella *Rag.*
piperella Dyar

Megasis Gn.

6259 edwardsialis *Hlst.*
polyphemella Rag.

6260 excantalis *Hlst.*
pullatella Rag.

6261 caudellella *Dyar*

6262 aridella *Dyar*

6263 atrella *Hlst.*

6264 rubrithoracella *B. & McD.*

6265 indianella *Dyar*

Sarata Rag.

6266 nigrifasciella *Rag.*

6267 rhoiella *Dyar*

6268 tephrella *Rag.*

6269 perfuscalis *Hlst.*
dnopherella Rag.

6270 umbrella *Dyar*

6271 cinereella *Hlst.*

Lipographis Rag.

6272 fenestrella *Pack.*
a humilis *Rag.*

6273 leoninella *Pack.*
pallidella Dyar

Etiella Zell.

6274 zinckenella *Tr.*
a rubribasella *Hlst.*
b schisticolor *Zell.*
villosella Hlst.

Hypochalcia Hbn.

6275 hulstiella *Rag.*

6276 truncatella *Wgt.*

Melitara Wlk.

6277 prodenialis *Wlk.*
a bolli *Zell.*

6278 dentata *Grt.*

6279 parabates *Dyar*

6280 doddalis *Dyar*

Olycella Dyar

6281 junctolineella *Hlst.*
pectinatella Hamp.

6282 nephelepasa *Dyar*
subumbrella Dyar

Cactobrosis Dyar

6283 fernaldialis *Hlst.*
gigantella Rag.
cinereella Hlst.
longipennella Rag.
elongatella Hamp.

6284 ponderosella *B. & McD.*

6285 phoenicis *Dyar*

6286 interstitialis *Dyar*

6287 strigalis *B. & McD.*

6288 leuconips *Dyar*

6289 creabates *Dyar*

Ozamia Rag.

6290 lucidalis *Wlk.*

6291 thallassophila *Dyar*

6292 clarefacta *Dyar*
a heliophila *Dyar*

Yosemitia Rag.

6293 graciella *Hlst.*

6294 longipennella *Hlst.*

Eumysia Dyar

6295 mysiella *Dyar*

6296 aureomaculella *Dyar*

6297 maidella *Dyar*

6298 fuscatella *Hlst.*

6299 perdubiella *Dyar*

6300 stigmella *Dyar*
a maculicula *Dyar*

6301 bihinda *Dyar*

6302 bidentella *Dyar*

Zophodia Hbn.

6303 grossulariae *Riley*
turbatella Grt.

a franconiella *Hlst.*
bella Hlst.
b ihouna *Dyar*
c dilativitta *Dyar*
d magnificans *Dyar*

6304 purgatoria *Dyar*

6305 packardella *Rag.*

6306 pallidipennella *Hlst.*

6307 orobanchella *Dyar*

6308 holochlora *Dyar*

6309 dilatifasciella *Rag.*

6310 fieldiella *Dyar*

6311 glaucatella *Hlst.*

6312 polingella *Dyar*

6313 epischnioides *Hlst.*

Euzophera Zell.

6314 placidella *Dyar*

6315 nigricantella *Rag.*

6316 aglaeella *Rag.*

6317 semifuneralis *Wlk.*
impletella Zell.
pallulella Hlst.

6318 ochifrontella *Zell.*
ferruginella Rag.

6319 ostricolorella *Hlst.*

6320 fuscomaculella *Wgt.*

Hyphantidium Scott

6321 tumidulella *Rag.*

Mescinia Rag.

6322 estrella *B. & McD.*

Vitula Rag.

6323 edmandsi *Pack.*
dentosella Rag.

6324 serratilineella *Rag.*

6325 basimaculatella *Rag.*

Laetilia Rag.

6326 ephestiella *Rag.*
lustrella Dyar

6327 zamacrella *Dyar*

6328 coccidivora *Comst.*
pallida Comst.
a hulsti *Ckll.*

6329 eremiella *Dyar*

6330 myersella *Dyar*

6331 fiskeella *Dyar*

Canarsia Hlst.
Canarsiana Strand

6332 ulmiarrosorella *Clem.*
pneumatella Hlst.
ulmella Rag.
fuscatella Hlst.
discocellularis Strand

6333 gracilella *Hlst.*

6334 feliculella *Dyar*

Psorosina Dyar

6335 hammondi *Riley*

6336 angulella *Dyar*

Staudingeria Rag.

6337 albipenella *Hlst.*
a olivacella *Dyar*
b perluteella *Dyar*

Heterographis Rag.

6338 ignistrigella *Rag.*

6339 morrisonella *Rag.*
olbiella Hlst.
form coloradensis *Rag.*

6340 arizonella *Hlst.*

Hulstia Rag.

6341 undulatella *Clem.*
propriella Wlk.

6342 texanella *Hlst.*

Honora Grt.

6343 mellinella *Grt.*
ochrimaculella Rag.

6344 palloricostella *Walt.*

6345 dotella *Dyar*

6346 sciurella *Rag.*

6347 subsciurella *Rag.*

6348 montinatatella *Hlst.*
canicostella Rag.

6349 dulciella *Hlst.*

6350 fumosella *Hlst.*

Dolichorrhinia Rag.

6351 aureofasciella *Rag.*

Valdivia Rag.

6352 lativittella *Rag.*

6353 mirabilicornella *Dyar*

6354 albocostella *Hlst.*

Divitiaca B. & McD.

6355 parvulella *B. & McD.*

6356 simulella *B. & McD.*

6357 ochrella *B. & McD.*

Diviana Rag.

6358 eudoreella *Rag.*

Ocala Hlst.

6359 dryadella *Hlst.*
platanella Grossb.

Palatka Hlst.

6360 nymphaeella *Hlst.*
verecuntella Grossb.

Eurythmidia Rag.

6361 ignidorsella *Rag.*

Wunderia Grosb.

6361, 1 neaeriatella *Grossb.*

Dannemora Hlst.

6362 edentella *Hlst.*

Homoeosoma Curt.

6363 impressale *Hlst.*

6364 uncanale *Hlst.*

6365 elongellum *Dyar*

6366 illuviellum *Rag.*
candidellum Hlst.

6367 striatellum *Dyar*

6368 albescentellum *Rag.*

6369 inornatellum *Hlst.*

6370 mucidellum *Rag.*

6371 stypticellum *Grt.*

6372 reliquellum *Dyar*

6373 oslarellum *Dyar*

6374 electellum *Hlst.*
a texanellum *Rag.*
differtellum B. & McD.

6375 opalescellum *Hlst.*
tenuipunctellum Rag.

Caudellia Dyar

6376 apyrella *Dyar*

6377 albovittella *Dyar*

Unadilla Hlst.

6378 erronella *Zell.*
nasutella Hlst.

Ephestiodes Rag.

6379 gilvescentella *Rag.*

6380 infimella *Rag.*

6381 mignonella *Dyar*

6382 nigrella *Hlst.*

6383 benjaminella *Dyar*

6384 erythrella *Rag.*

Eurythmia Rag.

6385 hospitella *Zell.*
quantulella Hlst.

6386 parvulella *Ely*

6387 angulella *Ely*

6388 diffusella *Ely*

6389 furnella *Ely*

6390 coloradella *Hlst.*

6391 spaldingella *Dyar*

6392 yavapaella *Dyar*

6393 thurberiae *Dyar*

6394 anthophila *Dyar*

Moodna Hlst.

6395 lugubrella *Rag.*

6396 ostrinella *Clem.*
obtusangulella Rag.
pelviculella Hlst.

6397 nigrella *Hlst.*

6398 setonella *McD.*

Ephestia Gn.

6399 kuehniella *Zell.*
fuscofasciella Rag.
gitonella Druce

6400 rileyella *Rag.*

6401 elutella *Hbn.*
amarella Dyar

6402 figulilella *Greg.*

6403 cautella *Wlk.*

6404 nonparilella *Dyar*

6405 arizonella *Walt.*

Varneria Dyar

6406 postremella *Dyar*

6407 atrifasciella *B. & McD.*

Plodia Gn.

6408 interpunctella *Hbn.*
zeae Fitch

ANERASTIINAE

Uinta Hlst.

6409 oreadella *Hlst.*

Ragonotia Grt.

6410 dotalis *Hlst.*
discigerella Rag.
olivella Hlst.

Aurora Rag.

6411 longipalpella *Rag.*

Tolima Rag.

6412 roseopennella *Hlst.*

6413 opacella *Hlst.*

6414 cincaidella *Dyar*

Parramatta Hamp.

6415 placidella *B. & McD.*

Pectinigeria Rag.

6416 ardiferella *Hlst.*
nigromaculella Hlst.

6417 pamponerella *Dyar*

6418 gemmatella *Hlst.*

6419 bistriatella *Hlst.*
discostrigella Dyar

Poujadia Rag.

6420 glareosella *Zell.*
bicolorella Hlst.

6421 pimella *Dyar*

6422 quadricolorella *Dyar*

6423 floscella *Hlst.*

Ollia Dyar

6424 holoponerella *Dyar*

6425 santaritella *Dyar*

6426 parvella *Dyar*

Cabnia Dyar

6427 myronella *Dyar*

Saluria Rag.

6428 ostreella *Rag.*

6429 tetradella *Zell.*

6430 rostrella *Rag.*

6431 dichroeella *Rag.*

Martia Rag.
Urula Hlst.

6432 arizonella *Rag.*
incongruella Hlst.

Navasota Rag.

6433 hebetella *Rag.*

Alamosa Rag.

6434 piperatella *Rag.*

6435 bipunctella *B. & McD.*

Hypsotropa Zell.

6436 luteicostella *Rag.*
nodosella Hlst.

6437 cremoricosta *Hamp.*

Peoria Rag.

6438 bipartitella *Rag.*

6439 approximella *Wlk.*
haematica Zell.
roseatella Pack.

6439, 1 albicostella *Grossb.*

6440 albidella *Hlst.*

Barberia Dyar

6441 affinitella *Dyar*

Anerastia Hbn.

6442 ella *Hlst.*

6443 conspersella *Rag.*

6444 lobella *Hbn.*

Bandera Rag.

6445 binotella *Zell.*

6446 carneella *B. & McD.*

6447 virginella *Dyar*

6448 cupidinella *Hlst.*

6449 subluteella *Rag.*

Tampa Rag.

6450 dimediatella *Rag.*

Statina Rag.

6451 gaudiella *Hlst.*

6452 roseotinctella *Rag.*

6453 bifasciella *Hamp.*

Calera Rag.

6454 punctilimbella *Rag.*

Coenochroa Rag.

6455 illibella *Hlst.*
puricostella Rag.

6456 inspergella *Rag.*

6457 californiella *Rag.*

Chipeta Hlst.

6458 perlepidella *Hlst.*

PTEROPHORIDAE

Trichoptilus Wlshm.

6459 parvulus *B. & L.*

6460 defectalis *Wlk.*
congrualis Wlk.
oxydactylus Wlk.
ochrodactylus Fish
centetes Meyr.

6461 californicus *Wlshm.*
wrightii Grin.

6462 pygmaeus *Wlshm.*

6463 lobidactylus *Fitch*

Pterophorus Geoff.

Oxyptilus Zell.

6464 periscelidactylus *Fitch*

6465 ontario *McD.*

6466 evansi *McD.*

6467 tenuidactylus *Fitch*
nigrociliatus Zell.
cygnus B. & L.

6468 buscki *McD.*

6469 raptor *Meyr.*

6470 ningoris *Wlshm.*
bernardinus Grin.

6471 delawaricus *Zell.*
finitimus Grin.

Platyptilia Hbn.

6472 rhododactyla *D. & S.*

6473 fuscicornis *Zell.*
marmarodactyla Dyar
pasadenensis Grin.

6474 tesseradactyla *Linn.*
fischeri Zell.

6475 washburnensis *McD.*

6476 pallidactyla *Haw.*
marginidactylus Fitch
nebulaedactylus Fitch
bertrami Roess.
bischoffi Zell.
cervinidactylus Pack.
adusta Wlshm.

6477 carduidactyla *Riley*
cardui Zell.
hesperis Grin.

6478 percnodactyla *Wlshm.*

6479 williamsii *Grin.*

6480 ardua *McD.*

6481 albicans *Fish*

6482 albertae *B. & L.*

6483 brachymorpha *Meyr.*
crenulata B. & McD.

6484 punctidactyla *Haw.*
cosmodactyla Hbn.
ulodactyla Zett.
monticola Grin.

6485 pica *Wlshm.*

6486 acanthodactyla *Hbn.*

6487 grandis *Wlshm.*

6488 carolina *Kft.*

6489 auriga *B. & L.*

6490 edwardsii *Fish*

6491 albiciliata *Wlshm.*
a canadensis *McD.*

6492 nana *McD.*

6493 shastae *Wlshm.*

6494 albida *Wlshm.*

6495 orthocarpi *Wlshm.*

6496 fragilis *Wlshm.*

6497 albidorsella *Wlshm.*

6498 maea *B. & L.*

6499 cooleyi *Fern.*
schwarzi Dyar

6500 xylopsamma *Meyr.*
gorgoniensis Grin.

6501 modesta *Wlshm.*

6502 petrodactyla *Wlk.*

Exelastis Meyr.

6503 cervinicolor *B. & McD.*

Marasmarcha Meyr.

6504 pumilio *Zell.*
liophanes Meyr.

Stenoptilia Hbn.

6505 rhynchosiae *Dyar*

6506 parva *Wlshm.*

6507 pterodactyla *Linn.*
ptilodactyla Hbn.

6508 zophodactyla *Dup.*
semicostatus Zell.

6509 pallistriga *B. & McD.*

6510 mengeli *Fern.*

6511 bowmani *McD.*

6512 exclamationis *Wlshm.*

6513 coloradensis *Fern.*

6514 columbia *McD.*

Aciptilia Hbn.

6515 walsinghami *Fern.*

Pselnophorus Wallen.

6516 belfragei *Fish*

Adaina Tutt

6517 bipunctata *Moesch.*
simplicius Gross.

6518 zephyria *B. & L.*

6519 montana *Wlshm.*
form declivis *Meyr.*

6520 cinerascens *Wlshm.*

6521 buscki *B. & L.*

6522 ambrosiae *Murt.*
perplexus Grossb.

Oidaematophorus Wallen.

6523 occidentalis *Wlshm.*
californica Grin.

6524 cretidactylus *Fitch*
gypsodactylus Wlshm.

6525 downesi *McD.*

6526 guttatus *Wlshm.*

6527 mathewianus *Zell.*
gorgoniensis Grin.
hilda Grin.

6528 fishii *Fern.*

6529 eupatorii *Fern.*

6530 alaskensis *B. & L.*

6531 phaceliae *McD.*

6532 grisescens *Wlshm.*
acrias Meyr.
behrii Grin.

6533 cineraceus *Fish*
lugubris Fish

6534 rileyi *Fern.*

6535 lindseyi *McD.*

6536 baroni *Fish*

6537 castor *B. & L.*

6538 pollux *B. & L.*

6539 mizar *B. & L.*

6540 meyricki *B. & L.*

6541 gratiosus *Fish*

6542 fieldi *Wgt.*

6543 confusus *Brn.*

6544 citrites *Meyr.*

6545 brucei *Fern.*
chionastes Meyr.

6546 inquinatus *Zell.*

6547 eros *B. & L.*

6548 pan *B. & L.*

6549 phoebus *B. & L.*

6550 triton *B. & L.*

6551 integratus *Meyr.*

6552 auster *B. & L.*

6553 medius *B. & L.*

6554 lienigianus *Zell*
linus B. & L.

6555 cadmus *B. & L.*

6556 iobates *B. & L.*

6557 cochise *B. & L.*

6558 ares *B. & L.*

6559 tinctus *Wlshm.*

6560 helianthi *Wlshm.*

6561 homodactylus *Wlk.*

6562 elliottii *Fern.*

6563 stramineus *Wlshm.*

6564 angustus *Wlshm.*

6565 paleaceus *Zell.*
sericidactylus Murt.

6566 venapunctus *B. & L.*

6567 luteolus *B. & L.*

6568 lacteodactylus *Cham.*
form kellicottii *Fish*
chlorias Meyr.

6569 balanotes *Meyr.*
aquila Meyr.

6570 grandis *Fish*
baccharides Grin.

6571 subochraceus *Wlshm.*

6572 sulphureodactylus *Pack.*

6573 serenus *Meyr.*

6574 australis *Grin.*

6575 costatus *B. & L.*

6576 falsus *B. & L.*

6577 varius *B. & L.*

6578 corvus *B. & L.*

6579 perditus *B. & L.*

6580 simplicissimus *McD.*

6581 unicolor *B. & McD.*

6582 inconditus *Wlshm.*

6583 caudelli *Dyar*

6584 rigidus *McD.*

6585 contortus *McD.*

6586 catalinae *Grin.*

6587 arion *B. & L.*

6588 monodactylus *Linn.*
cineridactylus Fitch
naevosidactylus Fitch
pergracilidactylus Pack.
barberi Dyar
pictipennis Grin.

6589 longifrons *Wlshm.*

Agdistis Hbn.

6590 americana *B. & L.*

ALUCITIDAE

Alucita Linn.

6591 huebneri *Wallen.*
montana Ckll.
‡*hexadactyla* Auct.

Superfamily **TORTRICOIDEA**

OLETHREUTIDAE

OLETHREUTINAE

Episimus Wlshm.

6592 argutanus *Clem.*
hamameliella Clem.
allutana Zell.

6593 augmentanus *Zell.*

6594 tyrius *Heinr.*

Bactra Steph.

6595 lanceolana *Hbn.*

6596 furfurana *Haw.*

6597 verutana *Zell.*
a albipuncta *Heinr.*
b chrysea *Heinr.*

6598 maiorina *Heinr.*

6599 priapeia *Heinr.*

6600 sinistra *Heinr.*

Polychrosis Rag.

6601 liriodendrana *Kft.*
magnoliana Kft.

6602 viteana *Clem.*
vitivorana Pack.
‡*botrana* Fern.

6603 monotropana *Heinr.*

6604 cypripediana *Forbes*

6605 rhoifructana *Kft.*

6606 yaracana *Kft.*
signifera Meyr.

6607 spiraeifoliana *Heinr.*

6608 exasperana *McD.*

6609 palliolana *McD.*

6610 aemulana *Heinr.*

6611 vernoniana *Kft.*
ambrosiana Kft.

6612 aruncana *Kft.*

6613 slingerlandana *Kft.*

6614 carduana *Busck.*

6615 blandula *Heinr.*

6616 cyclopiana *Heinr.*

6617 spiraeae *McD.*

Ahmosia Heinr.

6618 galbinea *Heinr.*

6619 aspasiana *McD.*

Endothenia Steph.

6620 montanana *Kft.*
kingi McD.

6621 heinrichi *McD.*

6622 rubipunctana *Kft.*

6623 sordulenta *Heinr.*

6624 melanosticta *Wlshm.*
flavillana Dyar

6625 hebesana *Wlk.*
inexpertana Wlk.
fullerea Riley

6626 daeckeana *Kft.*

6627 conditana *Wlshm.*

6628 infuscata *Heinr.*

6629 antiquana *Hbn.*
a nubilana *Clem.*
vetulana Wlshm.

Taniva Heinr.

6630 albolineana *Kft.*
abietana Fern.
piceae Busck

Tia Heinr.

6631 vulgana *McD.*

Hulda Heinr.

6632 impudens *Wlshm.*

Esia Heinr.

6633 approximana *Heinr.*

Eumarozia Heinr.

6634 malachitana *Zell.*

Zomaria Heinr.

6635 interruptolineana *Fern.*

6636 rosaochreana *Kft.*

6637 andromedana *B. & McD.*

Aphania Hbn.

6638 capreana *Hbn.*
funerea Meyr.

6639 youngana *McD.*

6640 frigidana *Pack.*
moeschleri Ken.

6641 spinulana *McD.*

6642 brevicornutana *McD.*

6643 tertiana *McD.*

6644 bifida *McD.*

6645 afficticia *Heinr.*

6646 strigosa *Heinr.*

6647 albeolana *Zell.*

6648 apateticana *McD.*
‡*deceptana* McD.

6649 deceptana *Kft.*

6650 dextrana *McD.*

6651 infida *Heinr.*

6652 removana *Kft.*

Sciaphila Treit.

6653 duplex *Wlshm.*
form thallasana *McD.*

Badebecia Heinr.

6654 urticana *Hbn.*
campestrana Zell.
dilutifuscana Wlshm.

Phaecasiophora Grt.

6655 confixana *Wlk.*
perductana Wlk.
mutabilana Clem.

6656 niveiguttana *Grt.*

6657 inspersa *Heinr.*

Exartema Clem.

6658 monetiferanum *Riley*

6659 nitidanum *Clem.*

6660 foedanum *Clem.*
concinnanum Fern.

6661 furfuranum *McD.*

6662 olivaceanum *Fern.*
bolandanum McD.

6663 fraternanum *McD.*

6664 subnubilum *Heinr.*

6665 electrofuscum *Heinr.*

6666 rusticanum *McD.*

6667 zellerianum *Fern.*
‡*nitidanum* Zell.

6668 footianum *Fern.*

6669 atrodentanum *Fern.*

6670 punctanum *Wlshm.*
cornanum Heinr.

6671 connectum *McD.*

6672 inornatanum *Clem.*

6673 clavanum *Wlk.*

6674 mediopartitum *Heinr.*

6675 exoletum *Zell.*

6676 bicoloranum *McD.*

6677 tenebricum *Heinr.*

6678 quadrifidum *Zell.*

6679 tilianum *Heinr.*

6680 sciotanum *Heinr.*

6681 trepidulum *Heinr.*

6682 nigranum *Heinr.*

6683 viburnanum *McD.*

6684 hippocastanum *Kft.*

6685 merrickanum *Kft.*

6686 corylanum *Fern.*

6687 ochrosuffusanum *Heinr.*

6688 brunneopurpuratum *Heinr.*

6689 ferrugineanum *Riley*

6690 fagigemmeanum *Cham.*

6691 sericoranum *Wlshm.*

6692 melanomesum *Heinr.*

6693 valdanum *McD.*
micantanum Forbes

6694 versicoloranum *Clem.*

6695 brevirostratum *Heinr.*

6696 permundanum *Clem.*
meanderana Wlk.

6697 submissanum *McD.*

6698 nananum *McD.*
quebecense Heinr.

6699 malanum *Fern.*

6700 appendiceum *Zell.*

6701 concinnanum *Clem.*
form terminanum *McD.*

6702 fasciatanum *Clem.*
decisana Wlk.
albofasciatum Zell.

6703 troglodanum *McD.*

6704 exaeresimum *Heinr.*

6705 ferriferanum *Wlk.*
gratiosana Clem.
usticana Zell.

Hedia Hbn.

6706 separatana *Kft.*
‡*dimidiana* Fern.

6707 ochroleucana *Hbn.*
nimbatana Clem.
contrariana Wlk.
consanguinana Wlshm.

6708 variegana *Hbn.*

6709 chionosema *Zell.*

6710 cyanana *Murt.*

Tsinilla Heinr.

6711 lineana *Fern.*

Olethreutes Hbn.
Argyroploce Hbn.

6712 griseoalbana *Wlshm.*

6713 osmundana *Fern.*
ochromediana Kft.

6714 auricapitana *Wlshm.*

6715 agilana *Clem.*

6716 albiciliana *Fern.*

6717 *siderana *Treit.*
a chalybeana *Wlshm.*

6718 sordidana *McD.*

6719 galaxana *Kft.*
a glitranana *Kft.*

6720 constellatana *Zell.*

6721 astrologana *Zell.*
a coronana *Kft.*

6722 coruscana *Clem.*
ferrolineana Wlk.
argyroelana Zell.

6723 puncticostana *Wlk.*
a murina *Pack.*
b major *Wlshm.*

6724 nordeggana *McD.*

6725 heinrichana *McD.*

6726 minaki *McD.*

6727 deprecatoria *Heinr.*

6728 cespitana *Hbn.*
flavofasciana West. & Humph.
instrutana Clem.
poana Zell.

6729 carolana *McD.*

6730 polluxana *McD.*

6731 glaciana *Moesch.*
dealbana Wlk.
fuscalbana Zell.
castorana McD.

6732 bipartitana *Clem.*
similisana Wlk.
caesialbana Zell.

6733 trinitana *McD.*

6734 schulziana *Fabr.*
bentleyana Curt.

6735 intermistana *Clem.*
‡*turfosana* Moesch.
tessellana Pack.

6736 septentrionana *Curt.*
? primariana Wlk.
? fulvifrontana Pack.

6737 inquietana *Wlk.*
‡*septentrionana* Moesch.
boreana Rebel

6738 bowmanana *McD.*

6739 mengelana *Fern.*
groenlandicana B.-H.

6740 costimaculana *Fern.*

6741 devotana *Kft.*

6742 buckellana *McD.*
a albidula *Heinr.*

Evora Heinr.

6743 hemidesma *Zell.*

EUCOSMINAE

Pseudogalleria Rag.

6744 inimicella *Zell.*

Rhyacionia Hbn.
Retinia Gn.

6745 buoliana *Schiff.*

6746 neomexicana *Dyar*
‡*offectalis* Ckll.

6747 pasadenana *Kft.*

6748 busckana *Heinr.*

6749 adana *Heinr.*

6750 zozana *Kft.*
matutina Meyr.
a montana *Busck.*

6751 rigidana *Fern.*

6752 frustrana *Comst.*
a bushnelli *Busck*

6753 subcervinana *Wlshm.*

Petrova Heinr.

6754 comstockiana *Fern.*

6755 virginiana *Busck*

6756 albicapitana *Busck*
a arizonensis *Heinr.*

6757 metallica *Busck*

6758 luculentana *Heinr.*

6759 sabiniana *Kft.*

6760 edemoidana *Dyar*

6761 monophylliana *Kft.*

6762 gemistrigulana *Kft.*

6763 pallipennis *McD.*

6764 burkeana *Kft.*

6765 picicolana *Dyar*

Barbara Heinr.

6766 colfaxiana *Kft.*
a siskiyouana *Kft.*
b coloradensis *Heinr.*
c taxifoliella *Busck*

6767 ulteriorana *Heinr.*

Spilonota Steph.

6768 ocellana *D. & S.*
pyrifoliana Clem.
oculana Harr.
form lariciana *Hein.*

Strepsicrates Meyr.
Phthinolophus Dyar

6769 smithiana *Wlshm.*
a indentana *Dyar*

Thiodia Hbn.

6770 radiatana *Wlshm.*

6771 albertana *McD.*

6772 essexana *Kft.*

6773 awemeana *Kft.*

6774 indeterminana *McD.*

6775 umbrastriana *Kft.*

6776 roseoterminana *Kft.*

6777 ferruginana *Fern.*

6778 formosana *Clem.*
sagittana Wlk.
stercoreana Zell.
a subcandida *Heinr.*

6779 altana *McD.*

6780 corculana *Zell.*
aspidiscana Wlshm.

6781 annetteana *Kft.*

6782 refusana *Wlk.*

6783 amphorana *Wlshm.*

6784 decempunctana *Wlshm.*

6785 ochrocephala *Wlshm.*

6786 raracana *Kft.*
fastidiosa Meyr.

6787 ochroterminana *Kft.*

6788 perfuscana *Heinr.*

6789 crispana *Clem.*

6790 alterana *Heinr.*

6791 marmontana *Kft.*

6792 sinestrigana *McD.*

6793 oregonensis *Heinr.*

6794 tomonana *Kft.*
limigena Meyr.

6795 modernana *McD.*

6796 fasciculatana *McD.*

6797 convergana *McD.*

6798 mormonensis *Heinr.*

6799 delphinus *Heinr.*

6800 latens *Heinr.*

6801 columbiana *Wlshm.*

6802 insignata *Heinr.*

6803 apacheana *Wlshm.*

6804 influana *Heinr.*

6805 sublapidana *Wlshm.*

6806 lapidana *Wlshm.*

6807 kokana *Kft.*
chortaea Meyr.
a sororiana *Heinr.*

6808 ornatula *Heinr.*

6809 elongana *Wlshm.*

6810 rupestrana *McD.*

6811 transversa *Wlshm.*

6812 tarandana *Moesch.*

6813 nepotinana *Heinr.*

6814 complicana *McD.*

6815 spectana *McD.*

6816 tenuiana *Wlshm.*

6817 migratana *Heinr.*

6818 cinereolineana *Heinr.*

6819 misturana *Heinr.*

6820 parvana *Wlshm.*

6821 fertoriana *Heinr.*

6822 crassana *McD.*

6823 alatana *McD.*

6824 clavana *Fern.*

6825 indagatricana *Heinr.*

6826 argenticostana *Wlshm.*

6827 spiculana *Zell.*

6828 dorsiatomana *Kft.*

6829 striatana *Clem.*
albicepsana Wlk.
trivittana Zell.
a occidentalis *Heinr.*

6830 implicata *Heinr.*

6831 delphinoides *Heinr.*

6832 pallidarcis *Heinr.*

6833 modicellana *Heinr.*

6834 minimana *Wlshm.*

6835 submminimana *Heinr.*

6836 pallidicostana *Wlshm.*

6837 perangustana *Wlshm.*

6838 kiscana *Kft.*
speculigera Meyr.

6839 salmicolorana *Heinr.*

6840 artemisiana *Wlshm.*

6841 infimbriana *Dyar*
a candidula *Heinr.*

6842 octopunctana *Wlshm.*

6843 youngi *McD.*

6844 setonana *McD.*

6845 scalana *Wlshm.*

6846 festivana *Heinr.*

6847 segregata *Heinr.*

6848 castrensis *McD.*

6849 camdenana *McD.*

6850 montanana *Wlshm.*
triangulana Kft.

6851 benjamini *Heinr.*

6852 griseocapitana *Wlshm.*

6853 pastigiata *Heinr.*

6854 olivaceana *Riley*

6855 verniochreana *Heinr.*

6856 imbridana *Fern.*

6857 granulatana *Kft.*

6858 grindeliana *Busck*

6859 stramineana *Wlshm.*

6860 umbraticana *Heinr.*

6861 offectalis *Hlst.*
obliterana Wlshm.

6862 bucephaloides *Wlshm.*

6863 southamptonensis *Heinr.*

Eucosma Hbn.

6864 quinquemaculana *Rob.*

6865 robinsonana *Grt.*
quintana Zell.
tryonana Kft.

6866 hazelana *Klots*

6867 crambitana *Wlshm.*

6868 fandana *Kft.*
argyraula Meyr.

6869 canariana *Kft.*

6870 ridingsana *Rob.*
argentifurcatana Grt.
hipeana Grt.

6871 fernaldana *Grt.*

6872 magnidicana *Heinr.*

6873 caniceps *Wlshm.*

6874 gandana *Kft.*
chloroleuca Meyr.

6875 avalona *McD.*

6876 adamantana *Gn.*

6877 spaldingana *Kft.*

6878 sandiego *Kft.*

6879 gilletteana *Dyar*

6880 optimana *Dyar*

6881 agassizii *Rob.*

6882 laticurva *Heinr.*

6883 dapsilis *Heinr.*

6884 bolanderana *Wlshm.*

6885 argenteana *Wlshm.*

6886 idahoana *Kft.*

6887 ragonoti *Wlshm.*
ab. barnesiana *Dyar*

6888 serpentana *Wlshm.*

6889 ophionana *McD.*

6890 heathiana *Kft.*

6891 argentialbana *Wlshm.*
smithiana Wlshm.
a britana *McD.*

6892 morrisoni *Wlshm.*

6893 lathami *Forbes*

6894 pergandeana *Fern.*
a flavana *Fern.*

6895 agricolana *Wlshm.*

6896 costastrigulana *Kft.*

6897 comatulana *Zell.*

6898 vagana *McD.*

6899 albiguttana *Zell.*

6900 graciliana *Kft.*

6901 galenapunctana *Kft.*

6902 monogrammana *Zell.*

6903 atomosana *Wlshm.*

6904 serapicana *Heinr.*

6905 watertonana *McD.*

6906 glomerana *Wlshm.*

6907 sandana *Kft.*
griphodes Meyr.

6908 circulana *Hbn.*
a gemellana *Heinr.*

6909 scintillana *Clem.*
dodecana Zell.
‡*circulana* Fern.
a randana *Kft.*
paraglypta Meyr.

6910 fratruelis *Heinr.*

6911 fraudabilis *Heinr.*

6912 pallidipalpana *Kft.*

6913 perdricana *Wlshm.*
kandana Kft.
argillacea Meyr.

6914 russeola *Heinr.*

6915 luridana *Wlshm.*

6916 consociana *Heinr.*

6917 irroratana *Wlshm.*

6918 subflavana *Wlshm.*

6919 handana *Kft.*
ceramitis Meyr.

6920 sepulchrana *Meyr.*

6921 immaculana *Kft.*

6922 maculatana *Wlshm.*

6923 sonomana *Kft.*

6924 gloriola *Heinr.*

6925 bobana *Kft.*
antichroma Meyr.

6926 cocana *Kft.*
rhodophaea Meyr.

6927 rescissoriana *Heinr.*

6928 monitorana *Heinr.*

6929 tocullionana *Heinr.*

6930 momana *Kft.*
metaschista Meyr.

6931 grotiana *Kft.*

6932 palabundana *Heinr.*

6933 lolana *Kft.*
leucomalla Meyr.

6934 dodana *Kft.*
spilophora Meyr.

6935 fofana *Kft.*
annulata Meyr.

6936 invicta *Wlshm.*

6937 eburata *Heinr.*

6938 subinvicta *Kft.*

6939 snyderana *Kft.*

6940 emaciatana *Wlshm.*

6941 totana *Kft.*
spodias Meyr.

6942 persolita *Heinr.*

6943 popana *Kft.*
carcharias Meyr.

6944 matutina *Grt.*

6945 larana *Wlshm.*

6946 exclusoriana *Heinr.*

6947 daemonicana *Heinr.*

6948 heinrichi *McD.*

6949 occipitana *Zell.*

6950 reversana *Kft.*

6951 perpropinqua *Heinr.*

6952 tahoensis *Heinr.*
a subditiva *Heinr.*

6953 shastana *Wlshm.*

6954 palpana *Wlshm.*

6955 grandiflavana *Wlshm.*

6956 hyponomeutana *Wlshm.*

6957 giganteana *Riley*
a minorata *Heinr.*

6958 bipunctella *Wlk.*
worthingtoniana Fern.

6959 bilineana *Kft.*

6960 denverana *Kft.*

6961 fuscosparsa *Wlshm.*

6962 mediostriata *Wlshm.*

6963 excerptionana *Heinr.*

6964 abstemia *Meyr.*
‡*bactrana* Heinr.

6965 biplagata *Wlshm.*

6966 primulana *Wlshm.*

6967 gomonana *Kft.*
discipula Meyr.

6968 dilatana *Wlshm.*

6969 nandana *Kft.*
chersaea Meyr.

6970 landana *Kft.*
isospora Meyr.

6971 simplex *McD.*

6972 dorsisignatana *Clem.*
distigmana Wlk.
clavana Zell.
a diffusana *Kft.*
b similana *Clem.*
confluana Kft.
c engelana *Kft.*

6973 graduatana *Wlshm.*

6974 juncticiliana *Wlshm.*

6975 derelicta *Heinr.*

6976 excusabilis *Heinr.*

6977 eumaea *Meyr.*
wandana Kft.

6978 mandana *Kft.*
amanda Meyr.

6979 fulminana *Wlshm.*

6980 rusticana *Kft.*

6981 mobilensis *Heinr.*

6982 sombreana *Kft.*
phlaeodes Meyr.

6983 pandana *Kft.*
sardiopa Meyr.

6984 fiskeana *Kft.*

6985 corosana *Wlshm.*

6986 nuntia *Heinr.*

6987 inquadrana *Wlshm.*

6988 pulveratana *Wlshm.*

6989 consobrinana *Heinr.*

6990 aspidana *Wlshm.*

6991 hohona *Kft.*
syrtodes Meyr.

6992 biquadrana *Wlshm.*

6993 palousana *Kft.*

6994 mirosignata *Heinr.*

6995 suadana *Heinr.*

6996 canana *Wlshm.*

6997 expolitana *Heinr.*

6998 rorana *Kft.*
sceletopa Meyr.

6999 metariana *Heinr.*

7000 passerana *Wlshm.*

7001 zomonana *Kft.*
explosa Meyr.

7002 womonana *Kft.*
semnitis Meyr.

7003 vandana *Kft.*
pholas Meyr.

7004 cataclystiana *Wlk.*
ochreana Clem.

7005 conspiciendana *Heinr.*

7006 floridana *Kft.*

7007 petalonota *Meyr.*

7008 urnigera *Meyr.*

7009 fuscana *Kft.*

7010 resumptana *Wlk.*

7011 liturana *Wlshm.*

Epiblema Hbn.

7012 boxcana *Kft.*
aspista Meyr.

7013 serangias *Meyr.*
vomonana Kft.

7014 strenuana *Wlk.*
exvagana Wlk.
flavocellana Clem.
subversana Zell.
minutana Kft.
antaxia Meyr.

7015 abruptana *Wlshm.*

7016 numerosana *Zell.*

7017 grossbecki *Heinr.*

7018 praesumptiosa *Heinr.*
a separationis *Heinr.*

7019 deflexana *Heinr.*

7020 ochraceana *Fern.*

7021 sosana *Kft.*
pelina Meyr.

7022 insidiosana *Heinr.*

7023 symbolaspis *Meyr.*

7024 exacerbatricana *Heinr.*

7025 tripartitana *Zell.*

7026 benignata *McD.*

7027 scudderiana *Clem.*
saligneana Clem.
affusana Zell.

7028 kennebecana *Kft.*

7029 discretivana *Heinr.*

7030 obfuscana *Dyar*

7031 desertana *Zell.*

7032 carolinana *Wlshm.*

7033 hirsutana *Wlshm.*

7034 purpurissatana *Heinr.*
gratuitana Heinr.

7035 walsinghami *Kft.*

7036 periculosana *Heinr.*

7037 iowana *McD.*

7038 lyallana *McD.*

7039 infelix *Heinr.*

7040 suffusana *Zell.*

7041 dorsisuffusana *Kft.*

7042 illotana *Wlshm.*

7043 culminana *Wlshm.*

7044 otiosana *Clem.*
inclinana Zell.

7045 brightonana *Kft.*

7046 tandana *Kft.*
trapezitis Meyr.

7047 abbreviatana *Wlshm.*

Suleima Heinr.

7048 helianthana *Riley*

7049 daracana *Kft.*
profana Meyr.

7050 skinnerana *Heinr.*

7051 lagopana *Wlshm.*

7052 baracana *Kft.*
caracana Kft.
oxyleuca Meyr.
famosa Meyr.

7053 cinerodorsana *Heinr.*

Sonia Heinr.

7054 constrictana *Zell.*

7055 canadana *McD.*

7056 vovana *Kft.*
fraternana Busck
typicodes Meyr.

7057 filiana *Busck*

Gypsonoma Meyr.

7058 fasciolana *Clem.*
blakeana Grt.

7059 nebulosana *Pack.*

7060 parryana *Curt.*

7061 haimbachiana *Kft.*

7062 substitutionis *Heinr.*

7063 salicicolana *Clem.*
saliciana Clem.

7064 adjuncta *Heinr.*

Proteoteras Riley

7065 aesculana *Riley*

7066 implicata *Heinr.*

7067 willingana *Kft.*

7068 crescentana *Kft.*

7069 naracana *Kft.*
praesinospila Meyr.

7070 moffatiana *Fern.*

7071 arizonae *Kft.*

7072 obnigrana *Heinr.*

Zeiraphera Treit.

7073 claypoleana *Riley*
‡*instrutana* Clay.

7074 ratzeburgiana *Ratz.*

7075 diniana *Gn.*
pinicolana Zell.
pseudotsugana Kft.

7076 vancouverana *McD.*

7077 fortunana *Kft.*

Exentera Grt.

7078 improbana *Wlk.*
diffinana Wlk.
cressoniana Clem.
apriliana Grt.
a oregonana *Wlshm.*

7079 senatrix *Heinr.*

7080 spoliana *Clem.*
? destitutana Wlk.

7081 perstructana *Wlk.*

7082 haracana *Kft.*
resoluta Meyr.

7083 faracana *Kft.*
ultrix Meyr.

7084 maracana *Kft.*
praescripta Meyr.

7085 habrosana *Heinr.*

7086 costomaculana *Clem.*
bipustulana Wlk.

7087 virginiana *Clem.*

Gretchena Heinr.

7088 deludana *Clem.*

7089 concubitana *Heinr.*

7090 watchungana *Kft.*

7091 dulciana *Heinr.*

7092 bolliana *Sling.*

7093 amatana *Heinr.*

7094 delicatana *Heinr.*

7095 biangulana *Wlshm.*

7096 semialba *McD.*

Griselda Heinr.

7097 radicana *Wlshm.*

7098 pennsylvaniana *Kft.*

7099 gerulae *Heinr.*

Gwendolina Heinr.

7100 concitatricana *Heinr.*

Crocidosema Zell.

7101 plebeiana *Zell.*

Norma Heinr.

7102 dietziana *Kft.*

Kundrya Heinr.

7103 finitimana *Heinr.*

Hendecaneura Wlshm.

7104 shawiana *Kft.*

Rhopobota Led.

7105 naevana *Hbn.*
ilicifoliana Kft.
a geminana *Steph.*
vacciniana Pack.
luctiferana Wlk.

Epinotia Hbn.

7106 similana *Hbn.*
bimaculana Don.

7107 sperana *McD.*

7108 myricana *McD.*

7109 solandriana *Linn.*

7110 ethnica *Heinr.*

7111 pulsatillana *Dyar*
a siskiyouensis *Heinr.*

7112 medioviridana *Kft.*

7113 perplexana *Fern.*

7114 castaneana *Wlshm.*

7115 johnsonana *Kft.*

7116 madderana *Kft.*

7117 laracana *Kft.*
navalis Meyr.

7118 vertumnana *Zell.*
celtisana Riley

7119 zandana *Kft.*
peristicta Meyr.

7120 xandana *Kft.*
yandana Kft.
atacta Meyr.
nothrodes Meyr.

7121 albicapitana *Kft.*

7122 hopkinsana *Kft.*
a cupressi *Heinr.*

7123 subviridis *Heinr.*

7124 fumoviridana *Heinr.*

7125 subplicana *Wlshm.*

7126 improvisana *Heinr.*

7127 basipunctana *Wlshm.*

7128 rectiplicana *Wlshm.*

7129 corylana *McD.*

7130 solicitana *Wlk.*
packardiana Clem.
tephrinana Zell.

7131 hamptonana *Kft.*

7132 nisella *Clerck*
form criddleana *Kft.*

7133 albangulana *Wlshm.*

7134 walkerana *Kft.*

7135 transmissana *Wlk.*

7136 removana *McD.*

7137 momonana *Kft.*
sanifica Meyr.

7138 terracoctana *Wlshm.*

7139 miscana *Kft.*
semalea Meyr.

7140 silvertoniensis *Heinr.*

7141 marmoreana *Heinr.*

7142 digitana *Heinr.*

7143 nigralbanoidana *McD.*

7144 nigralbana *Wlshm.*

7145 ruidosana *Heinr.*

7146 heucherana *Heinr.*

7147 sagittana *McD.*

7148 emarginana *Wlshm.*

7149 crenana *Hbn.*
columbia Kft.
form albidorsana *Kft.*
form mediostriana *Kft.*

7150 cercocarpana *Dyar*

7151 bigemina *Heinr.*

7152 bicordana *Heinr.*

7153 arctostaphylana *Kft.*

7154 keiferana *Lange*

7155 unica *Heinr.*

7156 infuscana *Wlshm.*

7157 timidella *Clem.*

7158 aceriella *Clem.*
signatana Clem.
variana Clem.
subnisana Zell.

7159 nonana *Kft.*
carphologa Meyr.

7160 normanana *Kft.*

7161 nanana *Treit.*
domonana Kft.
piceafoliana Kft.
efficax Meyr.

7162 meritana *Heinr.*

7163 lomonana *Kft.*
veneratrix Meyr.

7164 purpuriciliana *Wlshm.*

7165 medioplagata *Wlshm.*

7166 plumbolineana *Kft.*
a russata *Heinr.*

7167 cruciana *Linn.*
augustana Hbn.
direptana Wlk.
vilisana Wlk.
cockleana Kft.
a alaskae *Heinr.*
b lepida *Heinr.*

7168 septemberana *Kft.*

7169 vagana *Heinr.*

7170 seorsa *Heinr.*

7171 kasloana *McD.*

7172 lindana *Fern.*

7173 trossulana *Wlshm.*

7174 signiferana *Heinr.*

Anchylopera Steph.

7175 nubeculana *Clem.*

7176 subaequana *Zell.*
a kincaidiana *Fern.*

7177 lamiana *Clem.*
‡*discigerana* Auct.

7178 discigerana *Wlk.*
metamelana Wlk.
discoferana Wlk.
‡*spireaefoliana* Auct.

7179 tenebrica *Heinr.*

7180 semiovana *Zell.*

7181 angulifasciana *Zell.*
intermediana Kft.

7182 maritima *Dyar*

7183 spireaefoliana *Clem.*

7184 burgessiana *Zell.*
murtfeldtiana Riley
a pruni *Heinr.*

7185 mira *Heinr.*

7186 furvescens *Heinr.*

7187 laciniana *Zell.*

7188 fuscociliana *Clem.*
dubiana Clem.

7189 platanana *Clem.*
marcidana Zell.

7190 pulchellana *Clem.*

7191 brauni *Heinr.*

7192 definitivana *Heinr.*

Ancylis Hbn.

7193 comptana *Froh.*
conflexana Wlk.
a cometana *Wlshm.*
b fragariae *Walsh & Riley*
amblygona Zell.
c floridana *Zell.*

7194 divisana *Wlk.*

7195 apicana *Wlk.*

7196 muricana *Wlshm.*
a cornifoliana *Riley*

7197 carbonana *Heinr.*
‡*uncana* Auct.

7198 diminutana *Haw.*
diminuatana Kft.

7199 goodelliana *Fern.*

7200 albafascia *Heinr.*

7201 unguicella *Linn.*
plagosana Clem.

7202 pacificana *Wlshm.*

7203 mediofasciana *Clem.*

7204 torontana *Kft.*

7205 tineana *Hbn.*
ocellana Clem.
leucophaleratana Pack.

7206 albacostana *Kft.*

Hystricophora Wlshm.

7207 leonana *Wlshm.*
a aurantiana *Wlshm.*

7208 paradisiae *Heinr.*

7209 stygiana *Dyar*
a californiae *Heinr.*

7210 roessleri *Zell.*

7211 ostentatrix *Heinr.*

7212 asphodelana *Kft.*
a seraphicana *Heinr.*

7213 taleana *Grt.*

7214 ochreicostana *Wlshm.*

7215 loricana *Grt.*

7216 decorosa *Heinr.*

7217 vestaliana *Zell.*

LASPEYRESIINAE

Goditha Heinr.

7218 bumeliana *Heinr.*

Dichrorampha Gn.

7219 kana *Busck*
planiloqua Meyr.

7220 capitana *Busck*

7221 britana *Busck*
‡*alpinana* Fern.

7222 simulana *Clem.*
aurisignana Zell.

7223 bittana *Busck*

7224 incanana *Clem.*
nigromaculana Kft.

7225 vancouverana *McD.*

7226 radicicolana *Wlshm.*

7227 banana *Busck*
sordescens Meyr.

7228 piperana *Busck*

7229 sedatana *Busck*
‡*plumbana* Fern.

7230 dana *Kft.*
aequorea Meyr.
a bradorensis *McD.*

7231 leopardana *Busck*

Satronia Heinr.

7232 tantilla *Heinr.*

Ricula Heinr.

7233 maculana *Fern.*

Talponia Heinr.

7234 plummeriana *Busck*

Hemimene Hbn.

7235 ocliferia *Heinr.*

7236 felicitana *Heinr.*

7237 signifera *Heinr.*

7238 paula *Heinr.*

7239 bowmanana *McD.*

Ethelgoda Heinr.

7240 texanana *Wlshm.*

Sereda Heinr.

7241 lautana *Clem.*
perfluana Zell.

Grapholitha Treit.

7242 molesta *Busck*

7243 libertina *Heinr.*

7244 packardi *Zell.*
pyricolana Murt.

7245 prunivora *Walsh.*

7246 angleseana *Kft.*

7247 caeruleana *Wlshm.*
zana Kft.
vana Kft.
xanthospora Meyr.
eoleuca Meyr.

7248 vitrana *Wlshm.*

7249 fana *Kft.*
oenochroa Meyr.

7250 conversana *Wlshm.*
wana Kft.
cupida Meyr.

7251 imitativa *Heinr.*

7252 lunatana *Wlshm.*

7253 eclipsana *Zell.*

7254 interstinctana *Clem.*
scitana Wlk.
distema Grt.

7255 edwardsiana *Kft.*

7256 lana *Kft.*
placerana Kft.
vancouverana Kft.
chrysotypa Meyr.

7257 dyarana *Kft.*

7258 tristrigana *Clem.*
saundersana Kft.

Ofatulena Heinr.

7259 duodecemstriata *Wlshm.*

7260 luminosa *Heinr.*

Laspeyresia Hbn.

7261 bracteatana *Fern.*
pallidibasalis Heinr.
a cornutana *Dyar*

7262 laricana *Busck*

7263 rana *Forbes*

7264 inopiosa *Heinr.*

7265 confusana *McD.*

7266 obnisa *Heinr.*

7267 parmatana *Clem.*

7268 larimana *Wlshm.*

7269 garacana *Kft.*
septicola Meyr.

7270 membrosa *Heinr.*

7271 multilineana *Kft.*

7272 ingrata *Heinr.*

7273 albimaculana *Fern.*
articulatana Kft.

7274 palmetum *Heinr.*

7275 populana *Busck*

7276 youngana *Kft.*

7277 nigricana *Steph.*
dandana Kft.
ratifera Meyr.
novimundi Heinr.

7278 candana *Forbes*

7279 grandicula *Heinr.*

7280 caryana *Fitch*
caryae Shimer

7281 fletcherana *Kft.*

7282 tana *Kft.*
cirrhas Meyr.

7283 cupressana *Kft.*

7284 prosperana *Kft.*
‡*succedana* Wlshm.

7285 costastrigulana *McD.*

7286 leucobasis *Busck*

7287 gallaesaliciana *Riley*

7288 lautiuscula *Heinr.*

7289 flexiloqua *Heinr.*

7290 americana *Wlshm.*

7291 flavicollis *Wlshm.*

7292 ninana *Dyar*

7293 colorana *Kft.*

7294 erotella *Heinr.*

7295 toreuta *Grt.*

7296 ingens *Heinr.*

7297 piperana *Kft.*

7298 miscitata *Heinr.*

Hedulia Heinr.

7299 injectiva *Heinr.*

Melissopus Riley

7300 latiferreanus *Wlshm.*
aurichalceana Riley
inquilina Kft.

Carpocapsa Treit.

7301 pomonella *Linn.*
pomonana Treit.
a simpsoni *Busck*

Gymnandrosoma Dyar

7302 punctidiscanum *Dyar*

7303 desotanum *Heinr.*

Ecdytolopha Zell.

7304 insiticiana *Zell.*

7305 mana *Kft.*
thaliastis Meyr.

7306 islandana *Kft.*
insulicola Meyr.

TORTRICIDAE

Coelostathma Clem.

7307 discopunctana *Clem.*

Adoxophyes Meyr.

7308 furcatana *Wlk.*

7309 negundana *McD.*

Homona Wlk.

7310 fervidana *Wlk.*
rileyana Grt.

7311 patulana *Wlk.*
audaculana Busck

Amorbia Clem.

7312 cuneana *Wlshm.*
a adumbrana *Wlshm.*

7313 synneurana *B. & Bsk.*

7314 humerosana *Clem.*

7315 essigana *Busck*

Synnoma Wlshm.

7316 lynosyrana *Wlshm.*

Sparganothis Hbn.

7317 pettitana *Rob.*

7318 groteana *Fern.*

7319 niveana *Wlshm.*

7320 albicaudana *Busck*

7321 pulcherrimana *Wlshm.*

7322 karacana *Kft.*
tempestiva Meyr.

7323 reticulatana *Clem.*
subauratana Wlk.
a mesospila *Zell.*

7324 ferreana *Busck*

7325 diluticostana *Wlshm.*
quercana Fern.

7326 directana *Wlk.*

7327 testulana *Zell.*

7328 distincta *Wlshm.*

7329 saracana *Kft.*
austera Meyr.

7330 demissana *Wlshm.*

7331 chambersana *Kft.*

7332 cana *Rob.*

7333 irrorea *Rob.*

7334 xanthoides *Wlk.*
a breviornatana *Clem.*

7335 flavibasana *Fern.*

7336 violaceana *Rob.*

7337 unifasciana *Clem.*
puritana Rob.

7338 vocaridorsana *Kft.*

7339 machimiana *B. & Bsk.*

7340 hydeana *Klots*

7341 inconditana *Wlshm.*

7342 rudana *Wlshm.*

7343 senecionana *Wlshm.*

7344 umbrana *B. & Bsk.*

7345 californiana *Wlshm.*

7346 pilleriana *Schiff.*
luteolana Hbn.

7347 tunicana *Wlshm.*

7348 caryae *Rob.*

7349 sulfureana *Clem.*
gratana Wlk.
fulvoroseana Clem.
virginiana Clem.
gallivorana Clem.
gracilana Wlshm.
a belfrageana *Zell.*

7350 euphronopa *Meyr.*

7351 lycopodiana *Kft.*

7352 taracana *Kft.*
procax Meyr.

7353 yumana *Kft.*

7354 striata *Wlshm.*

7355 bistriata *Kft.*

7356 tristriata *Kft.*

Platynota Clem.
Phylacteritis Meyr.

7357 flavedana *Clem.*
concursana Wlk.
laterana Rob.

7358 tinctana *Wlk.*

7359 semiustana *Wlshm.*

7360 labiosana *Zell.*

7361 rostrana *Wlk.*

7362 nigrocervina *Wlshm.*

7363 wenzelana *Haim.*

7364 metallicana *Wlshm.*

7365 iridana *B. & Bsk.*

7366 viridana *B. & Bsk.*

7367 stultana *Wlshm.*
chiquitana B. & Bsk.

7368 exasperatana *Zell.*

7369 idaeusalis *Wlk.*
sentana Clem.
dioptrica Meyr.

Pandemis Hbn.

7370 canadana *Kft.*

7371 pyrusana *Kft.*
pyrana Meyr.

7372 albaniana *Wlk.*
‡*obliquana* Kft.

7373 limitata *Rob.*

7374 lamprosana *Rob.*

Chrysoxena Meyr.

7375 auriferana *Busck*

Capua Steph.

7376 lentiginosana *Wlshm.*

Archips Hbn.
Cacoecia Hbn.

7377 dissitana *Grt.*

7378 persicana *Fitch*
blandana Clem.
fragariana Pack.
conigerana Zell.
? schreberiana Steph.

7379 infumatana *Zell.*

7380 brauniana *Kft.*

7381 obsoletana *Wlk.*
transiturana Wlk.
vesperana Clem.
sanbornana Rob.

7382 seminolana *Kft.*

7383 fervidana *Clem.*
paludana Rob.

7384 cerasivorana *Fitch*

7385 georgiana *Wlk.*

7386 houstonana *Grt.*
retana Wlshm.

7387 retiniana *Wlshm.*

7388 argyrospila *Wlk.*
furvana Rob.
v-signatana Pack.
a vividana *Dyar*
b columbiana *McD.*

7389 mortuana *Kft.*

7390 eleagnana *McD.*

7391 myricana *McD.*

7392 carnana *B. & Bsk.*

7393 semiferana *Wlk.*
flaccidana Rob.

7394 negundana *Dyar*

7395 lambertiana *Busck*

7396 fractivittana *Clem.*
fumosa Rob.

7397 melaleucana *Wlk.*
invexana Wlk.
semifuscana Clem.
? biustulana Steph.

7398 rosana *Linn.*
hewittana Bsk.

7399 purpurana *Clem.*
gurgitana Rob.
lintneriana Grt.

7400 magnoliana *Fern.*

7401 parallela *Rob.*

7402 zapulata *Rob.*

7403 symphoricarpana *Kft.*

7404 arcticana *Moesch.*
kukakana Kft.

7405 rosaceana *Harris*
vicariana Wlk.
gossypiana Pack.

7406 striana *Fern.*

7407 conflictana *Wlk.*

7408 fumiferana *Clem.*
nigridia Rob.

Tortrix Linn.

7409 lata *Rob.*

7410 pallorana *Rob.*

7411 clemensiana *Fern.*
nervosana Kft.

7412 dimorphana *B. & Bsk.*

7413 victoriana *Bsk.*

7414 citrana *Fern.*

7415 alleniana *Fern.*
trentonana McD.

7416 flavidana *McD.*

7417 lomonana *Kft.*
veneratrix Meyr.

7418 packardiana *Fern.*

7419 ivana *Fern.*

7420 peritana *Clem.*
inconclusana Wlk.

7421 purata *Meyr.*

7422 baboquavariana *Kft.*

7423 virescana *Clem.*
sescuplana Zell.

7424 glaucana *Wlshm.*

7425 busckana *Keif.*

7426 franciscana *Wlshm.*

7427 triangulana *Kft.*

7428 wellingtoniana *Kft.*

7429 gogana *Kft.*
crepuscularis Meyr.

7430 provana *Kft.*
invidana B. & Bsk.

7431 cockerellana *Kft.*

7432 dorsalana *Dyar*

7433 fucana *Wlshm.*

7434 semicirculana *Fern.*

7435 peroneana *B. & Bsk.*

7436 musculana *Hbn.*

7437 moeschleriana *Wocke*
algidana Moesch.
gelidana Moesch.

7438 grisea *Rob.*

7439 afflictana *Wlk.*
fuscolineana Clem.

7440 alberta *McD.*

Batodes Gn.

7441 angustiorana *Haw.*

Eulia Hbn.

7442 ministrana *Linn.*
ferrugana Hbn.
subfascianus Steph.

Argyrotaenia Hbn.

7443 velutinana *Wlk.*
triferana Wlk.
incertana Clem.

7444 lutosana *Clem.*

7445 pinatubana *Kft.*

7446 amatana *Dyar*

7447 coloradana *Fern.*

7448 gloverana *Wlshm.*

7449 niscana *Kft.*
camerata Meyr.

7450 mariana *Fern.*

7451 alisellana *Rob.*

7452 quercifoliana *Fitch*
trifurculana Zell.

7453 quadrifasciana *Fern.*

7454 juglandana *Fern.*

Tortricodes Gn.

7455 horariana *Wlshm.*

7456 fragariana *Bsk.*
elapsa Meyr.

Acroplectis Meyr.

7457 haemanthes *Meyr.*

Cnephasia Curt.

7458 osseana *Scop.*
a niveosana *Pack.*

7459 argentana *Cl.*
georgiella Hlst.

7460 fernaldana *Wlshm.*

7461 arizonana *Wlshm.*

7462 ednana *Kft.*

7463 listerana *Kft.*

7464 basiplagana *Wlshm.*

7465 indivisana *Wlk.*

7466 oleraceana *Gib.*

Argyrotoxa Steph.

7467 chioccana *Kft.*
chiococcana Meyr.

7468 bergmanniana *Linn.*
rosana Hbn.

7469 albicomana *Clem.*

7470 semipurpurana *Kft.*
form dorsipurpurana *Kft.*

7471 curvalana *Kft.*

Peronea Curt.

7472 emargana *Fabr.*
caudana Fabr.

7473 maccana *Tr.*
fishiana Fern.

7474 ptychogrammos *Zell.*

7475 nigrolinea *Rob.*
a ferruginiguttana *Fern.*

7476 maximana *B. & B.*

7477 caliginosana *Wlk.*

7478 latifasciana *Haw.*
‡*shalleriana* Auct.
a comparana *Hbn.*

7479 schalleriana *Linn.*
‡*logiana* Auct.
viburnana Clem.
famula Zell.

7480 oxycoccana *Pack.*

7481 variana *Fern.*
a angusana *Fern.*

7482 chalybeana *Fern.*

7483 senescens *Zell.*

7484 hastiana *Linn.*

7485 celiana *Rob.*
form albilineana *Kft.*

7486 pulverosana *Wlk.*

7487 walkerana *McD.*

7488 caryosphena *Meyr.*

7489 variegana *Schiff.*

7490 robinsoniana *Forbes*
‡*flavivittana* Rob.
form clemensiana *Kft.*

7491 flavivittana *Clem.*
form perspicuana *Rob.*

7492 youngana *McD.*

7493 brittania *Kft.*

7494 fragariana *Kft.*

7495 inana *Rob.*

7496 busckana *McD.*

7497 maculidorsana *Clem.*
hypericana Ely..

7498 scabrana *D. & S.*

7499 lipsiana *D. & S.*

7500 hudsoniana *Wlk.*
♀ *implexana* Wlk.
brewsteriana Rob.

7501 bowmanana *McD.*

7502 minuta *Rob.*
vacciniivorana Pack.
malivorana LeB.
variolana Zell.
form cinderella *Riley*

7503 logiana *Linn.*
niveana Fabr.
placidana Rob.
form trisignana *Rob.*
tripunctana Shel.

7504 nivisellana *Wlshm.*

7505 cervinana *Fern.*
form americana *Fern.*

7506 comandrana *Fern.*

7507 subnivana *Wlk.*
deflectana Rob.
peculiana Zell.

7508 braunana *McD.*

7509 kearfottana *McD.*

7510 simpliciana *Wlshm.*

7511 forbesana *McD.*

7512 fuscana *B. & Bsk.*

7513 ferrugana *D. & S.*

7514 semiannula *Rob.*
stadiana B. & Bsk.

7515 gallicolana *Clem.*
form heindelana *Fern.*

7516 cornana *McD.*

7517 contaminana *Hbn.*
reticulata Pierce & Met.

7518 foliana *Wlshm.*

PHALONIIDAE

Phalonia Hbn.

7519 floccosana *Wlk.*
confusana Rob.

7520 atomosana *Busck.*

7521 spartinana *B. & McD.*

7522 hospes *Wlshm.*

7523 straminoides *Grt.*

7524 zaracana *Kft.*

7525 schwarziana *Busck*

7526 plummeriana *Busck*

7527 scissana *Wlk.*

7528 smeathmanniana *Fabr.*

7529 kindermannana *Tr.*

7530 deutschiana *Zett.*
fuscostrigana Clem.
chalcana Pack.

7531 felix *Wlshm.*

7532 romonana *Kft.*
officiosa Meyr.

7533 louisiana *Busck*

7534 formonana *Kft.*
myrinitis Meyr.

7535 cephalanthana *Heinr.*

7536 rutilana *Hbn.*

7537 seriatana *Zell.*

7538 intactana *Wlshm.*

7539 angustana *Clem.*
dorsimaculana Rob.

7540 promptana *Rob.*

7541 obliquana *Kft.*

7542 angulatana *Rob.*

7543 bomonana *Kft.*
cyamitis Meyr.

7544 rana *Busck*
funesta Meyr.

7545 argentilimitana *Rob.*

7546 labeculana *Rob.*

7547 parallelana *Wlshm.*

7548 transversana *Wlshm.*

7549 pimana *Busck*

7550 lepidana *Clem.*

7551 sublepidana *Kft.*

7552 biscana *Kft.*
ixeuta Meyr.
a giscana *Kft.*

7553 maiana *Kft.*

7554 gunniana *Busck*

7555 voxcana *Kft.*
omphacitis Meyr.

7556 interruptofasciana *Rob.*

7557 aureana *Busck*

7558 bunteana *Rob.*

7559 hollandana *Kft.*

7560 viscana *Kft.*
peganitis Meyr.

7561 aurorana *Kft.*

7562 marloffiana *Busck*
nonlavana Kft.

7563 toxcana *Kft.*
baryzela Meyr.

7564 lavana *Busck*

7565 punctadiscana *Kft.*

7566 zoxcana *Kft.*
telifera Meyr.

7567 oenotherana *Riley*

7568 latipunctana *Wlshm.*

7569 dilutana *Wlshm.*

7570 nana *Haw.*
carneana Gn.
ochreoalbana Wlk.

7571 campicolana *Wlshm.*

7572 parvimaculana *Wlshm.*

7573 vachelliana *Kft.*

7574 hubbardana *Busck*

7575 leguminana *Busck*

7576 glaucofuscana *Zell.*

7577 dorsistriatana *Wlshm.*

7578 edwardsiana *Wlshm.*

7579 fulvotinctana *Wlshm.*

7580 nomonana *Kft.*
voluntaria Meyr.

7581 temerana *Busck*
cincinnatana Kft.

7582 discana *Kft.*
cricota Meyr.

7583 foxcana *Kft.*
liquida Meyr.

*7584 albidana *Wlk.*
winniana Kft.

7586 grandis *Busck*

7587 yuccatana *Busck*

7588 ziscana *Kft.*
fabicola Meyr.

7589 carmelana *Kft.*
a obispoana *Kft.*

7590 wiscana *Kft.*
acropeda Meyr.

7591 elderana *Kft.*
helonoma Meyr

**No number 7585*

7592 basiochreana *Kft.*

7593 hoffmanana *Kft.*

Commophila Hbn.

7594 macrocarpana *Wlshm.*

7595 infernalis *Heinr.*

7596 comes *Wlshm.*

7597 fuscodorsana *Kft.*

7598 saxicolana *Wlshm.*

7599 contrastana *Kft.*

7600 bana *Kft.*
rhodites Meyr.

7601 huachucana *Kft.*

7602 umbrabasana *Kft.*

Pharmacis Hbn.

7603 sartana *Hbn.*

7604 bimaculana *Rob.*

7605 erigeronana *Riley*

7606 deceptana *Busck*

7607 mexicana *Busck*

7608 vitellinana *Zell.*

7609 argyoplaca *Meyr.*

Hysterosia Steph.

7610 fulviplacana *Wlshm.*
aegrana Wlshm.
homonana Kft.
refuga Meyr.
komonana Kft.
fermentata Meyr.

7611 aureoalbida *Wlshm.*

7612 canariana *B. & Bsk.*

7613 waracana *Kft.*
dicax Meyr.

7614 villana *Busck*

7615 cartwrightana *Kft.*

7616 terminana *Busck*
merrickana Kft.

7617 perspicuana *B. & Bsk.*

7618 birdana *Busck*

7619 riscana *Kft.*
vincta Meyr.

7620 pecosana *Kft.*

7621 baracana *Busck*
tiscana Kft.
vigilans Meyr.

7622 modestana *Busck*

CARPOSINIDAE

Bondia Newm.

7623 fidelis *Meyr.*

7624 crescentella *Wlshm.*

Carposina H. S.

7625 ottawana *Kft.*

7626 nicholsana *Forbes*

7627 fernaldana *Busck*

7628 comonana *Kft.*
euryleuca Meyr.

Tesuquea Klots

7629 hawleyana *Klots*

COSSIDAE

Inguromorpha Hy. Edw.
Pomeria B. & McD.

7630 itzalana *Stkr.*

7631 arcifera *Dyar*
gabriel Dyar

7632 basalis *Wlk.*
slossoni Hy. Edw.

Givira Wlk.

7633 mucida *Hy. Edw.*

7634 arbeloides *Dyar*
a rufescens *B. & McD.*

7635 theodori *Dyar*
kunzei Dyar

7636 durangona *Schaus*

7637 carla *Dyar*

7638 cornelia *N. & D.*
caerulea Dalla T.

7639 lucretia *B. & McD.*

7640 ethela *N. & D.*

7641 anna *Dyar*

7642 marga *B. & McD.*

7643 lotta *B. & McD.*

7644 francesca *Dyar*

7645 minuta *B. & McD.*

7646 cleopatra *B. & McD.*

Hypopta Hbn.

7647 palmata *B. & McD.*

Zeuzera Latr.

7648 pyrina *L.*

Hamilcara B. & McD.

7649 ramuscula *Dyar*

7650 atra *B. & McD.*

7651 gilensis *B. & McD.*

Cossula Bailey

7652 magnifica *Stkr.*
magnifica Bailey

Toronia B. & McD.

7653 perplexa *N. & D.*

7654 luzena *Barnes*

Fania B. & McD.

7655 nanus *Stkr.*

Heterocoma B. & McD.

7656 albistriga *B. & McD.*

Comadia B. & McD.

7657 engelhardti *B. & B.*

7658 dolli *B. & B.*

7659 stabilis *B. & B.*

7660 subterminata *B. & B.*

7661 bertholdi *Grt.*
a fusca *B. & B.*
b edwardi *N. & D.*

7662 intrusa *B. & B.*

7663 polingi *B. & B.*

7664 manfredi *Neum.*

7665 henrici *Grt.*

Acossus Dyar

7666 centerensis *Lint.*

7667 populi *Wlk.*
a angrezi *Bailey*
b orc *Stkr.*
gencrosa Dyar

7668 undosus *Lint.*
brucei Frch.

7669 connectus *B. & McD.*

Prionoxystus Grt.

7670 robiniae *Peck*
♀ *plagiatus* Wlk.
♂ *crepera* Harr.
ab. ♀ reticulatus *Lint.*
ab. ♀ quercus *Ehrm.*
a zabolicus *Stkr.*
b mixtus *B. & B.*
c subnigrus *B. & B.*
d flavotinctus *B. & B.*

7671 macmurtrei *Guer.*
querciperda Fitch

Superfamily **GELECHIOIDEA**

COSMOPTERYGIDAE

Synallagma Busck

7672 busckiella *Engel*

Chrysoclista Staint.

7673 villella *Busck*

Cosmopteryx Hbn.

7674 pulcherrimella *Cham.*

7675 clemensella *Staint.*

7676 gemmiferella *Clem.*

7677 attenuatella *Wlk.*
lespedezae Wlshm.

7678 ipomoeae *Busck*

7679 unicolorella *Wlshm.*

7680 quadrilineella *Cham.*

7681 opulenta *Braun*

7682 chalybaeella *Wlshm.*

7683 delicatella *Wlshm.*

7684 minutella *Beut.*

7685 fernaldella *Wlshm.*
floridanella Beut.
nigrapunctella Busck

7686 montisella *Cham.*

7687 nitens *Wlshm.*

7688 clandestinella *Busck*

7689 hermodora *Meyr.*

7690 magophila *Meyr.*

Tanygona Braun

7691 lignicolorella *Braun*

7692 albalineella *Cham.*

Periploca Braun

7693 purpuriella *Braun*

Teladoma Busck

7694 helianthi *Busck*

Batrachedra Staint.
Aetia Cham.

7695 bipunctella *Cham.*

7696 praeangusta *Haw.*
striolata Zell.
pulvella Cham.
clemensella Cham.

7697 concors *Meyr.*

7698 concitata *Meyr.*

7699 enormis *Meyr.*

7700 salicipomonella *Clem.*

7701 trichella *Busck*

7702 placendiella *Busck*

7703 mathesoni *Busck*

7704 knabi *Wlshm.*

Blastodacna Wocke

7705 curvilineella *Cham.*
bicristatella Cham.

Chrysopeleia Cham.

7706 ostryaeella *Cham.*

7707 purpuriella *Cham.*

Amaurogramma Braun

7708 quadricristatella *Cham.*

7709 extensa *Braun*

Cystioecetes Braun

7710 nimbosus *Braun*

Ithome Cham.
‡*Eriphia* Cham.

7711 unimaculella *Cham.*

7712 concolorella *Cham.*

7713 nigrilineella *Cham.*

Stagmatophora H. S.

7714 ceanothiella *Cosens*

7715 iridella *Busck*

7716 sexnotella *Cham.*

7717 wyattella *B. & B.*

7718 niphochrysa *Meyr.*

7719 gleditschiaeella *Cham.*

Perimede Cham.

7720 erransella *Cham.*

7721 particornella *Busck*

7722 falcata *Braun*

Pyroderces H. S.

7723 rileyi *Wlshm.*

Psacaphora H. S.

7724 cambiella *Busck*

7725 purpuriella *Busck*

7726 edithella *B. & B.*

7727 terminella *Westw.*
engelella Busck

7728 deceptella *Braun*

7729 sexstrigella *Braun*

7730 annulata *Braun*

7731 difficilis *Braun*

7732 communis *Braun*

7733 argentimaculella *Murt.*

7734 luciferella *Clem.*

7735 cephalanthiella *Cham.*

Homaledra Busck

7736 heptathalama *Busck*

7737 sabalella *Cham.*

Cyphophora H. S.

7738 tricristatella *Cham.*
grandisella Cham.
subiridescens Wlshm.

7739 passerella *Busck*

7740 eloisella *Clem.*
magnatella Zell.
oenotheraeella Cham.
lyonetiella Cham.

Stilbosis Clem.

7741 tesquella *Clem.*
quinquecristatella Cham.

Colonophora Meyr.

7742 sublustris *Meyr.*

Walshia Clem.

7743 amorphella *Clem.*
miscecalonella Cham.

Lymnaecia Staint.

7744 phragmitella *Staint.*

Mompha Hbn.

7745 albella *Cham.*

7746 albopalpella *Cham.*

7747 bifasciella *Cham.*

7748 brevivittella *Clem.*
oenotherivorella Cham.
oenotheraeseminella Cham.

7749 stellella *Busck*

7750 circumscriptella *Zell.*

7751 pecosella *Busck*

7752 coloradella *Cham.*

7753 definitella *Zell.*
unicristatella Cham.

7754 ignobilisella *Cham.*

7755 claudiella *Kft.*

7756 minimella *Cham.*

7757 murtfeldtella *Cham.*
albocapitella Cham.
grissaeella Cham.
obscurusella Cham.
parvicristatella Cham.

7758 unifasciella *Cham.*

7759 rufocristatella *Cham.*

7760 punctiferella *Busck*

7761 nuptialis *Meyr.*

7762 conturbatella *Hbn.*

Chaetocampa Busck

7763 crotonella *Bott.*

EPERMENIIDAE

Epermenia Hbn.

7764 ramapoella *Kft.*

7765 albapunctella *Busck*

7766 canicinctella *Clem.*

7767 pimpinella *Murt.*

7768 cicutaella *Kft.*

7769 alameda *Braun*

7770 infracta *Braun*

7771 bidentata *Braun*

7772 imperialella *Busck*

7773 metrothetis *Meyr.*

Acanthedra Meyr.

7774 stolidota *Meyr.*

GELECHIIDAE

Nealyda Dietz

7775 pisoniae *Busck*

7776 kinzelella *Busck*

7777 bifidella *Dietz*

Neodactylota Busck

7778 snellenella *Cham.*

7779 barberella *Busck*

Metzneria Zell.

7780 lappella *Linn.*

Megacraspedas Zell.
Autoneda Busck

7781 plutella *Cham.*

Isophrictis Meyr.

7782 tanacetella *Schr.*
striatella Hbn.

7783 pallidistrigella *Cham.*

7784 magnella *Busck*

7785 cilialineella *Cham.*

7786 pennella *Busck*

7787 dietziella *Busck*

7788 canicostella *Wlshm.*

7789 actiella *B. & Bsk.*

7790 occidentalis *Braun*

7791 actinopa *Meyr.*

7792 anteliella *Busck*

7793 sabulella *Wlshm.*

7794 similiella *Cham.*
‡*solaniella* Cham.
piscipellis Zell.

7795 rudbeckiella *Bott.*
form denotata *Bott.*

7796 tophella *Wlshm.*

7797 pallidella *Cham.*

7798 modesta *Wlshm.*

Stereomita Braun

7799 andropogonis *Braun*

Ptycerata Ely

7800 busckella *Ely*

Sitotroga Heinr.

7801 cerealella *Oliv.*

Aristotelia Hbn.

7802 perterrita *Meyr*

7803 monactis *Meyr.*

7804 placidella *Zell.*
natalella Busck

7805 disconotella *Cham.*

7806 angustipennella *Clem.*
kearfottella Busck

7807 gilvolineella *Cham.*

7808 harrisonella *Busck*

7809 discriminata *Meyr.*

7810 robusta *Braun*

7811 pullusella *Cham.*
minimella Cham.

7812 melanaphra *Meyr.*

7813 fragariae *Busck*

7814 absconditella *Wlk.*
palpiannulella Cham.

7815 physaliella *Cham.*

7816 palpialbella *Cham.*

7817 quinquepunctella *Busck*

7818 rubidella *Clem.*
cassella Wlk.

7819 calens *Meyr.*

7820 callirrhoda *Meyr.*

7821 lespedezae *Braun*

7822 salicifungiella *Clem.*

7823 fungivorella *Clem.*

7824 planitia *Braun*

7825 ivae *Busck*

7826 molestella *Zell.*

7827 pudibundella *Zell.*

7828 intermediella *Cham.*
rubensella Cham.

7829 urbaurea *Keif.*

7830 rhamnina *Keif.*

7831 adenostomae *Keif.*

7832 eldorado *Keif.*

7833 eumeris *Meyr.*

7834 roseosuffusella *Clem.*
bellela Wlk.

7835 devexella *Braun*

7836 psoraleae *Braun*

7837 rhoisella *Busck*

7838 adceanotha *Keif.*

7839 amelanchierella *Braun*

7840 bifasciella *Busck*

7841 lindanella *B. & B.*

7842 aquosa *Meyr.*
‡*suffusella* Cham.

7843 cockerella *Busck*

7844 elegantella *Cham.*
superbella Cham.

7845 monilella *B. & Bsk.*

7846 argentifera *Busck*

7847 primipilana *Meyr.*

7848 ochroxysta *Meyr.*

7849 hexacopa *Meyr.*

7850 iospora *Meyr.*

7851 isopelta *Meyr.*

7852 nigrobasiella *Clarke*

7853 atacta *Meyer.*

Chrysopora Clem.

7854 lingulacella *Clem.*
‡*hermannella* Cham.
armeniella F. & B.

7855 hermannella *Fabr.*

7856 versicolorella *Kft.*

Enchrysa Zell.

7857 dissectella *Zell.*
youngella Kft.

Numata Busck

7858 bipunctella *Busck*

Glauce Cham.

7859 pectenalaeella *Cham.*

Leuce Cham.

7860 fuscocristatella *Cham.*
belfragesella Cham.

Helice Cham.
Theisoa Cham.

7861 pallidochrella *Cham.*
gleditschiaeella Cham.
permolestella Busck

7862 constrictella *Zell.*
bifasciella Cham.

7863 multifasciella *Cham.*

Tosca Heinr.

7864 plutonella *Heinr.*

7865 pollostella *Busck*

7866 elachistella *Busck*

Evippe Cham.

7867 prunifoliella *Cham.*

7868 leuconota *Zell.*
plutella Cham.

7869 abdita *Braun*

Agnippe Cham.

7870 biscolorella *Cham.*

7871 fuscopulvella *Cham.*

7872 evippeella *Busck*

7873 crinella *Keif.*

Argyrolacia Keif.

7874 bifida *Keif.*

Recurvaria Haw.

7875 obliquistrigella *Cham.*

7876 juniperella *Kft.*

7877 robiniella *Fitch*
fuscopallidella Cham.
robiniaefoliella Cham.

7878 argentialbella *Cham.*

7879 variella *Cham.*

7880 apicitripunctella *Clem.*
atritella Wlk.
abietisella Pack.

7881 eryngiella *Bott.*

7882 colubrinae *Busck*

7883 cristatella *Cham.*

7884 citriella *Cham.*

7885 moreonella *Heinr.*

7886 milleri *Busck*

7887 thujaella *Kft.*

7888 coniferella *Kft.*

7889 stanfordia *Keif.*

7890 pinella *Busck*

7891 condignella *Busck*

7892 piceaella *Kft.*
form obscurella *Kft.*
‡*nigra* Kft.

7893 gibsonella *Kft.*

7894 alnifructella *Busck*

7895 dorsivittella *Zell.*
vagatioella Cham.

7896 quercivorella *Cham.*
gilviscopella Zell.

7897 invictella *Busck*

7898 nanella *Hbn.*
crataegella Busck

7899 ceanothiella *Braun*

7900 francisca *Keif.*

7901 nigra *Busck*

7902 consimilis *Braun*

7903 graphicella *Busck*

7904 bacchariella *Keif.*

7905 stibomorpha *Meyr.*

7906 vestigata *Meyr.*

7907 taphiopis *Meyr.*

Eucordylea Dietz

7908 atrupictella *Dietz*

7909 gallicola *Busck*

7910 elucidella *B. & B.*

7911 mackiei *Keif.*

7912 huntella *Keif.*

Exoteleia Wlgn.
Paralechia Busck

7913 pinifoliella *Cham.*

7914 californica *Busck*

7915 burkei *Keif.*

7916 dodecella *Linn.*

Trypanisma Clem.

7917 prudens *Clem.*
quinqueannulella Cham.

7918 fagella *Busck*

Besciva Busck

7919 longitudinella *Busck*

Epithectis Meyr.

7920 citrinella *B. & B.*

7921 saundersella *Cham.*

7922 gallaegenitella *Clem.*
geminella Riley

7923 attributella *Wlk.*
difficilisella Cham.

7924 sylvicolella *Busck*

7925 bicostomaculella *Cham.*
thoracella Wlshm.

7926 osteosema *Meyr.*

7927 oxymeris *Meyr.*

Leucogonia Meyr.

7928 subsimella *Clem.*

7929 californica *Keif.*

7930 distincta *Keif.*

Arogalea Wlshm.

7931 cristifasciella *Cham.*
inscripta Wlshm.

Telphusa Cham.

7932 aethiops *Westw.*
quinquecristatella Cham.

7933 sedulitella *Busck*
agrifolia Braun

7934 basifasciella *Zell.*

7935 glandiferella *Zell.*
sella Cham.

7936 betulella *Busck*

7937 belangerella *Cham.*
oronella Wlshm.

7938 palliderosacella *Cham.*

7939 basistrigella *Zell.*

7940 caryaevorella *Pack.*

7941 quercinigracella *Cham.*
fragmentella Zell.

7942 querciella *Cham.*

7943 fasciella *Cham.*

7944 lophosella *Busck*

7945 sequax *Haw.*

7946 baldiana *B. & Bsk.*

7947 fuscopunctella *Clem.*

7948 amelanchierella *Braun*

7949 praefixa *Braun*

7950 acaciella *Busck*

7951 longifasciella *Clem.*
curvistrigella Cham.
obliquifasciella Cham.
lutraula Meyr.

7952 latifasciella *Cham.*

7953 alexandriaeella *Cham.*

7954 bicostomaculella *Cham.*
quercifoliella Cham.

7955 mariona *Heinr.*

Xenolechia Meyr.

7956 velatella *Busck*

7957 querciphaga *Keif.*

7958 ontariensis *Keif.*

Cremona Busck

7959 cotoneastri *Busck*

Gelechia Hbn.

7960 branella *Busck*

7961 metallica *Braun*

7962 clandestina *Meyr.*

7963 ceanothiella *Busck*
marinensis Keif.

7964 paralogella *Busck*

7965 trialbamaculella *Cham.*
epigaeella Cham.

7966 minimaculella *Cham.*

7967 argentipunctella *Ely*

7968 thoracealbella *Cham.*

7969 leucanieella *Busck*

7970 paraplutella *Busck*

7971 cercerisella *Cham.*
olympiadella Zell.

7972 quinella *Zell.*

7973 arizonella *Busck*

7974 lipatiella *Busck*

7975 bimaculella *Cham.*
ternariella Zell.
sylvaecolella Cham.

7976 coloradensis *Busck*

7977 viduella *Fabr.*
labradoriella Clem.

7978 fulmenella *Busck*
prorepta Meyr.

7979 albilorella *Zell.*
trifasciella Cham.

7980 lugubrella *Fabr.*

7981 dentella *Busck*

7982 sistrella *Busck*

7983 abdominella *Busck*

7984 xanthophilella *B. & Bsk.*

7985 coticola *Busck*

7986 depuratella *Busck*

7987 dromicella *Busck*

7988 triangulella *Busck*

7989 packardella *Cham.*

7990 unifasciella *Busck*

7991 paulella *Busck*

7992 kincaidella *Busck*

7993 catalinella *Busck*

7994 panella *Busck*

7995 aristella *Busck*

7996 morenella *Busck*

7997 ribesella *Cham.*

7998 mandella *Busck*

7999 nanodella *Busck*

8000 dyariella *Busck*

8001 albisparsella *Cham.*
platanella Cham.

8002 periculella *Busck*

8003 neotrophella *Heinr.*

8004 trophella *Busck*

8005 continuella *Zell.*
trimaculella Pack.
albomaculella Cham.

8006 unistrigella *Cham.*

8007 chloroschema *Meyr.*

8008 fructuaria *Braun*

8009 discostrigella *Cham.*

8010 trachycosma *Meyr.*

8011 biforella *Busck*

8012 pseudofondella *Busck*

8013 fondella *Busck*

8014 terminimaculella *Kft.*

8015 clistrodoma *Meyr.*

8016 inaequalis *Busck*

8017 benitella *B. & Bsk.*

8018 malindella *Busck*

8019 lindenella *Busck*

8020 mediofuscella *Clem.*
vagella Wlk.
fuscoochrella Cham.
liturosella Zell.
rhedaria Meyr.

8021 walsinghami *Dietz*

8022 pennsylvanica *Dietz*

8023 longicornis *Curt.*
alternatella Kft.

8024 arenella *Forbes*

8025 petulans *Braun*

8026 abella *Busck*

8027 fuscotaeniaella *Cham.*

8028 texanella *Cham.*
chambersella Dyar

8029 invariabilis *Kft.*

8030 barnesiella *Busck*

8031 puertella *Busck*

8032 variabilis *Busck*

8033 diversella *Busck*

8034 striatella *Busck*

8035 rectistrigella *B. & Bsk.*

8036 figurella *Busck*

8037 bigella *Busck*

8038 bispiculata *Meyr.*

8039 bistrigella *Cham.*

8040 xyloglypta *Meyr.*

8041 flavicorporella *Wlshm.*

8042 desiliens *Meyr.*

8043 ochreosuffusella *Cham.*
depressostrigella Cham.

8044 ocherfuscella *Cham.*

8045 ochreostrigella *Cham.*

8046 mimella *Clem.*

8047 spilosella *B. & Bsk.*

8048 hibiscella *Busck*

8049 wacoella *Cham.*

8050 cockerelli *Busck*

8051 discoocellella *Cham.*
violaceofusca Zell.

8052 capiteochrella *Cham.*

8053 pravinominella *Cham.*
‡*quadrimaculella* Cham.

8054 inquilinella *Busck*

8055 retiniella *B. & Bsk.*
langei Keif.

8056 decemmaculella *Cham.*

8057 rileyella *Cham.*

8058 pallidegrisseella *Cham.*

8059 glycyrrhizaeella *Cham.*

8060 fuscoluteella *Cham.*

8061 nundinella *Zell.*
beneficentella Murt.

8062 monumentella *Cham.*

8063 obscurosuffusella *Cham.*
? canopulvella Cham.

8064 conspersa *Braun*

8065 versutella *Zell.*

8066 lynceella *Zell.*

8067 obscuroocelella *Cham.*

8068 occidentella *Cham.*

8069 vanduzeei *Keif.*

*8071 chrysopyla *Keif.*

8072 eriogonella *Clarke*

8073 rigidae *Clarke*

8074 eldorada *Keif.*

8075 luteogeminata *Clarke*

8076 dammersi *Keif.*

8077 negundella *Heinr.*

8078 nigrimaculella *Busck*

8079 flexurella *Clem.*

8080 maculimarginella *Cham.*

8081 gilvomaculella *Clem.*
biminimaculella Cham.

8082 serotinella *Busck*

8083 monotaeniella *Bott.*

8084 pseudoacaciella *Cham.*
caecella Zell.

8085 thoraceochrella *Cham.*
obscurella Cham.
perobscurella Wlshm.

8086 thoracestrigella *Cham.*

8087 obscurusella *Cham.*
fuscopulvella Cham.

8088 fuscomaculella *Cham.*

8089 vernella *Murt.*
‡*formosella* Murt.

8090 brumella *Clem.*

8091 trilineella *Cham.*

8092 natalis *Heinr.*

8093 trichostola *Meyr.*

8094 acrina *Keif.*

8095 ornatifimbriella *Clem.*
unctulella Zell.

8096 seculaella *Clarke*

8097 aulaea *Clarke*

8098 abactella *Clarke*

8099 braunella *Keif.*
a arborei *Keif.*

8100 caudatae *Clarke*

8101 lepidotae *Clarke*

8102 amorphaeella *Cham.*

8103 abradescens *Braun*

**No number 8070*

8104 psiloptera *B. & Bsk.*

8105 persicaeella *Murt.*
confusella Cham.

8106 fluvialella *Busck.*

8107 scabrella *Busck*

8108 arbutina *Keif.*

8109 manzanitae *Keif.*

8110 badiomaculella *Cham.*

8111 griseaella *Cham.*

8112 griseochrella *Cham.*

8113 liturella *Wlk.*

8114 maculatusella *Cham.*

*8116 demissae *Keif.*

8117 saliciphaga *Keif.*

8118 frugalis *Braun*

8119 prognosticata *Braun*

8120 nigrobarbata *Braun*

8121 occlusa *Braun*

8122 permacta *Braun*

8123 albifemorella *Clarke*

8124 sarcochlora *Meyr.*

8125 helicosticta *Meyr.*

8126 fuliginea *Meyr.*

8127 notochlora *Meyr.*

8128 pinguicula *Meyr.*

8129 speculifera *Meyr.*

8130 camptogramma *Meyr.*

8131 promonitrix *Meyr.*

8132 hemicrossa *Meyr.*

8133 isocrossa *Meyr.*

8134 xanthuris *Meyr.*

8135 normifera *Meyr.*

8136 catacrossa *Meyr.*

8137 chlorocrana *Meyr.*

8138 hipposaris *Meyr.*

8139 acharnaea *Meyr.*

8140 rivulata *Meyr.*

8141 collinearis *Meyr.*

8142 asbolodes *Meyr.*

8143 agriodes *Meyr.*

8144 halycopa *Meyr.*

8145 gomphopis *Meyr.*

8146 monopa *Meyr.*

8147 epigypsa *Meyr.*

Stegasta Meyr.

8148 bosqueella *Cham.*
basqueella Cham. (laps. cal.)
costipunctella Moesch.

Gnorimoschema Busck

8149 serratipalpella *Cham.*

8150 dudiella *Busck*

8151 septentrionella *Fyles*

8152 gibsoniella *Busck*

8153 gallaesolidaginis *Riley*

8154 salinaris *Busck*

8155 laguna *Busck*

8156 gallaeasteriella *Kell.*
caesiella Brodie

8157 gallaediplopappi *Fyles*

8158 washingtoniella *Busck*

8159 baccharisella *Busck*

8160 petrella *Busck*

8161 neopetrella *Keif.*

8162 subterranea *Busck*

*No number 8115

8163 coquillettella *Busck*

8164 ericameriae *Keif.*

8165 busckiella *Kft.*

8166 chiquitella *Busck*

8167 tetradymiella *Busck*

8168 miscitatella *Clarke*

8169 alaricella *Busck*

8170 banksiella *Busck*

8171 contraria *Braun*

8172 albimarginella *Cham.*

8173 semicyclionella *Busck*

8174 terracottella *Busck*

8175 pedmontella *Cham.*

8176 faustella *Busck*

8177 collinusella *Cham.*

8178 atriplex *Busck*

8179 pallidochrella *Cham.*
? versicolorella Cham.

8180 ochreostrigella *Cham.*
henshawiella Busck

8181 potentella *Keif.*

8182 triocellella *Cham.*

8183 albangulata *Braun*

8184 octomaculella *Cham.*

8185 princeps *Busck*

8186 radiatella *Busck*

8187 saphirinella *Cham.*

8188 splendoriferella *Busck*

8189 florella *Busck*

8190 vastifica *Braun*

8191 batanella *Busck*

8192 macromaculata *Braun*

8193 erigeronella *Braun*

8194 detersella *Clem.*
brackenridgella Busck

8195 scutellariaeella *Cham.*

8196 lavernella *Cham.*
physalivorella Cham.

8197 ambrosiaeella *Cham.*

8198 artemisiella *Kft.*
axenopsis Meyr.

8199 polemoniella *Braun*

8200 sacculicola *Braun*

8201 lutescella *Clarke*

8202 consueta *Braun*

8203 compsomorpha *Meyr.*

8204 sporomachla *Meyr.*

8205 lectulifera *Meyr.*

8206 fercularia *Meyr.*

8207 semirosea *Meyr.*

8208 eucausta *Meyr.*

Phthorimaea Meyr.

8209 subtractella *Wlk.*

8210 inexperta *Meyr.*
‡*simpliciella* Cham.

8211 striatella *Murt.*

8212 minor *Busck*

8213 glochinella *Zell.*
solaniella Cham.
cinerella Murt.
inconspicuella Murt.

8214 operculella *Zell.*
solanella Bdv.
tabacella Rag.

8215 lycopersicella *Busck*

8216 elmorei *Keif.*

8217 plaesiosema *Turn.*

8218 altisolani *Keif.*

8219 chenopodiella *Busck*

8220 obsoletella *Roesl.*

8221 emancipata *Meyr.*
‡*marmorella* Cham.

8222 discomaculella *Cham.*
aurimaculella Cham.

8223 laudatella *Wlshm.*

8224 grisella *Cham.*

8225 milleriella *Cham.*

8226 ochroschista *Meyr.*

8227 charcoti *Meyr.*

Nothris Hbn.

8228 nephanthes *Meyr.*

8229 thymiata *Meyr.*

8230 tephrinopa *Meyr.*

8231 melanchlora *Meyr.*

8232 diaconalis *Meyr.*

8233 gracula *Meyr.*

8234 mundata *Meyr.*

8235 sabinella *Zell.*
bianulella Cham.
ocellella Cham.

8236 notandella *Busck*

8237 anarsiella *Cham.*

8238 monella *Busck*

Polyhymno Cham.

8239 luteostrigella *Cham.*
fuscostrigella Cham.

8240 acaciella *Busck*

8241 sexstrigella *Cham.*

Calliprora Meyr.

8242 thermogramma *Meyr.*

Sophronia Hbn.

8243 primella *Busck*

8244 roseicrinella *Busck*

8245 teretracma *Meyr.*

Stomopteryx Hein.
Aproaerema Durr.

8246 anthyllidella *Hbn.*
palpilineella Busck (*nec.* Cham.

8247 nigrella *Cham.*

8248 palpilineella *Cham.*

8249 adversa *Braun*

8250 crotalariella *Busck*

8251 iobapta *Meyr.*

8252 metadesma *Meyr.*

Untomia Busck

8253 untomiella *Busck*

8254 albistrigella *Cham.*

Duvita Busck

8255 vittella *Busck*

8256 pasadenae *Keif.*

8257 cyclella *Busck*

8258 nigratomella *Clem.*
apicilinella Clem.
apicistrigella Cham.
concinusella Cham.

8259 tahavusella *Forbes*

Compsolechia Meyr.

8260 coverdalella *Kft.*

8261 paltodoriella *Busck*

8262 levipedella *Clem.*

8263 fullonella *Zell.*
rufusella Cham.
subruberella Cham.
rubescens Wlshm.

8264 laguncullariella *Busck*

8265 lupinella *Busck*

8266 fragariella *Busck*

8267 psoraliella *B. & Bsk.*

8268 crescentifasciella *Cham.*

8269 rhoifructella *Clem.*
consonella Zell.
quadrimaculella Cham.
ochreocostella Cham.

8270 lacteusochrella *Cham.*

8271 argyrothamniella *Busck*

8272 niveopulvella *Cham.*

8273 nonstrigella *Busck*

8274 tristrigella *Wlshm.*

8275 agrimoniella *Clem.*
aduncella Zell.
aderusella Riley

8276 kearfottella *Busck*

8277 sacramenta *Keif.*

8278 comparanda *Meyr.*

Anacampsis Curt.

8279 conclusella *Wlk.*
tephriasella Cham.
grissefasciella Cham.

8280 innocuella *Zell.*

Strobisia Clem.

8281 irridipennella *Clem.*
aphroditella Cham.

8282 proserpinella *F. & B.*

Hoplophysis Wlshm.

8283 emblemella *Clem.*
venustella Cham.

Onebala Wlk.

8284 alacella *Clem.*
ochripalpella Zell.
goodellella Cham.

Thelyasceta Meyr.

8285 nonstrigella *Cham.*
purpureofusca Wlshm.

Prostomeus Busck

8286 brunneus *Busck*

Acompsia Hbn.

8287 labradorica *Moesch.*

Anarsia Zell.

8288 lineatella *Zell.*
pruniella Clem.

Hypatima Hbn.
Chelaria Haw.

8289 zesticopa *Meyr.*

Telephila Meyr.

8290 vacciniella *Busck*

8291 delotella *Busck*

Dichomeris Hbn.

8292 trimaculella *Cham.*
touceyella Busck

8293 rustica *Wlshm.*

8294 citrifoliella *Cham.*

8295 hirculella *Busck*

8296 ligulella *Hbn.*
contubernatella Fitch
malifoliella Fitch
flavivittella Clem.
quercipomonella Cham.
form pometella *Harr.*
pauciguttella Clem.
reedella Cham.

8297 trinotella *Coq.*

8298 ventrella *Fitch*
unicipunctella Clem.
quercicella Cham.

8299 marginella *Fabr.*

8300 caryaefoliella *Cham.*

8301 suffusella *Cham.*

8302 mollis *B. & Bsk.*

8303 georgiella *Wlk.*
roseocostella Wlshm.

8304 punctidiscella *Clem.*
stramineella Cham.

8305 punctipennella *Clem.*
gracilella Cham.

8306 bipunctella *Wlshm.*

8307 deflecta *Busck*

8308 bimaculella *Cham.*

Deoclona Busck

8309 yuccasella *Busck*

Epicorthylis Zell.

8310 inversella *Zell.*

Trichotaphe Clem.

8311 griseella *Cham.*

8312 bidiscomaculella *Cham.*

8313 trimaculella *Cham.*

8314 fernaldella *Busck*

8315 serrativitella *Zell.*
plutella Cham.

8316 barnesiella *Busck*

8317 simpliciella *Busck*

8318 inserrata *Wlshm.*

8319 flavocostella *Clem.*

8320 eupatoriella *Cham.*
dolabella Zell.

8321 hemiclina *Meyr.*

8322 setosella *Clem.*
costolutella Cham.
bilobella Zell.

8323 stipendiaria *Braun*

8324 costarufoella *Cham.*

8325 washingtoniella *Busck*

8326 condaliavorella *Busck*

8327 melantherella *Busck*

8328 trinotella *Busck*

8329 leuconotella *Busck*

8330 juncidella *Clem.*
pallipalpis Wlk.
dubitella Cham.

8331 levisella *Fyles*

Oegoconia Staint.

8332 quadripuncta *Haw.*
novimundi Busck

Mnesistega Meyr.

8333 telemacha *Meyr.*

Brachmia Hbn.

8334 hystricella *Braun*

8335 subalbusella *Cham.*
parvipulvella Cham.
chambersella Murt.
inaequepulvella Cham.

8336 badia *Braun*

8337 discoannulella *Cham.*

8338 pullifimbriella *Cham.*

8339 casca *Braun*

8340 melanocarpa *Meyr.*

Sceptia Wlshm.

8341 aberratella *Busck*

Glyphidocera Wlshm.

8342 lactiflosella *Cham.*

8343 dimorphella *Busck*

8344 meyrickella *Busck*

8345 speratella *Busck*

8346 septentrionella *Busck*

8347 aequepulvella *Cham.*

8348 floridanella *Busck*

8349 isonephes *Meyr.*

8350 democratica *Meyr.*

8351 barythyma *Meyr.*

8352 lithodoxa *Meyr.*

OECOPHORIDAE

Dasycera Steph.

8353 newmanella *Clem.*

Triclonella Busck

8354 pergandeella *Busck*

8355 determinatella *Zell.*
australisella Cham.

Fabiola Busck

8356 shaleriella *Cham.*

8357 tecta *Braun*

Decantha Busck

8358 borkhauseni *Zell.*
boreasella Cham.

Schiffermulleria Hbn.
Epicallima Dyar

8359 lucidella *Busck*

8360 amplicincta *Braun*

8361 argenticinctella *Clem.*

8362 edithella *Busck*

8363 antidectis *Meyr.*

8364 dimidiella *Wlshm.*

8365 quadrimaculella *Cham.*

8366 rostrigera *Meyr.*

8367 coloradella *Wlshm.*

Endrosis Hbn.

8368 lacteella *Schiff.*
kennicottella Clem.

Paratheta Meyr.

8368, 1 astigmatica *Meyr.*

Borkhausenia Hbn.
Chambersia Riley

8369 ascriptella *Busck*

8370 haydenella *Cham.*

8371 episcia *Wlshm.*

8372 conia *Wlshm.*

8373 diveni *Heinr.*

8374 fasciata *Wlshm.*

8375 orites *Wlshm.*

8376 pseudospretella *Staint.*

8377 longa *Meyr.*

8378 leucoritis *Meyr.*

8379 aciculata *Meyr.*

Martyringa Busck

8380 latipennis *Wlshm.*

Machimia Clem.

8381 huachucella *Busck*

8382 canariella *Busck*

8383 tentoriferella *Clem.*
confertella Wlk.
fernaldella Cham.

8384 ciliella *Busck*

8385 obscuromaculella *Cham.*

8386 concolorella *Beut.*

8387 humata *Meyr.*

8388 cretacea *Zell.*

Pleurota Hbn.

8389 albastrigulella *Kft.*

Eumeyrickia Busck

8390 trimaculella *Fitch*
albapulvella Cham.
haustellata Wlshm.

Eido Cham.

8391 albapalpella *Cham.*

Carcina Hbn.

8392 quercana *Fabr.*

Depressaria Haw.

8393 alienella *Busck*

8394 multifidae *Clarke*

8395 dracunculi *Clarke*

8396 leptotaeniae *Clarke*

8397 togata *Wlshm.*

8398 nymphidia *Meyr.*

8399 juliella *Busck*

8400 nervosa *Haw.*

8401 barberella *Busck*

8402 artemisiella *McD.*

8403 corystopa *Meyr.*

8404 heracliana *De Geer*
ontariella Beth.

8405 groteella *Rob.*
symmochlota Meyr.

8406 betulella *Busck*

8407 maculatella *Busck*

8408 cinereocostella *Clem.*
clausella Wlk.

Agonopterix Hbn.

8409 atrodorsella *Clem.*

8410 costosa *Haw.*
dryadoxena Meyr.
blackmori Busck

8411 posticella *Wlshm.*

8412 sabulella *Wlshm.*

8413 argillacea *Wlshm.*

8414 arnicella *Wlshm.*

8415 clarkei *Keif.*

8416 arenella *Schiff.*

8417 pergandiella *Busck*

8418 pallidella *Busck*
terinella B. & Bsk.
serrae Clarke

8419 nivalis *Braun*

8420 flavicomella *Engel*

8421 callosella *B. & Bsk.*

8422 blacella *B. & Bsk.*

8423 senicionella *Busck*

8424 canadensis *Busck*

8425 amissella *Busck*

8426 pteleae *B. & Bsk.*

8427 amyrisella *Busck*

8428 novimundi *Wlshm.*

8429 endryopa *Meyr.*

8430 clemensella *Cham.*

8431 rosaciliella *Busck*

8432 latipalpella *B. & Bsk.*

8433 canella *Busck*
cogitata Braun

8434 sciadopa *Meyr.*

8435 klamathiana *Wlshm.*

8436 ciniflonella *Zell.*

8437 lythrella *Wlshm.*

8438 hyperella *Ely*
testifica Meyr.

8439 curvilineella *Beut.*

8440 pulvipennella *Clem.*
eupatoriella Cham.
solidaginis Wlshm.

8441 muricolorella *Busck*

8442 thoracefasciella *Cham.*

8443 fernaldella *Wlshm.*
walsinghamiella Busck

8444 nigrinotella *Busck*

8445 sanguinella *Busck*

8446 fulva *Wlshm.*

8447 lecontella *Clem.*

8448 robiniella *Pack.*
hilarella Zell.

8449 psoraliella *Wlshm.*

8450 nubiferella *Wlshm.*

8451 gelidella *Busck*

8452 nebulosa *Zell.*

8453 scabella *Zell.*

8454 plummerella *Busck*

8455 umbraticostella *Wlshm.*

8456 thoracenigraeella *Cham.*

8457 gracilis *Wlshm.*

8458 murmurans *Meyr.*

Epigraphia Steph.

8459 steinkellneriana *Schiff.*
packardella Clem.
eruditella Grt.
merrickella Dyar

Semioscopis Hbn.

8460 inornata *Wlshm.*

8461 megamicrella *Dyar*

8462 acertella *Busck*

8463 aurorella *Dyar*

8464 allenella *Wlshm.*

Gerdana Busck

8465 caritella *Busck*

Inga Busck

8466 sparsiciliella *Clem.*
contrariella Wlk.
atropicta Zell.

Cryptolechia Zell.
Psilocorsis Clem.

8467 reflexella *Clem.*
cressonella Cham.

8468 ferruginosa *Zell.*

8469 dubitatella *Zell.*

8470 fletcherella *Gibs.*

8471 obsoletella *Zell.*

8472 faginella *Cham.*

8473 quercicella *Clem.*

8474 cryptolechiella *Cham.*

8475 trigama *Meyr.*

8476 diligenda *Meyr.*

BLASTOBASIDAE

Blastobasis Zell.

8477 guilandinae *Busck*

8478 hulstella *Dietz*

8479 yuccaecolella *Dietz*

8480 plummerella *Dietz*
form fuscopurpurella *Dietz*
form simplicella *Dietz*

8481 sagitella *Dietz*

8482 distinctella *Dietz*

8483 villella *Busck*

8484 eriobotyrae *Busck*

8485 coenomorpha *Meyr.*

Zenodochium Wlshm.

8486 citricolella *Cham.*

8487 coccivorella *Cham.*

Valentinia Wlshm.

8488 glandulella *Riley*
nubilella Zell.

8489 fractilinea *Zell.*

8490 quaintancella *Dietz*

8491 nothrotes *Wlshm.*

8492 retectella *Zell.*

8493 floridella *Dietz*

8494 confectella *Zell.*

8495 repartella *Dietz*

Euresia Dietz

8496 pulchella *Dietz*

Calosima Dietz

8497 argyrosplendella *Dietz*

8498 dianella *Dietz*

Asaphocrita Meyr.

8499 protypica *Meyr.*

Holcocera Clem.

8500 dives *Dietz*
form basipallidella *Dietz*

8501 aphidiella *Wlshm.*

8502 estriatella *Dietz*

8503 gigantella *Cham.*

8504 nigrostriata *Wlshm.*

8505 purpurocomella *Clem.*

8506 ochrocephala *Dietz*

8507 crassicornella *Dietz*

8508 modestella *Clem.*

8509 confamulella *Heinr.*

8510 immaculella *McD.*

8511 chalcofrontella *Clem.*
form minorella *Dietz*
form fumerella *Dietz*
a quisqueliella *Zell.*

8512 confluentella *Dietz*

8513 busckiella *Dietz*

8514 sciaphilella *Zell.*
triangularisella Cham.

8515 plagiatella *Dietz*

8516 livorella *Zell.*

8517 iceryaeella *Riley*

8518 maligemmella *Murt.*

8519 gilbociliella *Clem.*

8520 funebra *Dietz*
form reductella *Dietz*

8521 inconspicua *Wlshm.*

8522 augusti *Heinr.*

8523 stygna *Wlshm.*

8524 boreasella *Dietz*

8525 nucella *Wlshm.*

8526 nana *Dietz*

8527 elyella *Dietz*

8528 insulatella *Dietz*

8529 inclusa *Dietz*

8530 simulella *Dietz*

8531 messelinella *Dietz*
form spoliatella *Dietz*

8532 morrisoni *Wlshm.*

8533 fluxella *Zell.*

8534 clemensella *Cham.*

8535 irenica *Wlshm.*

8536 illibella *Dietz*

8537 crescentella *Dietz*
a annulipes *Dietz*

8538 spretella *Dietz*

8539 ursella *Wlshm.*

8540 punctiferella *Clem.*
form subsenella *Zell.*
form texanella *Wlshm.*

8541 zelleriella *Dietz*
form annectella *Dietz*

8542 vestaliella *Dietz*

8543 tartarella *Dietz*

8544 pusilla *Dietz*

8545 rufopunctella *Dietz*

8546 melanostriatella *Dietz*

8547 interpunctella *Dietz*

8548 panurgella *Heinr.*

Eubolepia Dietz

8549 anomalella *Dietz*

8550 gargantuella *Heinr.*

Ploiophora Dietz

8551 ampla *Dietz*

8552 fidella *Dietz*

Pigritia Clem.

8553 confusella *Dietz*

8554 purpurella *Dietz*

8555 basilarella *Dietz*

8556 laticapitella *Clem.*
aufugella Zell.
luteopulvella Cham.

8557 mediofasciella *Dietz*

8558 ornatella *Dietz*

8559 angustipennella *Dietz*

8560 tristella *Dietz*

8561 arizonella *Dietz*

8562 spoliatella *Dietz*

8563 obscurella *Dietz*

Epigritia Dietz

8564 ochrocomella *Clem.*
pallidotinctella Dietz
form heidemannella *Dietz*

Dryoperia Cool.
‡*Dryope* Cham.

8565 occidentella *Dietz*

8566 tenebrella *Dietz*

8567 minnicella *Dietz*

8568 grisella *Dietz*

8569 fuscosuffusella *Dietz*

8570 murtfeldtella *Cham.*
erratella Dietz

8571 canariella *Dietz*

8572 discopunctella *Dietz*

8573 ochreella *Clem.*

8574 fenyesella *Dietz*

Pseudopigritia Dietz

8575 dorsomaculella *Dietz*

8576 equitella *Dietz*

8577 fraternella *Dietz*

8578 argyreella *Dietz*

STENOMIDAE

Menestomorpha Wlshm.

8579 oblongata *Wlshm.*

Asapharca Meyr.

8580 nephelomicta *Meyr.*

Aedemoses Wlshm.

8581 haesitans *Wlshm.*

Stenoma Zell.

8582 schlaegeri *Zell.*

8583 lindseyi *B. & Bsk.*

8584 unipunctella *Clem.*
tortricella Cham.
lithosima Zell.

8585 algidella *Wlk.*
leucillana Zell.

8586 querciella *Busck*

8587 osseella *Wlshm.*

8587,1 manzanitae *Keif.*

8588 decorosella *Busck.*

8589 irene *B. & Bsk.*

8590 humilis *Zell.*
nubeculosa Zell.
canusella Cham.

8591 furcata *Wlshm.*

8592 vestalis *Zell.*
albella Cham.

8593 thomasi *B. & Bsk.*

8594 mistrella *Busck*

8595 crambitella *Wlshm.*

8596 agrioschista *Meyr.*

Setiostoma Zell.

8597 xanthobasis *Zell.*

8598 fernaldella *Riley*

Durrantia Busck

8599 piperatella *Zell.*

8600 obiterella *Busck*
chambersella Dyar

8601 montivola *Meyr.*

Menesta Clem.

8602 tortriciformella *Clem.*
liturella Wlk.
coryliella Cham.

8603 melanella *Murt.*

8604 albaciliaeella *Cham.*

ETHMIIDAE

Ethmia Hbn.

8605 albitogata *Wlshm.*

8606 coquillettella *Busck*

8607 umbrimarginella *Busck*

8608 lassenella *Busck*

8609 albistrigella *Wlshm.*
chrysurella Dietz

8610 monachella *Busck*

8611 caliginosella *Busck*

8612 monticola *Wlshm.*

8613 fuscipedella *Wlshm.*

8614 macelhosiella *Busck*

8615 geranella *B. & Bsk.*

8616 arctostaphylella *Wlshm.*
form obscurella *Beut.*
form mediella *Busck*

8617 discostrigella *Cham.*
form subcaerulea *Wlshm.*

8618 semitenebrella *Dyar*

8619 confusella *Wlk.*

8620 trifurcella *Cham.*

8621 marmorea *Wlshm.*

8622 semilugens *Zell.*
multipunctella Cham.
semiopaca Grt.
plumbeella Beut.

8623 semiombra *Dyar*

8624 hagenella *Cham.*
josephinella Dyar

8625 mirusella *Cham.*
albicostella Beut.

8626 apicipunctella *Cham.*
zavalla Busck

8627 longimaculella *Cham.*
walsinghamella Beut.

8628 coranella *Dyar*

8629 zelleriella *Cham.*
texanella Cham.

8630 delliella *Fern.*

8631 bittenella *Busck*

8632 prattiella *Busck*

Pyramidobela Braun
Idioptila Meyr.

8633 quinquecristata *Braun*

8634 agyrtodes *Meyr.*

8635 angelarum *Keif.*

Superfamily **YPONOMEUTOIDEA**

GLYPHIPTERYGIDAE

Hilarographa Zell.

8636 youngiella *Busck*

8637 regalis *Wlshm.*

8638 olympica *Braun*

Thelethia Dyar

8639 extranea *Hy. Edw.*

Tortyra Wlk.

8640 diva *Riley*

8641 slossonia *Fern.*

8642 biferana *Wlk.*
dyari Busck

Anthophila Haw.
Simaethis Leech
Hemerophila Hbn.

8643 fabriciana *Linn.*
a alpinella *Busck*

8644 pariana *Cl.*

Allononyma Busck

8645 vicarialis *Zell.*
betuliperda Dyar

8646 diana *Hbn.*
luridana Wlk.

Abrenthia Busck

8647 cuprea *Busck*

Brenthia Clem.

8648 pavonacella *Clem.*
amphicarpeoeana Cham.

Choreutis Hbn.

8649 inflatella *Clem.*
a virginiella *Clem.*

8650 dyarella *Kft.*

8651 extrincicella *Dyar*

8652 pernivalis *Braun*

8653 multimarginata *Braun*

8654 immutabilis *Braun*

8655 augustella *Clarke*

8656 carduiella *Kft.*

8657 busckiella *Kft.*

8658 gemmalis *Hlst.*

8659 piperella *Busck*

8660 sororculella *Dyar*

8661 silphiella *Grt.*

8662 gnaphaliella *Kft.*

8663 onustana *Wlk.*
ohioensis Zell.

8664 balsamorrhizella *Busck*

8665 coloradella *Kft.*

8666 occidentella *Dyar*

8667 caliginosa *Braun*

8668 schausiella *Busck*

8669 leucobasis *Fern.*

8669, 1 melanifera *Keif.*

Glyphipteryx Hbn.

8670 impigritella *Clem.*
exoptatella Cham.

8671 lanista *Meyr.*

8672 montisella *Cham.*

8673 californiae *Wlshm.*

8674 saurodonta *Meyr.*

8675 quadragintapunctata *Dyar*

8676 quinqueferella *Wlshm.*

8677 unifasciata *Wlshm.*

8678 bifasciata *Wlshm.*

8679 circumscriptella *Cham.*

Ellabella Busck

8680 editha *Busck*

Probolacma Meyr.

8681 melanoclista *Meyr.*

Lotisma Busck

8682 trigonana *Wlshm.*
kincaidiella Busck

Araeolepia Wlshm.

8683 subfasciella *Wlshm.*

AEGERIIDAE

Bembecia Hbn.

8684 marginata *Harr.*
pleciaeformis Wlk.
odyneripennis Wlk.
rubi Riley
flavipes Hlst.
form albicoma *Hlst.*

Alcathoe Hy. Edw.

8685 caudata *Harr.*
form ♂ walkeri *Neum.*

8686 carolinensis *Engelh.*

8687 pepsioides *Engelh.*
a atra *Engelh.*

Aegeria Fabr.

8688 apiformis *Cl.*

8689 pacifica *Hy. Edw.*
californicum Neum.

8690 tibialis *Harr.*
flavitibia Wlk.
minimum Neum.
a dyari *Ckll.*

Sanninoidea Beut.

8691 exitiosa *Say*
persica Thom.
pepsidiformis Hbn.
xiphiaeformis Bdv.

form fitchi *Hy. Edw.*
form edwardsi *Beut.*
form luminosa *Neum.*

8692 opalescens *Hy. Edw.*
pacifica Riley

8693 graefi *Hy. Edw.*
a barnesi *Beut.*

Synanthedon Hbn.

8694 mellinipennis *Bdv.*
resplendens Hy. Edw.
artemisiae Hy. Edw.
senecioides Hy. Edw.

8695 giliae *Hy. Edw.*
vitrina Neum.
deceptiva Beut.

8696 rileyana *Hy. Edw.*
brunneipennis Hy. Edw.
hyperici Hy. Edw.

8697 bibionipennis *Bdv.*
♀ *chrysidipennis* Bdv.
rutilans Hy. Edw.
aureola Hy. Edw.
hemizonae Hy. Edw.
lupini Hy. Edw.
perplexa Hy. Edw.
impropria Hy. Edw.
washingtonia Hy. Edw.

8698 madariae *Hy. Edw.*

8699 arctica *Beut.*

8700 florissantella *Ckll.*

8701 mimuli *Hy. Edw.*

8702 neglecta *Hy. Edw.*

8703 refulgens *Hy. Edw.*

8704 bassiformis *Wlk.*
lustrans Grt.
consimilis Hy. Edw.
bolli Hy. Edw.
eupatorii Hy. Edw.
sexfasciata Hy. Edw.
infirma Hy. Edw.
imitata Hy. Edw.

8705 corni *Hy. Edw.*

8706 acerrubri *Engelh.*

8707 anthracipennis *Bdv.*

8708 tipuliformis *Linn.*

8709 arizonae *Beut.*

8710 albociliata *Engelh.*

8711 auritincta *Engelh.*

8712 morula *Hy. Edw.*

8713 novaroensis *Hy. Edw.*

8714 brunneri *Busck.*

8715 rubrofascia *Hy. Edw.*

8716 bolteri *Hy. Edw.*

8717 rubricincta *Beut.*

8718 fulvipes *Harr.*

8719 saxifragae *Hy. Edw.*
henshawi Hy. Edw.

8720 pictipes *G. & R.*
inusitata Hy. Edw.

8721 viburni *Engelh.*

8722 castaneae *Busck*

8723 albicornis *Hy. Edw.*
proxima Hy. Edw.
modesta Kell.

8724 americana *Beut.*

8725 culiciformis *Linn.*

8726 tepperi *Hy. Edw.*

8727 acerni *Clem.*
acericolum Germ.

8728 aureopurpura *Hy. Edw.*

8729 pyri *Harr.*
koebelei Hy. Edw.

8730 rhododendri *Beut.*

8731 scitula *Harr.*
gallivorum Westw.
hospes Walsh
aemula Hy. Edw.

8732 ithacae *Beut.*

8733 corusca *Hy. Edw.*

8734 decipiens *Hy. Edw.*
imperfecta Hy. Edw.
nicotianae Hy. Edw.

8735 rubristigma *Kell.*

8736 querci *Hy. Edw.*

8737 prosopis *Hy. Edw.*

8738 tecta *Hy. Edw.*

8739 candescens *Hy. Edw.*

8740 sigmoidea *Beut.*

8741 tacoma *Beut.*

8742 texana *Hy. Edw.*
wittfeldi Hy. Edw.

8743 seminole *Beut.*

8744 marcia *Beut.*

8745 praestans *Hy. Edw.*

8746 fragariae *Hy. Edw.*
orthocarpi Hy. Edw.
a semipraestans *Ckll.*

8747 helianthi *Hy. Edw.*
behrensi Hy. Edw.
elda Hy. Edw.

8748 mariona *Beut.*

8749 polygoni *Hy. Edw.*
meadi Hy. Edw.

8750 achillae *Hy. Edw.*
eremocarpi Hy. Edw.

8751 floridensis *Grt.*

8752 geliformis *Wlk.*

8753 sapygaeformis *Wlk.*

8754 animosa *Hy. Edw.*

8755 pyralidiformis *Wlk.*
nigella Hlst.

8756 sanborni *Hy. Edw.*

8757 ruficornis *Hy. Edw.*
minuta Hy. Edw.

8758 subaerea *Hy. Edw.*

8759 nigra *Beut.*

8760 verecunda *Hy. Edw.*

8761 edwardsi *Beut.*

8762 utahensis *Beut.*

Parharmonia Beut.

8763 pini *Kell.*

8764 piceae *Dyar*

Sannina Wlk.

8765 uroceriformis *Wlk.*
quinquecaudata Ridings

Vespamima Beut.

8766 sequoiae *Hy. Edw.*
pinorum Behrens

Palmia Beut.

8767 praecedens *Hy. Edw.*

Podosesia Moesch.

8768 syringae *Harr.*
longipes Moesch.

8769 fraxini *Lugger*

8770 comes *Heinr.*

Gaea Beut.

8771 emphytiformis *Wlk.*

8772 solituda *Hy. Edw.*

8773 arizonensis *Beut.*

8774 palmi *Beut.*

Euhagena Hy. Edw.

8775 nebraskae *Hy. Edw.*

Melittia Hbn.

8776 satyriniformis *Hbn.*

8777 cucurbitae *Harr.*
ceto Westw.
amoena Hy. Edw.

8778 snowi *Hy. Edw.*

8779 gloriosa *Hy. Edw.*

8780 grandis *Stkr.*

8781 lindseyi *B. & B.*
‡*superba* B. & L.
barnesi dalla T.

8782 magnifica *Beut.*

Zenodoxus G. & R.

8783 maculipes *G. & R.*

8784 heucherae *Hy. Edw.*
potentillae Hy. Edw.

8785 palmi *Neum.*
palmiana dalla T.

8786 canescens *Hy. Edw.*

8787 mexicanus *Beut.*

Calasesia Beut.

8788 coccinea *Beut.*

Albuna Hy. Edw.

8789 pyramidalis *Wlk.*
nomadaepennis Bdv.
hylotomiformis Wlk.
vancouverensis Hy. Edw.
form montana *Hy. Edw.*
tanaceti Hy. Edw.
form rubrescens *Hlst.*
form coloradensis *Hy. Edw.*
torva Hy. Edw.

8790 fraxini *Hy. Edw.*
morrisoni Hy. Edw.

8791 beutenmulleri *Skin.*

Paranthrene Hbn.
Memythrus Newm.

8792 tricincta *Harr.*

8793 denotata *Hy. Edw.*

8794 robiniae *Hy. Edw.*

8795 cupressi *Hy. Edw.*

8796 polistiformis *Harr.*

8797 scepsiformis *Hy. Edw.*

8798 simulans *Grt.*
luggeri Hy. Edw.

8799 palmi *Hy. Edw.*

8800 asilipennis *Bdv.*
denudatum Harr.
vespipenne H. S.
bombyciformis Wlk.

8801 seminole *Neum.*

8802 dolli *Neum.*
a castaneum *Beut.*

8803 perlucida *Busck*

8804 admiranda *Hy. Edw.*

8805 fenestratus *B. & L.*

HELIODINIDAE

Euclemensia Grt.

8806 bassettella *Clem.*

8807 schwarziella *Busck*

Erineda Busck

8808 elyella *Busck*

8809 aenea *Braun*

Idioglossa Wlshm.

8810 miraculosa *Frey*
americella Wlshm.

Cycloplasis Clem.

8811 panicifoliella *Clem.*

Scelorthus Busck

8812 pisoniella *Busck*

Lamprolophus Busck

8813 lithella *Busck*

Lithariapteryx Cham.

8814 abroniaeella *Cham.*

Heliodines Staint.

8815 bella *Cham.*

8816 extraneella *Wlshm.*

8817 sexpunctella *Wlshm.*

8818 tripunctella *Wlshm.*

8819 unipunctella *Wlshm.*

8820 metallicella *Busck*

8821 albaciliella *Busck*

8822 nyctaginella *Gib.*

8823 perichalca *Meyr.*

8824 ciccella *B. & Bsk.*

Schreckensteinia Hbn.

8825 erythriella *Clem.*

8826 felicella *Wlshm.*

8827 festaliella *Hbn.*

PLUTELLIDAE

Eucalantica Busck

8828 polita *Wlshm.*

Pliniaca Busck

8829 bakerella *Busck*

8830 sparsisquamella *Busck*

Euceratia Wlshm.

8831 securella *Wlshm.*

8832 castella *Wlshm.*

Abebaea Hbn.

8833 subsylvella *Wlshm.*

8834 sublucella *Wlshm.*

8835 querciella *Busck*

8836 gerdanella *Busck*

8837 delicatella *Busck*

8838 cockerella *Busck*

8839 nella *Busck*

8840 cervella *Wlshm.*

8841 electropa *Meyr.*

Trachoma Wall.

8842 falciferella *Wlshm.*
ordinalis Meyr.

8843 walsinghamiella *Busck*
‡*instabilella* Wlshm.

8844 senex *Wlshm.*
koebelella Dyar

Harpipteryx Hbn.

8845 dentiferella *Wlshm.*
form frustrella *Wlshm.*
form canariella *Wlshm.*

8846 xylostella *Linn.*

Cerostoma Latr.

8847 rubrella *Dyar*

8848 elongata *Braun*

8849 undulatella *Busck*

8850 oliviella *Busck*

8851 arizonella *Busck*

8852 unicipunctella *Busck*

8853 radiatella *Don.*
ochrella Cham.

8854 aleutianella *Beut.*

8855 schwarziella *Busck*

8856 flavistrigella *Busck*

8857 barberella *Busck*

8858 manella *Busck*

8859 striatella *Busck*

8860 vintrella *Busck*

8861 maculatella *Busck*

8862 angelicella *Busck*

8863 dorsimaculella *Kft.*

8864 leptaula *Meyr.*

Melitonympha Meyr.

8865 heteraula *Meyr.*

Acrolepia Curt.

8866 incertella *Cham.*
dorsimaculella Cham.

8867 reticulosa *Braun*

8868 leucoscia *Meyr.*

Plutella Schr.

8869 vanella *Wlshm.*

8870 porrectella *Linn.*
vigilacella Clem.

8871 poulella *Busck.*

8872 omissa *Wlshm.*

8873 notabilis *Busck*

8874 albidorsella *Wlshm.*

8875 interrupta *Wlshm.*

8876 armoraciae *Busck*
monochlora Meyr.

8877 dammersi *Busck*

8878 maculipennis *Curt.*
cruciferarum Zell.
brassicella Fitch
♂ *limbipennella* Clem.
♀ *mollipedella* Clem.
xylostella Pack.
♀ *dubiosella* Beut.

YPONOMEUTIDAE

Argyresthia Hbn.

8879 quadristrigella *Zell.*

8880 trifasciae *Braun*

8881 thoracella *Busck*

8882 alternatella *Kft.*

8883 libocedrella *Busck*

8884 cupressella *Wlshm.*

8885 freyella *Wlshm.*
‡*abdominalis* Zell.

8886 quercicolella *Cham.*

8887 annettella *Busck*

8888 nymphocoma *Meyr.*

8889 calliphanes *Meyr.*

8890 goedartella *Linn.*

8891 pygmaeella *Hbn.*

8892 chalcochrysa *Meyr.*

8893 oreasella *Clem.*
‡*andereggiella* Zell.

8894 castaneella *Busck*

8895 franciscella *Busck*

8896 inscriptella *Busck*

8897 apicimaculella *Cham.*
visaliella Cham.

8898 subreticulata *Wlshm.*

8899 deletella *Zell.*

8900 eugeniella *Busck*

8901 altissimella *Cham.*

8902 monochromella *Busck*

8903 conjugella *Zell.*

8904 belangerella *Cham.*

8905 montella *Cham.*

8906 plicipunctella *Wlshm.*

8907 rileiella *Busck*

8908 pedmontella *Cham.*

8909 furcatella *Busck*

8910 bolliella *Busck*

8911 mesocausta *Meyr.*

8912 undulatella *Cham.*

8913 austerella *Zell.*

8914 thuiella *Pack.*

8915 laricella *Kft.*

8916 pallidella *Braun*

8917 media *Braun*

8918 pilatella *Braun*

8919 arceuthobiella *Busck*

Podiasa Busck

8920 chiococcella *Busck*

Zelleria Staint.

8921 gracilariella *Busck*
form ribesella *Busck*

8922 semitincta *Meyr.*

8923 haimbachi *Busck*

Swammerdamia Hbn.

8924 castaneae *Busck*

8925 cuprescens *Braun*

Ocnerostoma Zell.

8926 piniariella *Zell.*

Xyrosaris Meyr.

8927 celastrustella *Kft.*

8928 ochroplagiata *Braun*

Eucatagma Busck

8929 amyrisella *Busck*

Orinympha Meyr.

8930 aetherias *Meyr.*

Yponomeuta Latr.

8931 multipunctella *Clem.*
ordinatella Wlk.

8932 orbimaculella *Cham.*
‡*euonymella* Cham.

8933 atomocella *Dyar*
diaphorus Wlshm.

8934 semialba *Meyr.*

8935 leucothorax *Meyr.*

8936 padella *Linn.*

Atteva Wlk.

8937 floridana *Neum.*

8938 edithella *Busck*

8939 aurea *Fitch*
compta Clem.

Lactura Wlk.
Mieza Wlk.

8940 pupula *Hbn.*
laeta Gey.
igninix Wlk.
crassivenella Zell.

8941 subfervens *Wlk.*
a psammitis *Zell.*

8942 basistriga *B. & McD.*
rhodocentra Meyr.

8943 atrolinea *B. & McD.*

Urodus H. S.
Trichostibas Zell.

8944 parvula *Hy. Edw.*

SCYTHRIDAE

Scythris Hbn.

8945 eburnea *Wlshm.*
arizoniella Kft.
8946 albapennella *Cham.*
8947 sponsella *Busck*
8948 albilineata *Wlshm.*
8949 aterrimella *Wlk.*
8950 basilaris *Zell.*
flavifrontella Clem.
8951 impositella *Zell.*
matutella Clem.
monstratella Wlk.
dorsipallidella Cham.
buristriga Cham.
brevistriga Cham.
immaculatella Cham.
8952 graminivorella *Braun*
8953 eboracensis *Zell.*
8954 pacifica *McD.*
8955 fuscicomella *Clem.*
8956 ochristriata *Wlshm.*
8957 altisierrae *Keif.*
8958 perspicelella *Wlshm.*
8959 confinis *Braun*
8960 reducta *Braun*
8961 anthracina *Braun*
8962 scintillifera *Braun*
8963 pilosella *Zell.*
8964 magnatella *Busck*
8965 plausipennella *Cham.*
8966 suffusa *Wlshm.*
8967 trivinctella *Zell.*
8968 ypsilon *Braun*
8969 interrupta *Braun*
8970 mixaula *Meyr.*
8971 oxyplecta *Meyr.*
8972 charon *Meyr.*
8973 piratica *Meyr.*
8974 hemidyctias *Meyr.*
8975 fissirostris *Meyr.*

Superfamily **CYCNODIOIDEA**

HELIOZELIDAE

Heliozela H. S.

8976 aesella *Cham.*
8977 gracilis *Zell.*

Antispila Hbn.

8978 ampelopsiella *Cham.*
8979 voraginella *Braun*
8980 cornifoliella *Clem.*
8981 eugeniella *Busck*
8982 argentifera *Braun*
8983 hydrangiaeella *Cham.*
8984 isabella *Clem.*
8985 nyssaefoliella *Clem.*
8986 viticordifoliella *Clem.*
8987 major *Kft.*
8988 aurirubra *Braun*

Coptodisca Wlshm.

8989 diospyriella *Cham.*
8990 condaliae *Busck*
8991 ella *Cham.*
8992 lucifluella *Clem.*

8993 juglandiella *Cham.*

8994 magnella *Braun*

8995 negligens *Braun*

8996 ostryaefoliella *Clem.*

8997 saliciella *Cham.*

8998 splendoriferella *Clem.*

pruniella Clem.
saccatella Pack.

8999 arbutiella *Busck*

9000 kalmiella *Dietz*

9001 ribesella *Braun*

9002 cercocarpella *Braun*

9003 quercicolella *Braun*

DOUGLASIIDAE

Tinagma Zell.

9004 obscurofasciella *Cham.*
crenulellum Engel

9005 gigantea *Braun*

9006 pulverilinea *Braun*

9007 leucaspis *Braun*

ELACHISTIDAE

Elachista Tr.
Aphelosetia Steph.

9008 bicristatella *Cham.*
duplicatella Dyar

9009 orestella *Busck*

9010 brachyelytrifoliella *Clem.*

9011 concolorella *Cham.*

9012 illectella *Clem.*

9013 inornatella *Cham.*

9014 maculosella *Clem.*

9015 madarella *Clem.*

9016 argentosa *Braun*

9017 enitescens *Braun*

9018 metallifera *Wlshm.*

9019 orichalcella *Clem.*

9020 parvipulvella *Cham.*

9021 praematurella *Clem.*
form cristatella *Cham.*
form albapalpella *Cham.*

9022 pusilla *F. & B.*

9023 staintonella *Cham.*

9024 texanella *Cham.*

9025 texanica *F. & B.*

9026 salinaris *Braun*

9027 sincera *Braun*

9028 herbigrada *Braun*

9029 stramineola *Braun*

9030 agilis *Braun*

9031 aurocristata *Braun*

9032 controversa *Braun*

9033 radiantella *Braun*

9034 solitaria *Braun*

9035 cygnodiella *Busck*

9036 unifasciella *Cham.*

9037 albicapitella *Engel*

9038 praelineata *Braun*

9039 sylvestris *Braun*

9040 leucofrons *Braun*

9041 irrorata *Braun*

9042 cana *Braun*

9043 inaudita *Braun*

9044 cucullata *Braun*

9045 patriodoxa *Meyr.*

9046 philopatris *Meyr.*

9047 tanyopis *Meyr.*

9048 griseicornis *Meyr.*

Aphigalia Dyar

9049 albella *Cham.*

9050 ochreomaculella *Cham.*

Stephensia Staint.

9051 cunilae *Braun*

Dicranoctetes Braun

9052 angularis *Braun*

Coelopoeta Wlshm.

9053 glutinosi *Wlshm.*

9054 baldella *B. & Bsk.*

Superfamily **TINEOIDEA**

COLEOPHORIDAE

Coleophora Hbn.
Haploptilia Hbn.

9055 nigralineella *Cham.*

9056 tiliaefoliella *Clem.*

9057 rosaefoliella *Clem.*

9058 malivorella *Riley*
multipulvella Cham.

9059 atromarginata *Braun*

9060 albovanescens *Heinr.*

9061 elaeagnisella *Kft.*

9062 querciella *Clem.*

9063 currucipennella *Zell.*

9064 sacramenta *Heinr.*

9065 discostriata *Wlshm.*

9066 castipennella *Wlshm.*

9067 atlantica *Heinr.*

9068 accordella *Wlshm.*

9069 bella *Wlshm.*

9070 acamtopappi *Busck*

9071 quadristrigella *Busck*

9072 entoloma *Busck*

9073 gaylussaciella *Heinr.*

9074 cretaticostella *Clem.*

9075 kearfottella *B. & Bsk.*

9076 ochrella *Cham.*

9077 leucochrysella *Clem.*

9078 viburnella *Clem.*

9079 argentialbella *Cham.*

9080 rosacella *Clem.*

9081 albiantennaella *Wild.*

9082 cornella *Wlshm.*

9083 carpinella *Heinr.*

9084 umbratica *Braun*

9085 caryaefoliella *Clem.*
rufoluteella Cham.

9086 ostryae *Clem.*

9087 corylifoliella *Clem.*

9088 limosipenella *Dup.*
laticornella Clem.

9089 comptoniella *McD.*

9090 alniella *Heinr.*

9091 lentella *Heinr.*

9092 coruscipennella *Clem.*
auropurpurella Cham.

9093 viridicuprella *Wlshm.*

9094 aeneusella *Cham.*

9095 apicialbella *Braun*
‡*apicella* Braun

9096 occidentis *Zell.*
fletcherella Fern.

9097 salmani *Heinr.*

9098 laricella *Hbn.*

9099 cerasivorella *Pack.*

9100 zelleriella *Cham.*

9101 volckei *Heinr.*

9102 pruniella *Clem.*

9103 cinerella *Cham.*

9104 concolorella *Clem.*

9105 innotabilis *Braun*

9106 piperata *Braun*

9107 unicolorella *Cham.*

9108 kalmiella *McD.*

9109 manitoba *Busck*

9110 heinrichella *McD.*

9111 vernoniaeella *Cham.*

9112 argentella *Cham.*
‡*argentialbella* Cham.

9113 monardella *McD.*

9114 sparsipulvella *Cham.*

9115 wyethiae *Wlshm.*

9116 sparsipuncta *Heinr.*

9117 granifera *Braun*

9118 coenosipennella *Clem.*

9119 bistrigella *Cham.*

9120 cratipennella *Clem.*
gigantella Cham.

9121 quadrilineella *Cham.*

9122 brunneipennis *Braun*

9123 annulicola *Braun*

9124 duplicis *Braun*

9125 ericoides *Braun*

9126 polemoniella *Braun*

9127 astericola *Heinr.*

9128 infuscatella *Clem.*

9129 borea *Braun*

9130 acutipennella *Wlshm.*

9131 viscidiflorella *Wlshm.*

9132 chambersella *Dyar*
‡*artemisicolella* Cham.

9133 caespititiella *Zell.*
ciliaeochrella Cham.

9134 atriplicivora *Ckll.*

9135 demissella *Braun*

9136 amaranthella *Braun*

9137 biforis *Braun*

9138 prepostera *Braun*

9139 suaedicola *Ckll.*

9140 glaucella *Wlshm.*

9141 albacostella *Cham.*

9142 tenuis *Wlshm.*

9143 crinita *Braun*

9144 nigrostriata *Wlshm.*

9145 basistrigella *Cham.*

9146 biminimaculella *Cham.*

9147 bipunctella *Wlshm.*

9148 suaedae *Busck*

9149 ochrostriata *Wlshm.*

9150 shaleriella *Cham.*

9151 fagicosticella *Cham.*

9152 fuscostrigella *Cham.*

9153 lineapulvella *Cham.*

9154 inornatella *Cham.*

9155 irroratella *Wlshm.*

9156 lynosyridella *Wlshm.*

9157 luteocostella *Cham.*

9158 octagonella *Wlshm.*

9159 portulacea *Ckll.*

9160 texanella *Cham.*

9161 trilineella *Cham.*

9162 lapidicornis *Wlshm.*

9163 vagans *Wlshm.*

GRACILLARIIDAE

Lithocolletis Hbn.

9164 fitchella *Clem.*
‡*quercifoliella* Fitch
quercetorum F. & B.

9165 leucothorax *Wlshm.*

9166 bataviella *Braun*

9167 trinotella *Braun*

9168 quercialbella *Fitch*
quercipulchella Cham.

9169 clemensella *Cham.*

9170 pernivalis *Braun*

9171 argentifimbriella *Clem.*
longestriata F. & B.
fuscocostella Cham.

9172 lucidicostella *Clem.*

9173 albanotella *Cham.*
subaureola F. & B.

9174 insignis *Wlshm.*

9175 hageni *F. & B.*
necospinusella Cham.

9176 arbutusella *Braun*

9177 obscuricostella *Clem.*
virginiella Cham.

9178 ostryaefoliella *Clem.*
mirifica F. & B.

9179 manzanita *Braun*

9180 rileyella *Cham.*
tenuistrigata F. & B.

9181 kearfottella *Braun*

9182 caryaealbella *Cham.*

9183 olivaeformis *Braun*

9184 felinelle *Heinr.*

9185 martiella *Braun*

9186 viburnella *Braun*

9187 gemmea *F. & B.*

9188 diversella *Braun*

9189 morrisella *Fitch*
texanella Zell.
amphicarpaeella Cham.

9190 uhlerella *Fitch*
amorphaeella Cham.
amorphae F. & B.

9191 robiniella *Clem.*
pseudacaciella Fitch

9192 auronitens *F. & B.*

9193 diaphanella *F. & B.*

9194 minutella *F. & B.*

9195 scudderella *F. & B.*

9196 ledella *Wlshm.*

9197 salicivorella *Braun*

9198 deceptusella *Cham.*

9199 intermixta *Braun*

9200 alnicolella *Wlshm.*

9201 alni *Wlshm.*
‡*alnivorella* Cham.

9202 malimalifoliella *Braun*

9203 crataegella *Clem.*

9204 propinquinella *Braun*

9205 incanella *Wlshm.*

9206 populiella *Cham.*

9207 rhododendrella *Braun*

9208 sexnotella *Cham.*

9209 aceriferella *Clem.*

9210 obsoleta *F. & B.*

9211 argentinotella *Clem.*

9212 occitanica *F. & B.*

9213 apicinigrella *Braun*

9214 basistrigella *Clem.*
intermedia F. & B.

9215 celtisella *Cham.*
nonfasciella Cham.
pusillifoliella F. & B.

9216 lucetiella *Clem.*
aenigmatella F. & B.

9217 symphoricarpella *Cham.*
symphoricarpella F. & B.
bolliella Dyar

9218 ostensackenella *Fitch*
ornatella Cham.

9219 tritaenianella *Cham.*
consimilella F. & B.

9220 affinis *F. & B.*

9221 mariaeella *Cham.*

9222 tiliacella *Cham.*

9223 oregonensis *Wlshm.*

9224 fragilella *F. & B.*

9225 salicifoliella *Cham.*
atomariella Zell.

9226 tremuloidiella *Braun*

9227 celtifoliella *Cham.*

9228 lysimachiaeella *Cham.*

9229 inusitatella *Braun*

9230 aberrans *Braun*

9231 gaultheriella *Wlshm.*

9232 nemoris *Wlshm.*

9233 caryaefoliella *Clem.*
juglandiella Clem.

9234 lentella *Braun*

9235 saccharella *Braun*

9236 macrocarpella *F. & B.*

9237 superimposita *Braun*

9238 cretaceella *Braun*

9239 cincinnatiella *Cham.*

9240 hamadryadella *Clem.*
alternatella Zell.

9241 umbellulariae *Wlshm.*

9242 agrifoliella *Braun*

9243 conglomeratella *Zell.*
bicolorella Cham.
obtusilobae F. & B.

9244 arizonella *Braun*

9245 ulmella *Cham.*
modesta F. & B.

9246 quercivorella *Cham.*

9247 mediodorsella *Braun*

9248 australisella *Cham.*

9249 chambersella *Wlshm.*
‡*quinquenotella* Cham.

9250 cervina *Wlshm.*

9251 platanoidiella *Braun*

9252 fletcherella *Braun*

9253 arcuella *Braun.*

9254 betulivora *Wlshm.*

9255 eppelsheimi *F. & B.*

9256 bethunella *Cham.*
lebertella F. & B.

9257 picturatella *Braun*

9258 fasciella *Wlshm.*
‡*unifasciella* Cham.

9259 castaneaeella *Cham.*

9260 guttifinitella *Clem.*
toxicodendri F. & B.

9261 obstrictella *Clem.*
bifasciella Cham.
ceriferae Wlshm.

9262 corylisella *Cham.*
‡*bifasciella* Wlshm.

9263 aesculisella *Cham.*

9264 ostryarella *Cham.*

9265 aceriella *Clem.*

9266 hamameliella *Busck*

9267 tubiferella *Clem.*

Porphyrosela Braun

9268 desmodiella *Clem.*
gregariella Murt.

Protolithocolletis Braun

9269 lathyri *Braun*

Cremastobombycia Braun

9270 grindeliella *Wlshm.*

9271 solidaginis *F. & B.*

9272 ambrosiella *Cham.*
amoena F. & B.

9273 ignota *F. & B.*
bostonica F. & B.
helianthisella Cham.
helianthivorella Cham.
elephantopodella F. & B.
actinomeridis F. & B.

9274 verbesinella *Busck*

Marmara Clem.

9275 salictella *Clem.*

9276 serotinella *Busck*

9277 guilandinella *Busck*

9278 fulgidella *Clem.*

9279 elotella *Busck*

9280 fraxinicola *Braun*

9281 opuntiella *Busck*

9282 arbutiella *Busck*

9283 fasciella *Cham.*
quinquenotella Cham.

9284 pomonella *Busck*

9285 auratella *Braun*

9286 leptodesma *Meyr.*

9287 apocynella *Braun*

9288 smilacisella *Cham.*

Leucanthiza Clem.

9289 amphicarpeaefoliella *Clem.*
saundersella Cham.

9290 dircella *Braun*

Neurolipa Ely

9291 randiella *Busck*

Apophthisis Braun

9292 pullata *Braun*

9293 congregata *Braun*

Leucospilapteryx Spul.

9294 venustella *Clem.*
eupatoriella Cham.

Chilocampyla Busck

9295 dyariella *Busck*

Neurostrota Ely

9296 gunniella *Busck*

Acrocercops Wall.

9297 albinatella *Cham.*

9298 quinquestrigella *Cham.*

9299 rhombiferella *F. & B.*

9300 astericola *F. & B.*

9301 strigosa *Braun*

9302 affinis *Braun*

9303 arbutella *Braun*

9304 onosmodiella *Busck*

9305 sideroxylonella *Busck*

Neurobatha Ely

9306 strigifinitella *Clem.*
duodecemlineella Cham.
quercifoliella Cham.

Phyllocnistis Zell.

9307 ampelopsiella *Cham.*

9308 populiella *Cham.*

9309 vitifoliella *Cham.*

9310 vitigenella *Clem.*

9311 liriodendrella *Clem.*

9312 magnoliella *Cham.*

9313 liquidambarisella *Cham.*

9314 intermediella *Busck*

9315 erechtiisella *Cham.*
insignis F. & B.

9316 finitima *Braun*

9317 magnatella *Zell.*

Parectopa Clem.

9318 lespedezaefoliella *Clem.*
mirabilis F. & B.

9319 robiniella *Clem.*

9320 pennsylvaniella *Eng.*

9321 plantaginisella *Cham.*
geiella Cham.
erigeronella Cham.

9322 geraniella *Braun*

9323 thermopsella *Cham.*

9324 occulta *Braun*

9325 albicostella *Braun*

9326 bosquella *Cham.*

9327 interpositella *F. & B.*

Micurapteryx Spul.

9328 salicifoliella *Cham.*

Callisto Steph.
Parornix Spul.

9329 boreasella *Clem.*

9330 guttea *Haw.*
a solitariella *Dietz*

9331 kalmiella *Dietz*

9332 preciosella *Dietz*

9333 spiraeifoliella *Braun*

9334 crataegifoliella *Clem.*

9335 dubitella *Dietz*

9336 conspicuella *Dietz*

9337 arbitrella *Dietz*

9338 vicinella *Dietz*

9339 strobivorella *Dietz*

9340 arbutifoliella *Dietz*

9341 obliterella *Dietz*

9342 inusitatumella *Cham.*

9343 melanotella *Dietz*

9344 geminatella *Pack.*
prunivorella Cham.

9345 quadripunctella *Clem.*
form albifaciella *Dietz*

9346 innotata *Wlshm.*

9347 trepidella *Clem.*

9348 festinella *Clem.*

9349 texanella *Busck*

9350 alta *Braun*

Gracillaria Haw.

9351 minimella *Ely*

9352 sebastianiella *Busck*

9353 burserella *Busck*

9354 perseae *Busck*

9355 flavimaculella *Ely*

9356 cornusella *Ely*

9357 vacciniella *Ely*

9358 anthobaphes *Meyr.*

9359 amphidelta *Meyr.*

9360 bimaculatella *Ely*

9361 burgessiella *Zell.*

9362 belfrageella *Cham.*
auriferella F. & B.

9363 macranthes *Meyr.*

9364 blandella *Clem.*
juglandivorella Cham.

9365 juglandiella *Cham.*
juglandisnigraeella Cham.

9366 ostryaeella *Cham.*

9367 violacella *Clem.*
desmodifoliella Clem.

9368 azaleella *Brants*
azaleae Busck

9369 packardella *Cham.*
elegantella F. & B.
inornatella Cham.

9370 coroniella *Clem.*

9371 glutinella *Ely*

9372 superbifrontella *Clem.*

9373 porphyretica *Braun*

9374 negundella *Cham.*

9375 stigmatella *Fabr.*
consimilella F. & B.
purpuriella Cham.

9376 populiella *Cham.*

9377 scutellariella *Braun*

9378 palustriella *Braun*

9379 rhoifoliella *Cham.*

9380 sassafrasella *Cham.*

9381 obscuripennella *F. & B.*

9382 acerifoliella *Cham.*

9383 atomosella *Zell.*

9384 quercinigrella *Ely*

9385 hypericella *Braun*

9386 ferruginella *Braun*

9387 umbratella *Braun*

9388 invariabilis *Braun*

9389 reticulata *Braun*

9390 flavella *Ely*

9391 alnivorella *Cham.*
a alnicolella *Cham.*
b pulchella *Cham.*
c sanguinella *Beut.*
d nigristrigella *Beut.*
ruptostrigella Beut.
e shastaella *Beut.*
f fuscoochrella *Beut.*

9392 strictella *Wlk.*
adaptella Wlk.

9393 sauzalitoeella *Cham.*

9394 murtfeldtella *Busck*

9395 serotinella *Ely*

9396 melanocarpae *Braun*

9397 paradoxa *F. & B.*

9398 cuculipennella *Hbn.*
fraxinella Ely

9399 aceriella *Cham.*

9400 behrensella *Cham.*

9401 ribesella *Cham.*

OPOSTEGIDAE

Opostega Zell.

9402 albogaleriella *Clem.*

9403 nonstrigella *Cham.*

9404 quadristrigella *Cham.*
accessoriella F. & B.

9405 scioterma *Meyr.*

9406 cretea *Meyr.*

9407 bistrigulella *Braun*

LYONETIIDAE

Leucoptera Hbn.

9408 erythrinella *Busck*

9409 guettardella *Busck*

9410 pachystimella *Busck*

9411 robiniella *Braun*

Corythophora Braun

9412 aurea *Braun*

Paraleucoptera Heinr.

9413 albella *Cham.*

Proleucoptera Busck

9414 smilaciella *Busck*

Acanthocnemes Cham.
Caconome Dyar

9415 fuscoscapulella *Cham.*

Lyonetia Hbn.

9416 alniella *Cham.*

9417 latistrigella *Wlshm.*

9418 candida *Braun*

9419 speculella *Clem.*
nidificansella Pack.
gracilella Cham.
apicistrigella Cham.

9420 saliciella *Busck*

Eulyonetia Cham.

9421 inornatella *Cham.*

Metriochroa Busck

9422 psychotriella *Busck*

Bedellia Staint.

9423 somnulentella *Zell.*
staintonella Clem.

9424 minor *Busck*

Philonome Cham.
Busckia Dyar

9425 clemensella *Cham.*

9426 albella *Cham.*

9427 luteella *Cham.*

Bucculatrix Zell.

9428 luteella *Cham.*

9429 magnella *Cham.*

9430 fusicola *Braun*

9431 montana *Braun*

9432 niveella *Cham.*

9433 cuneigera *Meyr.*
errans Braun

9434 agnella *Clem.*

9435 copeuta *Meyr.*

9436 capitialbella *Cham.*

9437 albicapitella *Cham.*

9438 litigiosella *Zell.*

9439 packardella *Cham.*

9440 trifasciella *Clem.*
obscurofasciella Cham.

9441 eupatoriella *Braun*

9442 coronatella *Clem.*

9443 immaculatella *Cham.*

9444 ivella *Busck*

9445 quinquenotella *Cham.*

9446 rileyi *F. & B.*

9447 staintonella *Cham.*
‡*albella* Cham.

9448 pomifoliella *Clem.*
pomonella Pack.
curvilineatella Pack.

9448, 1 canadensisella *Cham.*

9449 ambrosiaefoliella *Cham.*

9450 locuples *Meyr.*

9451 sexnotata *Braun*

9452 ainsliella *Murt.*

9453 variabilis *Braun*

9454 ilecella *Busck*

9455 crescentella *Braun*

9456 angustata *F. & B.*

9457 chrysothamni *Braun*

9458 tenebricosa *Braun*

9459 angustisquamella *Braun*

9460 salutatoria *Braun*

9461 divisa *Braun*

9462 arnicella *Braun*

9463 fugitans *Braun*

9464 ochristrigella *Braun*

9465 albaciliella *Braun*

9466 tetrella *Braun*

9467 transversata *Braun*

9468 sporobolella *Busck*

9469 koebelella *Busck*

9470 albertiella *Busck*

9471 eurotiella *Wlshm.*

9472 thurberiella *Busck*

9473 althaeae *Busck*

9474 ceanothiella *Braun*

9475 latella *Braun*

9476 quadrigemina *Braun*

9477 insolita *Braun*

9478 pertenuis *Braun*

9479 floccosa *Braun*

9480 nigripunctella *Braun*

Exegetia Braun

9481 crocea *Braun*

TISCHERIIDAE

Tischeria Zell.

9482 sulphurea *F. & B.*

9483 clemensella *Cham.*
bicolor F. & B.

9484 concolor *Zell.*

9485 castaneaeella *Cham.*
castanella Wlshm.

9486 cinereotunicella *Braun*

9487 citrinipennella *Clem.*

9488 mediostriata *Braun*

9489 quercitella *Clem.*
quercivorella Cham.

9490 badiiella *Cham.*
purinosella Cham.

9491 albostraminea *Wlshm.*

9492 nubila *Braun*

9493 fuscomarginella *Cham.*

9494 tinctoriella *Cham.*

9495 helianthi *F. & B.*

9496 solidaginifoliella *Clem.*

9497 pulvella *Cham.*

9498 explosa *Braun*

9499 heteroterae *F. & B.*

9500 omissa *Braun*

9501 heliopsisella *Cham.*
nolckeni F. & B.

9502 longeciliata *F. & B.*

9503 ambrosiaeella *Cham.*

9504 bifurcata *Braun*

9505 ambigua *Braun*

9506 immaculata *Braun*

9507 ceanothi *Wlshm.*

9508 malifoliella *Clem.*

9509 aenea *F. & B.*

9510 roseticola *F. & B.*

9511 admirabilis *Braun*

Coptotriche Wlshm.

9512 zelleriella *Clem.*
complanoides F. & B.
latipennella Cham.

OINOPHILIDAE

Phaeoses Forbes

9513 sabinella *Forbes*

PSYCHIDAE

Oiketicus Guild.

9514 abbotii *Grt.*

9515 townsendi *Twnsnd.*
a bonniwelli *B. & B.*

9516 dendrokomos *Jones*

9517 toumeyi *Jones*

9518 davidsoni *Hy. Edw.*

Thyridopteryx Steph.

9519 ephemeraeformis *Haw.*
coniferarum Pack.

9519, 1 pallidovenata *Grossb.*

9520 vernalis *Jones*

9521 alcora *Barnes*

9522 meadi *Hy. Edw.*

Platoeceticus Pack.

9523 gloveri *Pack.*

9524 nigrita *B. & McD.*

9525 jonesi *B. & B.*

Eurukuttarus Hamp.

9526 confederata *Grt.*

9527 traceyi *Jones*

9528 celibata *Jones*

9529 cacocnemos *Jones*

9530 edwardsi *Heyl.*
carbonaria Pack.

9531 polingi *B. & B.*

Hyaloscotes Butl.

9532 fragmentella *Hy. Edw.*
coniferella Hy. Edw.
fumosa Butl.

9533 pithopoera *Dyar*

Prochalia B. & McD.

9534 pygmaea *B. & McD.*

Zamopsyche Dyar

9535 commentella *Dyar*

Apterona Mill.

9536 rileyi *Heyl.*

9537 fragilis *B. & McD.*

Fumaria Haw.

9538 casta *Pall.*

Solenobia Zell.

9539 walshella *Clem.*

ACROLOPHIDAE

Acrolophus Poey

9540 furcatus *Wlshm.*

9541 persimplex *Dyar*

9542 leopardus *Busck*

9543 punctellus *Busck*

9544 diversus *Busck*

9545 antonellus *B. & McD.*

9546 cressoni *Wlshm.*

9547 flavicomus *Busck*

9548 hirsutus *Busck*

9549 pyramellus *B. & McD.*

9550 maculifer *Wlshm.*

9551 occidens *Busck*

9552 kearfotti *Dyar*

9553 cockerelli *Dyar*

9554 griseus *Wlshm.*

9555 mortipennellus *Grt.*
quadripunctellus Dyar

9556 plumifrontellus *Clem.*
bombycina Zell.

9557 cervinus *Wlshm.*
angustipennellus Beut.

9558 texanellus *Cham.*

9559 hulstellus *Beut.*

9560 arizonellus *Wlshm.*

9561 simulatus *Wlshm.*

9562 laticapitanus *Wlshm.*

9563 coloradellus *Wlshm.*

9564 unistriganus *Dyar*

9565 barnesi *Dyar*

9566 morrisoni *Wlshm.*

9567 propinquus *Wlshm.*

9568 confusellus *Dyar*

9569 busckellus *Haim.*

9570 popeanellus *Clem.*
scardina Zell.

9571 acanthogona *Meyr.*

9572 exaphrista *Meyr.*

9573 carphologa *Meyr.*

9574 leucallactis *Meyr.*

9575 agrotipennellus *Grt.*

9576 tenuis *Wlshm.*
violaceellus Beut.

9577 macrogaster *Wlshm.*

9578 variabilis *Wlshm.*

9579 piger *Dyar*

9580 filicicornis *Wlshm.*
mexicanellus Beut.

9581 dorsimacula *Dyar*

9582 arcanellus *Clem.*

9583 davisellus *Beut.*
a minor *Dyar*

9584 quadrellus *B. & McD.*

9585 mora *Grt.*

TINEIDAE

Myrmecozela Zell.
Amydria Clem.

9586 brevipennella *Dietz*

9587 effrenatella *Clem.*

9588 coloradella *Dietz*

9589 arizonella *Dietz*

9590 apachella *Dietz*

9591 curvistrigella *Dietz*

9592 pandurella *Dietz*

9593 confusella *Dietz*

9594 clemensella *Cham.*

9595 onagella *Dietz*
a occidentella *Dietz*

9596 obliquella *Dietz*

9597 dyarella *Dietz*

9598 crescentella *Kft.*

9599 margorieella *Dietz*

9600 respersa *Meyr.*

Hypoplesia Busck
‡*Paraplesia* Dietz

9601 busckiella *Dietz*

9602 dietziella *Busck*

Paraneura Dietz

9603 simulella *Dietz*

9604 ehrhornella *Dietz*

9605 cruciferella *Dietz*

Setomorpha Zell.

9606 insectella *Fabr.*
operosella Zell.
inamoenella Zell.
ruderella Zell.
multimaculella Cham.
majorella Dietz
transversestrigella Dietz
fractiliniella Dietz

9607 sigmoidella *Dietz*

Epilegis Dietz

9608 cariosella *Dietz*

Apreta Dietz

9609 paradoxella *Dietz*

Epichaeta Dietz

9610 nepotella *Dietz*

Dorata Busck

9611 lineata *Wlshm.*
virgatella Busck

9612 medioliniella *Kft.*

9613 inornatella *Busck*

9614 atomophora *Meyr.*

Scardia Tr.

9615 anatomella *Grt.*

9616 coloradella *Dietz*

9617 fiskeella *Busck*

9618 gracilis *Wlshm.*

9619 fuscofasciella *Cham.*

9620 pravatella *Busck*

9621 caryophyllella *Busck*

9622 burkerella *Busck*

9623 approximatella *Dietz*

9624 errandella *Busck*

Dystopasta Busck
Dyotopasta Busck (*err. typo.*)

9625 yumaella *Kft.*
angustella Wlshm.

Xylesthia Clem.

9626 pruniramiella *Clem.*
congeminatella Zell.
clemensella Cham.
kearfottella Dietz

9627 albicans *Braun*

Elatobia H. S.
Dietzia Busck

9628 martinella *Wlk.*
afflictella Wlk.
carbonella Dietz

Kearfottia Fern.

9629 albifasciella *Fern.*

Monopis Hbn.

9630 rusticella *Hbn.*

9631 biflavimaculella *Clem.*
a insignisella *Wlk.*

9632 marginistrigella *Cham.*

9633 monachella *Hbn.*

9634 dorsistrigella *Clem.*
subjunctella Wlk.

9635 crocicapitella *Clem.*

9636 irrorella *Dietz*

9637 halospila *Meyr.*

Trichophaga Rag.

9638 tapetiella *Linn.*

Doleromorpha Braun

9639 porphyria *Braun*

Choropleca Durr.
‡*Cyane* Cham.

9640 visaliella *Cham.*

Tinea Linn.

9641 misella *Zell.*

9642 obscurostrigella *Cham.*

9643 fuscipunctella *Haw.*
nubilipennella Clem.
frigidella Pack.

9644 irrepta *Braun*

9645 apicimaculella *Cham.*

9646 orleansella *Cham.*

9647 straminiella *Cham.*

9648 bimaculella *Cham.*

9649 trimaculella *Cham.*

9650 carnariella *Clem.*

9651 griseella *Cham.*

9652 grumella *Zell.*

9653 pellionella *Linn.*

9654 misceella *Cham.*

9655 behrensella *Cham.*

9656 occidentella *Cham.*

9657 sparsipunctella *Wlshm.*

9658 tuscanella *Dietz*

9659 croceoverticella *Cham.*

9660 thoracestrigella *Cham.*

9661 vicinella *Dietz*

9662 unomaculella *Cham.*

9663 niveocapitella *Cham.*

9664 leucocapitella *Busck.*

9665 seminolella *Beut.*

9666 ophrionella *Dietz*

9667 xanthostictella *Dietz*

9668 imitatorella *Cham.*

9669 mandarinella *Dietz*

9670 roburella *Dietz*

9671 oregonella *Busck*

9672 rileyi *Dietz*

9673 multistriatella *Dietz*

9674 molybdanella *Dietz*

9675 geniculatella *Dietz*

9676 arcella *Fabr.*

9677 auropulvella *Cham.*

9678 acapnopennella *Clem.*
minutipulvella Cham.

9679 tylodes *Meyr.*

9680 atriflua *Meyr.*

9681 defectella *Zell.*

9682 apicisignatella *Dietz*

9683 angulifasciella *Dietz*

9684 marmorella *Cham.*

9685 fuscomaculella *Cham.*

9686 granella *Linn.*
variatella Clem.
costotristrigella Cham.

9687 cloacella *Haw.*

9688 interstitiella *Dietz*

9689 fulvisuffusella *Dietz*

9690 maculabella *Cham.*

9691 marginimaculella *Cham.*
maculimarginella Cham.

9692 fuscopulvella *Cham.*

9693 nigroatomella *Dietz*

Homostinea Dietz

9694 curviliniella *Dietz*

Tineola H. S.

9695 biselliella *Hum.*
lanariella Clem.

Tenaga Clem.

9696 pomiliella *Clem.*

Hybroma Clem.

9697 servulella *Clem.*
aurosuffusella Cham.

Tryptodema Dietz

9698 sepulchrella *Dietz*

Mea Busck
‡*Progona* Dietz

9699 skinnerella *Dietz*

9700 bipunctella *Dietz*

9701 floridella *Dietz*

Diachorisia Clem.

9702 velatella *Clem.*

Homosetia Clem.

9703 argentistrigella *Cham.*

9704 argentinotella *Cham.*

9705 cristatella *Cham.*
bifasciella Cham.

9706 obscurella *Dietz*

9707 chrysoadspersella *Dietz*

9708 costisignella *Clem.*

9709 fasciella *Cham.*

9710 maculatella *Dietz*

9711 miscecristatella *Cham.*
aurocristatella Cham.
fuscocristatella Cham.

9712 tricingulatella *Clem.*

9713 ornatella *Dietz*

9714 auriferella *Dietz*

9715 septemstrigella *Cham.*

Pelates Dietz

9716 heteropalpella *Dietz*

Leucomela Dietz

9717 miriamella *Dietz*

Oenoe Cham.

9718 hybromella *Cham.*

Superfamily **NEPTICULOIDEA**

NEPTICULIDAE

Nepticula v. Heyd.

9719 argentifasciella *Braun*

9720 scintillans *Braun*

9721 pteliaeella *Cham.*

9722 quadrinotata *Braun*

9723 trinotata *Braun*

9724 ceanothi *Braun*

9725 bifasciella *Clem.*
serotinaeella Cham.
? prunifoliella Clem.

9726 intermedia *Braun*

9727 diffasciae *Braun*

9728 rhamnicola *Braun*
‡*rhamnella* Braun

9729 cerea *Braun*

9730 rhoifoliella *Braun*

9731 terminella *Braun*

9732 villosella *Clem.*
dallasiana F. & B.

9733 resplendensella *Cham.*

9734 unifasciella *Cham.*

9735 purpuratella *Braun*

9736 taeniola *Braun*

9737 obscurella *Braun*

9738 ostryaefoliella *Clem.*

9739 procrastinella *Braun*

9740 paludicola *Braun*

9741 myricafoliella *Busck*

9742 altella *Braun*

9743 corylifoliella *Clem.*
virginiella Clem.
minimella Cham.

9744 opulifoliella *Braun*

9745 quercipulchrella *Cham.*

9746 condaliafoliella *Busck*

9747 juglandifoliella *Clem.*
caryaefoliella Clem.

9748 apicialbella *Cham.*
leucostigma Braun

9749 tiliella *Braun*

9750 rubifoliella *Clem.*

9751 virgulae *Braun*

9752 nyssaefoliella *Cham.*

9753 slingerlandella *Kft.*

9754 rosaefoliella *Clem.*

9755 exasperata *Braun*

9756 fuscotibiella *Clem.*
ciliaefuscella Cham.
discolorella Braun

9757 canadensis *Braun*

9758 ulmella *Braun*

9759 variella *Braun*

9760 platanella *Clem.*
maximella Cham.

9761 clemensella *Cham.*

9762 similella *Braun*

9763 thoracealbella *Cham.*
badiocapitella Cham.

9764 pomivorella *Pack.*

9765 chalybeia *Braun*

9766 flavipedella *Braun*

9767 castaneaefoliella *Cham.*

9768 hypericella *Braun*

9769 punctulata *Braun*

9770 grandisella *Cham.*

9771 belfrageella *Cham.*

9772 latifasciella *Cham.*

9773 crataegifoliella *Clem.*

9774 nigriverticella *Cham.*
maculosella Cham.

9775 populetorum *F. & B.*

9776 saginella *Clem.*
quercicastanella Cham.
fuscocapitella Cham.

9777 pallida *Braun*

9778 marmaropa *Braun*

9779 amelanchierella *Clem.*

9780 anguinella *Clem.*

9781 platea *Clem.*

Ectoedemia Busck

9782 obrutella *Zell.*
bosquella Cham.

9783 populella *Busck*

9784 castaneae *Busck*

9785 phleophaga *Busck*

9786 heinrichi *Busck*

9787 chlorantis *Meyr.*

Obrussa Braun

9788 ochrefasciella *Cham.*

Glaucolepis Braun

9789 saccharella *Braun*

Microcalyptris Braun

9790 scirpi *Braun*

Superfamily **INCURVARIOIDEA**

INCURVARIIDAE

Lampronia Steph.

9791 oregonella *Wlshm.*

9792 gillettella *Busck*

9793 russatella *Clem.*
tripunctella Wlshm.

9794 taylorella *Kft.*

9795 quieta *Braun*

9796 variata *Braun*

9797 labradorella *Clem.*

9798 aureovirens *Dietz*

9799 sedella *Busck*

9800 piperella *Busck*

9801 aenescens *Wlshm.*

9802 politella *Wlshm.*

9803 sublustris *Braun*

9804 obscuromaculata *Braun*

9805 fuscoleuca *Braun*

Greya Busck

9806 humilis *Wlshm.*

9807 subalba *Braun*

9808 augustella *Blkmre.*

9809 solenobiella *Wlshm.*

9810 punctiferella *Wlshm.*
a speculella *Blkmre.*

Chalceopla Braun
‡*Cyanauges* Braun

9811 cyanella *Busck*

9812 dietziella *Kft.*

9813 itoniella *Busck*

9814 discalis *Braun*

9815 cockerelli *Busck*

9816 ovata *Braun*

Paraclemensia Busck

9817 acerifoliella *Fitch*
iridella Cham.

Phryganeopsis Wlshm.
Setonella McD.

9818 brunnea *Wlshm.*
buscki McD.

Isocorypha Dietz

9819 mediostriatella *Clem.*
flavistrigella Wlshm.
auristrigella Cham.

9820 chrysocomella *Dietz*

Eudarcia Clem.

9821 simulatricella *Clem.*

9822 caemeteriella *Cham.*

PRODOXIDAE

Prodoxus Riley

9823 quinquepunctellus *Cham.*
decipiens Riley
paradoxica Cham.

9824 intermedius *Riley*

9825 marginatus *Riley*

9826 y-inversus *Riley*

9827 reticulatus *Riley*

9828 coloradensis *Riley*
rheumapterella Dietz
form lautus *Ckll.*
form confluens *Ckll.*

9829 pulverulentus *Riley*

9830 sordidus *Riley*

9831 cinereus *Riley*

9832 aenescens *Riley*

9833 barberellus *Busck*

Tegeticula Zell.
Pronuba Riley

9834 alba *Zell.*
yuccasella Riley

9835 maculata *Riley*
form apicella *Dyar*

9836 aterrima *Treal.*

9837 paradoxa *Riley*
synthetica Riley

ADELIDAE

Nemotois Hbn.

9838 bellela *Wlk.*

Adela Latr.

9839 ridingsella *Clem.*
schlaegeri Zell.
corruscifasciella Cham.

9840 trifasciella *Cham.*

9841 trigrapha *Zell.*
fasciella Cham.

9842 septentrionella *Wlshm.*

9843 flammeusella *Cham.*
lactimaculella Wlshm.

9844 purpurea *Wlk.*
biviella Zell.

9845 singulella *Wlshm.*

9846 punctiferella *Wlshm.*

9847 bella *Cham.*
chalybeis Zell.
iochroa Zell.

9848 aeruginosella *Wlshm.*

9849 simpliciella *Wlshm.*

Suborder **JUGATAE**

ERIOCRANIIDAE

Mnemonica Meyr.

9850 luteiceps *Wlk.*

9851 cyanosparsella *Willms.*

9852 auricyanea *Wlshm.*

9853 aurosparsella *Wlshm.*

9854 griseocapitella *Wlshm.*

MICROPTERYGIDAE

Epimartyria Wlshm.

9855 pardella *Wlshm.*

9856 auricrinella *Wlshm.*

Acanthopteroctetes Braun

9857 tripunctata *Braun*

HEPIALIDAE

Sthenopis Pack.

9858 argenteomaculatus *Harris*
argentata Pack.
alni Kell.

9859 purpurascens *Pack.*
ab. los *Stkr.*
ab. perdita *Dyar*

9860 quadriguttatus *Grt.*
semiauratus N. & D.

9861 thule *Stkr.*

9862 auratus *Grt.*

Hepialus Fabr.

9863 hyperboreus *Moesch.*

9864 confusus *Hy. Edw.*

9865 roseicaput *N. & D.*
form ♀ mutatus *B. & B.*
form ♀ demutatus *B. & B.*

9866 pulcher *Grt.*

9867 macglashani *Hy. Edw.*

9868 mathewi *Hy. Edw.*

9869 novigannus *B. & B.*
a mackiei *B. & B.*

9870 mustelinus *Pack.*
labradoriensis Pack.

9871 gracilis *Grt.*
furcatus Grt.

9872 lemberti *Dyar*

9873 behrensi *Stretch*
mendocinolus Behrens
form sequoiolus *Behrens*
a tacomae *Hy. Edw.*

9874 montanus *Stretch*
desolatus Stkr.
baroni Behrens
anceps Hy. Edw.
rectus Hy. Edw.

9875 californicus *Bdv.*

9876 hectoides *Bdv.*
modestus Hy. Edw.
inutilis Hy. Edw.
form lenzi *Behrens*
sangaris Stkr.

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MEMOIRS

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Revision of the North American Genera and Species of the Phalaenid Subfamily Plusiinae (Lepidoptera)

—

by J. McDUNNOUGH, Ph.D.

Los Angeles, California Issued May 1, 1944

Southern California Academy of Sciences

▲ ▲

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Los Angeles County Museum, Exposition Park, Los Angeles 7, Calif.

REVISION OF THE

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A REVISION OF THE NORTH AMERICAN GENERA AND SPECIES OF THE PHALAENID SUBFAMILY, PLUSIINAE (LEPIDOPTERA)*

By J. McDUNNOUGH

Ottawa, Ont.

In both the 1917 and the 1938 Check Lists the arrangement of the Phalaenid subfamily *Plusiinae* followed more or less along the lines of Hampson's revision (1913, Cat. Lep. Phal. Brit. Mus., XIII, 401-594). Some minor changes in nomenclature, due to Hampson's unorthodox method of fixing genotypes, were made as noted (1916, Ent. News, XXVII, 400), but it was recognized at the time that, until a careful study of the group with special reference to genitalia could be undertaken, it was probably as well to follow the latest revision.

Not until very recently has it been possible for me to find the time available for such a revision. The results of a careful study of structural characters, notably genitalia, show the necessity for considerable changes in generic terms and also for a shifting of species under the various headings in order to better emphasize their relationship. The present paper is intended to incorporate these results. It should be noted that the literature cited forms by no means a complete bibliography but merely represents some of the more important references.

The subfamily is a compact one and has been sufficiently well characterized by Hampson (as *Phytometrinae*); further definition on my part is, therefore, unnecessary. Our North American species fall quite naturally into three categories, based on the character of the clavus in the male genitalia, as follows:—

A. Clavus a short, slightly setose knob arising from a broad base.

B. Clavus a long, thin rod, variably setose.

C. Clavus not definitely defined.

The bulk of the species are contained in the first two sections; the clavus is obscure only in the small genus *Pseudeva* Hamp. and the species *albavitta* Ottol. Section A comprises all the species (except *sansoni* Dod) with yellow hindwings and also the species of the *rectangula-interrogationis* group; it is further characterized by the presence of readily recognizable tibial spines,

* Contribution No. 2240, Division of Entomology, Science Service, Department of Agriculture, Ottawa.

mostly confined to the portions of the hind tibiae between the spurs, but occasionally found on all tibiae. Section B includes the balance of the species. The tendency in this section to break up into small groups of species is much more marked than in the former one. In general it may be said that tibial spining is lacking; one or two small groups (to be discussed later) still show a recognizable spining, and individual specimens may frequently be found which show a weak spine or two on a tibia, usually a hind one, if the covering vestiture be carefully removed; such cases, however, are quite common throughout the *Phalaenidae* in species normally spineless, and I do not consider the presence of these single spines sufficient to warrant the term "spined tibiae", especially as they are very difficult to locate.

In Section A considerable confusion has existed regarding the identity of a number of the species and for this reason I have discussed at some length each individual species and have included specific keys based on genitalic characters. In the other sections the species are better known and have been adequately figured; I have, therefore, confined my remarks, on the whole, to genera rather than species, in an attempt to place these on a sounder footing.

The closely related genera *Abrostola* Ochs. and *Mouralia* Wlk. are not considered in the present paper as they show no particularly close relationship to the so-called *Plusia* group and, in any case, require no revision.

The drawings of genitalic structures have been made, under my supervision, by Miss Margaret MacKay of our Forest Insect Survey; her excellent and accurate work adds greatly to the value of the present paper.

SECTION A

Genus **CALOPLUSIA** Sm.

1884, Smith, Bull. Brook. Ent. Soc., VII, 68 (no species mentioned).

1891, Smith, List Lep. Bor. Am., 52 (includes *devergens* Hbn. & *hochenwarthi* Hochenw.)

1893, Smith, Bull. 44 U.S.NM., 258 (adds *alticola* Wlk. to other two).

1895, Grote, Abh. Naturw. Verein Bremen (List N. Am. Eupterotidae, etc.), 62 (sinks to *Syngrapha* Hbn.).

1902, Dyar, Jour. N. Y. Ent. Soc., X, 82 (sinks to *Syngrapha*).

1913, Hampson, Cat. Lep. Phal. Brit. Mus., XIII, 405 (designates *hochenwarthi* as genotype).

1916, McDunnough, Ent. News, XXVII, 400 (sinks erroneously to *Syngrapha*).

Palpi upturned, second joint fringed with long hairs in front, third joint free, rather long and pointed, rough-scaled. Eyes rather small and elliptical. Thorax with divided crest and abdomen crested on basal segments dorsally. *Tibiae all spined;* foretibia with row of spines along inner side; mid- and hind-tibiae strongly spined throughout.

MALE GENITALIA. Similar in general type to that of the following genus, *Syngrapha* Hbn. The juxta is armed with a strong, apical spine; the aedeagus is rather long, slightly bulbous at base and strongly shagreened apically; the armature of the vesica consists of a small, basal spine and a short, hollow, *cylinder of chitin,* thickly *covered with short spines,* situated apically. The eighth abdominal segment has a pair of hair-pencils, at times weak, arising from the cephalic margin.

FEMALE GENITALIA. Ovipositor and ninth segment partially telescoped into the eighth segment. There is no genital plate, the ostium consisting of a membranous opening leading into a short chitinized funnel; it is partially protected by the overlapping caudal margin of the eighth abdominal segment; the ventral side of the funnel may project caudad for a short distance, forming two rounded lobes, giving additional protection to the ostium. Beyond the funnel the ductus bursae is short, of same width as end of funnel and weakly granulose and strigate, somewhat expanding as it enters the bursa at a point on the right side, slightly below the apex of the bursa. Bursa a large oval, membranous sac, the proximal end (apex) of which is produced caudad along the left side of the ductus to form a short auxiliary sac; this sac is strongly shagreened or granulose and from its rounded apex the ductus seminalis arises as a very fine tube.

GENOTYPE. PHALAENA HOCHENWARTHI Hochenw.
(Lectotype, 1913)

I believe there is justification for the use of *Caloplusia* Sm. for *hochenwarthi* and its North American ally, *ignea* Grt. on the strength of the much stronger tibial spining. Hampson, with probably insufficient material before him, rather confused the issue by placing *devergens* Hbn., the genotype of *Syngrapha,* in *Caloplusia* along with *hochenwarthi,* which led to the sinking in my Check Lists of *Caloplusia* to *Syngrapha;* other authors apparently had fallen into a similar error. Neither in European specimens of *devergens* nor in our good series of specimens of its North American representative, *alticola* Wlk., can I find spining comparable to that of *hochenwarthi.* The spining, with the exception of odd, unimportant, weak spines occurring most frequently on the mid-tibiae and generally quite concealed in the

vestiture, is restricted to the area on the hind-tibiae between the two pairs of spurs. In consequence *devergens* falls into line in this respect with the other yellow-winged species.

Caloplusia hochenwarthi Hochenw.

There seem to be enough genitalic differences in both sexes between European and North American specimens to warrant the supposition that typical *hochenwarthi* does not occur in North America. I had at first supposed that the form, smaller and paler than *ignea* Grt., found in Labrador and subarctic regions, could be placed under this name, but find the genitalia do not match, although the general appearance is extremely similar.

In the male genitalia of specimens from the Tyrolese Alps the harpe, which is well-developed with outcurved and pointed apex, is *considerably broader* than in North American specimens; the apical spine on the juxta is in general not so long and the spines of the short, chitinized cylinder in the vesica are more numerous; the width of the clasper is somewhat variable in character.

In the female genitalia the chitinized funnel-like portion of the ostium is definitely longer than in our North American forms, with distinct *bilobed, caudad projection,* entirely lacking in the others. The apex of the bursa, caudad of the entrance of the ductus, is considerably narrowed and forms a *single convolution*; this convolution is not found in North American specimens.

It is a matter of opinion as to whether our North American representative is a distinct species or merely a well-defined race; in view of the definite genitalic differences, particularly in the female, I am following Hampson and treating *ignea* Grt. as specifically distinct from *hochenwarthi* of the European Alps.

Caloplusia ignea Grt.

Plate I, fig. 1; IV, fig. 1.

Plusia ignea Grt. 1863, Proc. Ent. Soc. Phila., II, 274.

Caloplusia ignea Smith, 1893, Bull. 44, U.S.N.M., 258 (as syn. alticola); Hampson, 1913, Cat. Lep. Phal. Brit. Mus., XIII, 409, Pl. 236, fig. 3.

Syngrapha ignea Ottolengui, 1902, Jour. N. Y. Ent. Soc., X, 76; Wolley-Dod, 1906, Can. Ent., XXXVII, 46; *id.* 1913, *op. cit.,* XLIV, 241.

The large size and bright orange hind-wings distinguish the species superficially from its European ally. The type material came from Colorado, probably in the vicinity of Denver; the species, however, occurs at higher altitudes all through the Rocky

Mts. and is not uncommon on most of the Albertan peaks; it also occurs in the Cascade and Coast ranges and is recorded as far north as Atlin, B. C. by Blackmore in his B. C. Check List (1927).

In the male genitalia the apical spine of the juxta is very strongly developed; the harpe, while of the same length and shape as that of *hochenwarthi,* is *considerably thinner*; the spines on the chitinous piece of the vesica are fewer but somewhat longer and stouter. In the female genitalia, as already indicated, the ventral, caudad projections of the funnel-like portion of the ductus are lacking, leaving the ostium protected solely by the overlapping eighth segment; the chitinized funnel is shorter than in *hochenwarthi.* The bursa is not so attenuated as in the European species and the portion which extends caudad of the inception of the ductus is shorter and broader, *without a convolution* and more heavily shagreened on its ventral surface.

C. IGNEA var SIMULANS var. nov.

PLUSIA HOCHENWARTHI Moeschler, 1874, Stett. Ent. Zeitschr., 160; *id.* 1884, Verh. z. b. Gesell. Wien, 296.

For the form of *ignea* which occurs on the east coast of Labrador and adjacent regions and which has generally gone under the name *hochenwarthi,* a new varietal name seems necessary. This race is smaller and paler than *ignea,* the yellow color of the hindwings being even paler than in *hochenwarthi* with the smoky basal suffusion extending more strongly along the inner margin. The forewings are practically similar to those of *hochenwarthi* but the silver mark seems on the whole to be narrower and less extended toward the t. p. line; this feature, however, is probably variable, as in all Plusias. In genitalia there are only minor differences from those of *ignea.*

HOLOTYPE— ♂, Rocky Bay, Quebec Labrador July 7, 1915 (P. A. Taverner). No. 5391 in Canadian National Collection.

ALLOTYPE— ♀, Labrador, (R.W. 76). Purchased by Wolley-Dod from Staudinger and Bang-Haas, Dresden and probably a specimen from the Moeschler Collection.

PARATYPES—1 ♂, Labrador, (ex. Coll. Bang-Haas); 1 ♀, Little Charlton Is. James Bay, July 14 (J. M. Macoun).

There is also a male specimen in the collection from Klondike River, Yukon Terr. which appears to belong here; the silver mark is, however, greatly reduced.

Morrison's record of *hochenwarthi* from the White Mts. N. H. (1875, Ann. Lyc. Nat. Hist. N. Y. XI, 99) needs verification. It may refer to the species from the same locality named *monticola* by Packard.

Genus **SYNGRAPHA** Hbn.

1821, Hübner, Verz. bek. Schmett., 250 (includes *ain* Hbn., *divergens* Fabr. and *devergens* Hbn.).

1895, Grote, *op. cit.*, 62 (designates *devergens* Hbn. as genotype).

1902, Dyar, *op. cit.*, 82 (designates *divergens* Fabr.=*hochenwarthi* Hochenw. as genotype, *ultra vires*).

1913, Hampson, *op. cit.* 412 (designates *ain* Hbn. as genotype, *ultra vires*).

Palpi and vestiture similar to that of *Caloplusia* Sm. Eyes elliptical, varying considerably in size from small to moderately large. Fore and mid-tibiae unspined (or practically so); hind-tibiae with *spines only between the two pairs of spurs.*

Male Genitalia. Tegumen of moderate height with the vinculum rather short and either bluntly pointed or rounded apically. Uncus thin, simple, in some cases (*interrogationis* group) compressed laterally towards apex, terminating in a small, sharp spine. Clasper of moderate length and of more or less even width throughout, at times slightly expanded costo-apically, with rounded apex and slightly sinuate costal margin; no differentiation of cucullus which remains unspined; in a few instances the costa either shows a preapical spine (*octoscripta, epigaea*) or is produced into a sharp spine, projecting slightly beyond the rounded apex of clasper (*variana, selecta*). Sacculus not greatly expanded at base, giving rise on its costo-basal margin to the short, chunky clavus; it extends as a narrow neck to the base of the harpe which is usually situated well before the middle of the clasper and extends transversely across same; this harpe consists of a chitinous spine or rod, frequently curved, and of very variable length and breadth in the different species. Juxta a large rounded or shield-shaped plate, often with a short, sharp apical spine. Aedeagus variable in size; in some species (*devergens, alticola, diasema,* etc.) it is short and chunky; in the majority of cases it is narrower and moderately long with either finely spiculate or shagreened apical section; the vesica may be unarmed (*parilis, devergens*) but generally shows a strong, terminal, straight or curved spine to which in some instances (*orophila, celsa, angulidens*) a weaker basal spine is added. In all species examined except the genotype, *devergens,* the eighth abdominal segment is provided with a pair of large ventral hair-pencils, situated in deep pockets; in *devergens* and its close ally *alticola,* these are greatly reduced.

Female Genitalia. In general quite similar to those of *Caloplusia.* The ostium may be a simple opening, unprotected (*parilis, sackeni*) or may be partially covered by a chitinous plate, projecting backward from the caudal margin of the funnel, and either entire and ventral (*interrogationis* group) or bifid with latero-ventral arms (*alticola, orophila*). The chitinized funnel

varies greatly in length in the various species, quite short in *devergens* and *parilis,* very long in the *interrogationis* group, thus reducing the length of the remainder of the ductus. The entrance of the granulose and strigate portion of the ductus into the bursa is always below its apex but it may enter almost ventrally (*parilis*) or on the right side (*devergens* and the *rectangula-celsa* group) or on the left side as in most of the yellow-winged species (*microgamma, orophila, diasema*), the *interrogationis-octoscripta* group and *epigaea.* The apex of the bursa, from which the ductus seminalis arises, shows a variable degree of shagreening; the bursa, in general, forms a long membranous sac.

Genotype. Noctua devergens Hbn. (Lectotype, 1895)

The present usage of this generic term conforms more or less to that of Hampson; I cannot, however, agree to Hampson's separation of *parilis* Hbn. into a separate genus (*Autographa* in err.) on the strength of the small eyes. The size of the eyes seems more or less regulated by the size of the insect and all manner of intergrades between small and large exist in the group. In all species, however, the shape of the eye appears to me to be decidedly elliptical and scarcely justifies the term "round" as applied by Hampson in his generic definition.

The identity of most of the species included in the genus has been adequately established by Ottolengui in his two papers (1902, Jour. N. Y. Ent. Soc., X, 57-82, Pls. VI-IX; 1919, *op. cit.,* XXVII, 117-125, Pl. XV). In a few instances, however, due to close similarity of maculation or to rather blurred illustrations, certain names seem to have been misplaced; I shall comment on these in more detail later.

Generally speaking, as noted by Ottolengui, the genitalia, both male and female, furnish excellent characters for differentiation of the various species, and in the keys at the end of the text portion I have endeavored to bring out some of the salient features exhibited by those organs.

Syngrapha parilis Hbn.

Plusia parilis Moeschler, 1884, Verh. z. b. Gesell, Wien, XXXIV, 296; Aurivillius, 1890, Bih. k. Sv. Vet.-Akad. Handl., XV (4) 17, Pl. I, fig. 6; Hampson, 1908, Can. Ent., XL, 106.

Syngrapha parilis Ottolengui, 1902, Jour. N. Y. Ent. Soc., X, 77, Pl. VIII, fig. 15.

Autographa parilis Hampson, 1913, Cat. Lep. Phal. Brit. Mus. XIII, 404.

Apart from the record from the far North on which Walker's synonym, *quadriplaga,* was based, Moeschler records the species from Labrador, and Hampson from the Alberta Rockies. A few specimens from this latter locality (*ex.* Coll. Wolley-Dod) are in our collection and are the only ones I have been able to ex-

amine; the abdomens of these have, unfortunately been crushed very flat and, in consequence, it has been impossible to get a very accurate idea of the exact position of the various parts of the female genitalia.

In both sexes the genitalia show marked similarity to those of *devergens* and *alticola;* in the male genitalia the lack of the prominent spine at apex of juxta is probably the most noticeable character; in the female genitalia the differentiating character I have used may not hold when better material can be examined; there are some slight differences in the size and shape of the initial, chitinized section of the ductus.

Syngrapha devergens Hbn.

With only a single pair of *devergens* from the Swiss Alps available for study I am in doubt as to whether our North American *alticola* can be considered a good species or merely a variety of *devergens.* In the male genitalia there is practically no character on which a separation could be made; in the female genitalia *devergens* appears to lack the pair of sublateral, chitinous appendages at the sides of the ostium which in some specimens of *alticola* are very well defined; as, however, the degree of chitinization is rather variable in the different specimens I have examined, I am uncertain whether the character is a specific one.

Moeschler (1884, op. cit.) records the species from Labrador; I have seen no material from this region, but judging by the comparison made by Moeschler between Labrador and European specimens, believe such specimens will fall under *alticola.* Winn's record of the species in his List of Quebec Lepidoptera (p. 47) from the Gomin Swamp near Quebec City needs checking; it may very likely refer to *montana* Pack, which occurs around Ottawa in similar localities.

Syngrapha alticola Wlk.

Plate I, fig. 2; IV, fig. 2.

Plusia alticola Hampson, 1908, Can. Ent., XL, 106.

Caloplusia alticola Hampson, 1913, Cat. Lep. Phal. Brit. Mus., XIII, 407, pl. 236, fig. 2.

Syngrapha alticola Wolley-Dod, 1913, Can. Ent., XLV, 241.

For the present and pending further study I am treating *alticola* as a species distinct from the European *devergens,* following Hampson.

Besides specimens collected by Mrs. Nicholl in the Alberta Rockies as noted by Hampson, others are before me from Banff, Nordegg and Laggan in Alberta; Mt. Apex and Jesmond in British Columbia; Churchill, Manitoba; Great Slave Lake and Great Bear Lake, N. W. T. and a pair taken by myself on July 25, 1928

on the northern slopes of Mt. Washburn, Yellowstone Park, Wyo., the female being very large and pale, especially in the subterminal area.

Male Genitalia. Characteristics are found in the sharp, apical spine on the broad, shield-shaped juxta; the short, chunky aedeagus without armature; the broad, well-developed harpe, slightly outwardly oblique, projecting at times over costa, terminated by a sharp spine and with its inner side forming a slight ridge. The twin hair-pencils of the eighth segment are reduced to small tufts of hair.

Female Genitalia. Ostium flanked by a couple of pockets, formed by invaginations of the eighth abdominal segment and connected by irregularly ridged membrane; ostium itself circular, protected not only by the overlapping membrane of the eighth abdominal segment but also by a pair of sublateral crinkly, chitinous projections (wings) of irregular shape and variable in the intensity of their chitinization. The initial portion of the ductus seminalis (funnel) is short, more or less quadrate and rather weakly chitinized with the exception of a narrow, medio-dorsal, membranous strip; beyond the funnel the ductus narrows slightly and forms a short, largely membranous tube, weakly granulose and, prior to its entrance into the bursa, showing numerous fine chitinous striations. The entrance to the membranous bursa is distinctly on the right side, the rounded apex of the bursa projecting caudad of the opening for a short distance; this area is finely granulose and at its extremity gives rise to the very fine ductus seminalis; the remainder of the large sac-like bursa is clear, membranous.

Syngrapha microgamma Hbn.

Plate I, fig. 3.

Syngrapha microgamma Wolley-Dod, 1910, Rep. Ent. Soc. Ont., 1909, 118; *id.*, 1913, Can. Ent., XLV, 240.

Autographa microgamma Barnes & Benjamin, 1923, Can. Ent., LV, 212.

Besides the specimens mentioned by Dod, I have before me single males from Behrens Riv., Man., Harlan, Sask., and Jesmond, B. C. These agree in maculation and genitalia with a specimen from Esthonia, Europe and confirm Dod's determination.

Male Genitalia. Juxta with well-developed apical spine. Aedeagus moderately long and very slightly bulbous at base, strongly spiculate apically, armed with a short, stout, slightly curved, apical spine, arising from a broadened base, and a very minute basal one, situated in the bulbous portion. Clasper rather narrow, rounded apically, with a long, thin, upright, tapering harpe, projecting well over costal edge.

Female Genitalia. (Based on a European specimen). Ostium with traces of the lateral pockets found in *alticola*. The opening itself is unprotected but flanked by two lateral, subtriangular pieces of chitin. Ductus a broad tube, chitinized lightly for practically its entire length, slightly expanded on right side at 2/3 and with membranous thickening on this same side; bending somewhat to left below bulge. The entrance to the bursa is on the left side and shows numerous fine chitinous strigae with a certain amount of granulation. The apex of the bursa is rounded and projects caudad for a short distance on right side of ductus beyond entrance; it is strongly shagreened and shows a brownish coloration; the remainder of the sac-like bursa is clear and smoothly membranous.

S. microgamma var. montana Pack.

Plusia montana Packard, 1874, Guide Stud. Ins., 313.

Autographa montana Barnes & Benjamin, 1923, Can. Ent., LV, 212.

Packard's name, based on material from the White Mts., N. H. (probably Mt. Washington) had been overlooked by all previous authors until resurrected by Benjamin who referred the name to *microgamma*. I have two specimens before me from Mt. Albert, Gaspe Co., Que. and another one taken in early June at the Mer Bleue, a peat bog near Ottawa, which seem to match Packard's brief description and certainly justify Benjamin's reference.

In two features of the male genitalia *montana* differs from *microgamma* of Europe and western Canada; the apical spine of the juxta is lacking and the spine at apex of the aedeagus is considerably larger and more curved. As compared with *microgamma* in maculation of forewings my eastern specimens all show a stronger incurve of the t. p. line in the submedian fold followed by a slight outward angle on vein 1; the s. t. line is more strongly marked and the tail of the silver mark seems less drawn out. More material will be needed to determine whether these differences are of specific value; for the present I treat *montana* as an eastern race of *microgamma*.

Syngrapha orophila Hamp.
Plate I, fig. 5; IV, fig. 3.

Autographa diasema Ottolengui (*nec* Bdv.), 1902, Jour. N. Y. Ent. Soc. X, Pl. VIII, fig. 6.

Plusia orophila Hampson, 1908, Can. Ent., XL, 105; *id.*, 1913, Cat. Lep. Phal. Brit. Mus., XIII, 416, Pl. 236, fig. 5.

Autographa orophila Wolley-Dod, 1913, Can. Ent., XLV, 239.

This species was confused by earlier authors with *diasema* Bdv. until the error was rectified by Hampson. It occurs all through the Alberta Rockies and we also have specimens from Mt. Apex, near Hedley, B. C.

Male Genitalia. Juxta without apical spine. Aedeagus rather short and lightly shagreened apically, characterized by the armature which consists of a thin, fairly long, basal spine and a strong, tapering, apical one, the point of which (in my slide at least) is directed cephalad. Harpe strongly outcurved, decumbent, with pointed apex.

Female Genitalia. Ostium characteristically protected by two sublateral, pointed projections (wings), arising from the heavily chitinized and strongly strigate ductus-funnel, which is quite long and rather broadly membranous on dorsal side. The continuation of the ductus shows an initial, small, membranous bulge to the right and then is strongly strigate with thin, chitinous strigae, which continue for some distance down the left side of the bursa, beyond the entrance; the right side is almost entirely chitinous. The apex of the bursa bulges caudad only slightly and is covered with a brown chitinous plate, extending down the right side of bursa for some length; remainder of bursa clear and membranous, very feebly granulose.

Syngrapha diasema Bdv.

Plate I, fig. 6; IV, fig. 4.

Plusia diasema Aurivillius, 1890, Bih. K. Sv. Vet.-Akad. Handl., XV, (4), 18.

Syngrapha diasema Hampson, 1913, Cat. Lep. Phal. Brit. Mus., XIII, 416, Pl. 236, fig. 6.

Syngrapha diasema borea McDunnough (*nec* Aúriv.) 1921, Can. Ent., LIII, 85.

Autographa diasema McDunnough, 1922, Can. Ent., LIV, 139.

Besides a series of 1 ♂, 5 ♀, from Hopedale, Labr. our collection contains single males from Nordegg, Alta. and Gt. Bear Lake, N. W. T. Hampson records it from St. Martin's Falls, Albany Riv., N. Ont., and figures a female; in this the secondaries are much too yellow for *diasema* and the determination will need careful checking. All our specimens agree in maculation and male genitalia with a European specimen from Lule, Lappmark, (*ex* Coll. Dod).

Male Genitalia. Apex of aedeagus and the anellus very heavily spiculate, no apical spine on juxta. Aedeagus wide and chunky, armed with a broad dagger-shaped, transversely-placed, apical spine. Harpe upright, thin, pointed, almost reaching to costa of clasper.

Female Genitalia. Ostium considerably broader than in *orophila;* the two sublateral wings project caudad but their apices are broadly rounded and not pointed. The ductus-funnel is strongly chitinized and strigate, gradually tapering, and noticeably longer than in *orophila.* The continuation of the ductus bends to the left and is short and broad, less heavily strigate and chitinized than in *orophila,* the strigae continued for only a very short distance along the left side of the bursa, below the entrance. The bursa consists of the usual large, membranous sac; the rounded apex projects caudad along the right side of the ductus for a greater distance than in *orophila* and shows none of the chitinization found in this species, being merely finely granulate; the membrane of the remainder of the bursa is smooth.

Syngrapha lula Strand
Plate IV, fig. 5.

Autographa sackeni Wolley-Dod (*nec* Grote), 1906, Can. Ent., XXXVIII, 45.

Syngrapha snovi Hampson (*nec* Hy. Edw.), 1913, Cat. Lep. Phal. Brit. Mus., XIII, 418, Pl. 236, fig. 8.

Syngrapha snowi ab. lula Strand, 1916, Arch. f. Naturgesch., A, (2), 47.

Autographa diversigna Ottolengui, 1919, Jour. N. Y. Ent. Soc., XXVII, 121, Pl. XV, fig. 2; McDunnough, 1921, Can. Ent., LIII, 85; *id.* 1922, Can. Ent., LIV, 139.

Autographa lula Barnes & Benjamin, 1923, Can. Ent., LV, 212.

A good series is before me from various localities in the Alberta Rockies. It is unfortunate that the name *diversigna* cannot be used for the species; until, however, some authoritative ruling on the status of aberrational names can be secured from a committee on Entomological Nomenclature, I follow Benjamin in raising Strand's aberrational name to specific rank.

Male Genitalia. Apex of aedeagus and anellus heavily spiculate, no apical spine on juxta. Aedeagus longer and narrower than in *diasema;* the apical spine is smaller, obliquely-placed and arises from one end of a lengthened base. Harpe much as in *diasema* but showing a slight ridge below the pointed apex.

Female Genitalia. Sublateral chitinous wings of *orophila* and *diasema* undeveloped. Ductus-funnel much shorter than in those two species, less heavily chitinized and strigate and more goblet-shaped; its dorsal surface is largely membranous and the right side shows a membranous thickening. The continuation beyond the funnel is short and broad, bent somewhat to left at inception and rather irregular, with the usual chitinous strigations, heaviest on the right side but, on the whole, weaker than in the other two species. Bursa smooth, membranous, very slightly granulose on the surface of the rather broadly rounded apex.

Syngrapha borea Auriv.

Plate I, fig. 4.

Plusia diasema var borea Aurivillius, 1890, Bih. K. Sv. Vet.-Akad. Handl., XV, (4), 17, Pl. I, fig. 8.

Autographa sackeni ? Gibson, 1920, Rep. Can. Arct. Exp., III, (I), 37, Pl. III, fig. 14.

Aurivillius considered *borea,* based on Greenland specimens, as a variety of *diasema;* he characterized it as smaller, with a more V-shaped silver mark but more especially laid stress on the yellower hind wings with narrower dark border.

Besides the specimen from Mayo Lake, Yukon, doubtfully referred by Gibson to *sackeni,* 1 ♂ , 4 ♀ , are before me from Dawson, Yukon Terr. These all match Aurivillius's description and figure of *borea* excellently and I believe I am correct in placing them under this name. The genitalia in both sexes show, however, that *borea* is a good species, quite distinct from *diasema* and more closely allied to *lula* and *sackeni.* From *sackeni* this species is distinguished by the lack of any yellow patch on primaries near base of costa.

Male Genitalia. Juxta and aedeagus much as in *lula.* The harpe is of moderate width throughout with *truncate apex* from the underside of which a minute spine projects; this truncate apex at once distinguishes *borea* from both *diasema* and *lula* in which the harpes taper to sharp points.

Female Genitalia. Very similar to those of *lula* but with definite suggestions of weakly chitinized wings extending caudad from ostium-margin. Ductus-funnel weakly chitinous and strigate, except for a strip on left side which shows stronger chitinization; the base of the funnel is membranous and projects as a short sac below and to the right of the continuation of the ductus; this continuation as well as the bursa are much as in *lula.*

Syngrapha sackeni Grt.

Autographa sackeni Ottolengui, 1902, Jour. N. Y. Ent. Soc., X, 75, Pl. VIII, fig. 17; *id.,* 1919, *op. cit.,* XXVII, 121, Pl. XV, fig. 1.

This Colorado species is excellently illustrated in Ottolengui's 1919 paper and any confusion which formerly existed as to its identity should now be eliminated. The species is known to me from Colorado (Hall Valley) and from the Bozeman region of Montana. I have had no males available from which to make genitalic slides.

Female Genitalia. Very similar to those of *borea.* The ductus-funnel is much the same shape but slightly better chitinized and more strigate; the terminal membranous sac on right side found in *borea* seems to be lacking; the distal portion of the ductus bends to the left as in *lula* and is strigate much as in this species.

The apex of the bursa is tinged with brown, due to a very definite shagreening, not found in the allied species mentioned.

Syngrapha snowii Hy. Edw.

Autographa snowii Ottolengui, 1902, Jour. N. Y. Ent. Soc., X, 75, Pl. VIII, fig. 16; *id.* 1919, *op. cit.*, XXVII, 121, Pl. XV, figs. 2, 3.

This species is unknown to me.

Syngrapha rectangula Kby.

Plate I, fig. 7; IV, fig. 6.

Syngrapha rectangula Hampson, 1913, Cat. Lep. Phal. Brit. Mus., XIII, 423, Pl. 236, fig. 14.

Autographa rectangula ab. demaculata Strand, 1916, Arch. f. Naturgesch. A. (2), 47.

Autographa rectangula race nargenta Ottolengui, 1919, Jour. N. Y. Ent. Soc., XXVII, 122, Pl. XV, fig. 8.

By the figures given by Hampson and Ottolengui the species is readily identified. The names *mortuorum* Gn. and *demaculata* Strand are based on variations in the silver mark; as such variations are almost countless throughout the group, it seems of little value to retain the names, even for individual aberrations. *Nargenta* Ottol. applies to the so-called race from British Columbia in which the silver suffusion of primaries is reduced; this feature, however, occurs also among our eastern specimens and some before me can only be separated from western forms by the locality label. The species is common in eastern Canada and we have bred specimens from larvae beaten from hemlock. Brown and McGuffin record the larva (1942, Can. Ent., LXXIV, 56) as feeding also on spruce and balsam fir. I have seen no specimens from the prairie Provinces although Brodie in his Manitoba List records it from eastern Manitoba.

Male Genitalia. Juxta a large, subrectangular plate, without apical spine. Aedeagus long with slightly bulbous base, strongly spiculate apically and armed with a stout, curved, pointed spine, arising from an expanded base. Clasper broadened somewhat apically with costa curving gently dorsad; harpe short and chunky, with rounded apex bearing a small spine on inner side; *base of sacculus flat.*

Female Genitalia. Ostium unprotected. Ductus-funnel goblet-shaped, moderately strongly chitinized and strigate (or crinkled); caudal margin irregular and well excavated medioventrally. On ventral side the broadly rounded base of the funnel overlaps shortly a following tubular portion of the ductus, which is lightly chitinized, more strongly on dorsal side where it projects well into the funnel; on the right side apically this tube expands into a small membranous sac. The terminal portion of the ductus

is short, sinuate, expanded as it enters the bursa on the right side, and granulose and strongly strigate. The bursa is a broad, membranous sac, less elongate than in the preceding species; the apex is broadly rounded and is finely granulose, the granulations extending to the entrance of the ductus bursae.

SYNGRAPHA ALIAS Ottol.

Plate I, fig. 8.

AUTOGRAPHA ALIAS Ottolengui, 1902, Jour. N. Y. Ent. Soc., X, 69, Pl. VIII, fig. 13; *id.* 1919, *op. cit.*, XXVII, Pl. XV, fig. 6; Dod, 1913, Can. Ent., XLV, 191.

AUTOGRAPHA INTERALIA Ottolengui 1919, Jour. N. Y. Ent. Soc., XXVII, 122, Pl. XV, fig. 5.

This species is very closely related to *rectangula;* the larva is also a feeder on spruce and according to Brown and McGuffin (*op. cit.*) cannot be distinguished from that of *rectangula.* However, as there appears to be a good character in the male genitalia I treat *alias* as a distinct species.

Interalia, described as a new species from two females from Nordegg, Alta., bears the same relationship to *alias* that *nargenta* does to *rectangula,* but is even more poorly defined as a race. In a topotypical series from Nordegg before me (including a female compared with Bowman's paratype), I find considerable variation in the amount of silvery suffusion on primaries and the same is true of eastern specimens. The species ranges across the entire Dominion of Canada and a couple of specimens are before me from as far north as Dawson, Yukon Territory.

MALE GENITALIA. Very similar to those of *rectangula;* the harpe is reduced, however, to a mere small knob and the costobasal edge of the sacculus shows a *strong, raised projection,* not found in *rectangula.*

FEMALE GENITALIA. Scarcely distinguishable from that of *rectangula.* The tubular, mid-section of the ductus is somewhat shorter and the lateral projection terminally on the right side is stronger and rather better chitinized. The entrance of the ductus into the bursa seems further down the right side and in consequence the rather narrower apex projects further caudad along the ductus. These differences are quite slight and may not be entirely constant.

SYNGRAPHA CELSA Hy. Edw.

Plate I, fig. 9; IV, fig. 7.

AUTOGRAPHA CELSA Ottolengui, 1902, Jour. N. Y. Ent. Soc., X, 72, Pl. 8, fig. 4; *id.* 1919, *op. cit.*, XXVII, 123, Pl. XV, figs. 9, 14.

AUTOGRAPHA EXCELSA Wolley-Dod, 1913, Can. Ent., XLV, 237, (*partim*).

Syngrapha altera Hampson (*nec* Ottolengui), 1913, Cat. Lep. Phal. Brit. Mus., XIII, 429, Pl. 236, fig. 22.

Syngrapha altera ab alterana Strand, 1916, Arch. f. Naturgesch., A. (2), 47.

Autographa celsa race sierrae Ottolengui, 1919, Jour. N. Y. Ent. Soc., XXVII, 123, Pl. XV, fig. 10.

As indicated by Ottolengui the species is a rather variable one, especially in the amount of dark suffusion in the inner median area; it appears to be widespread throughout the south-central area of British Columbia and on Vancouver Island. I have seen no Oregon specimens but accept Ottolengui's reference as correct. From the two preceding species *celsa* is best separated by the much yellower basal 2/3 of the hindwings. *Alterana* Strand, another of Strand's names based on variation in the silver-mark, can be consigned to the synonymy without loss. *Sierrae* Ottol., of which I have only one male before me from Placer County, Calif., seems a good Californian race, characterized by the generally paler color of primaries; a few females, however, from Vancouver Island match my specimen pretty closely and when plenty of Oregon material can be studied it may be found that the two intergrade.

Male Genitalia. Juxta without apical spine. Aedeagus rather broad, heavily spiculate apically, base scarcely bulbous, with *distinct small spine;* apical spine *very large and curved,* much longer than in the two preceding species. Clasper of nearly even width throughout with rounded apex at costa; harpe short, stubby and triangular, terminated by a sharp spine at the base of which is sometimes a small wart on outer side.

Female Genitalia. Ostium flanked by small, weakly chitinized, lateral pockets. Ductus-funnel long, carrot-shaped, heavily chitinized, especially in lower half; the caudal margin projects ventrally only slightly over the ostium, is somewhat crinkly, with a broad, shallow, median excavation; the base of the funnel *bends backward to the right* and terminates in a narrow membranous sac. The continuation of the ductus arises on the dorsal side of the funnel, just above the bend, and consists of a straight tube, about the width of the funnel-base and longer than usual, being somewhat longer than the funnel; it is very heavily strigate with fine chitinous strigae and enters the bursa on the right side, somewhat above the middle. The apex of the bursa extends caudad, along the left side of the ductus, for a considerable distance, is very heavily shagreened and of a brownish color, gradually deepening to almost black at extreme apex; the ductus seminalis arises on the right side just below apex. The lower half of the sac-like bursa is weakly granulose.

SYNGRAPHA ANGULIDENS Sm.

AUTOGRAPHA ANGULIDENS Ottolengui, 1902, Jour. N. Y. Ent. Soc., X, 71, Pl. VIII, fig. 5.

SYNGRAPHA ANGULIDENS ab. PLUSIOIDES Strand, 1916, Arch. f. Naturgesch., A. (2), 47.

The identity of this species has never been in doubt. Strand's name, based on a specimen without the white dot beyond the silver stigma, belongs in the synonymy. The species occurs in Colorado and adjoining states (Utah, Arizona).

MALE GENITALIA. Allied to those of *celsa* but the juxta shows a weak apical spine; the spiculation of the apical area of aedeagus is much finer, more granulose; the apical spine, while fully as long, is somewhat slimmer. The harpe is *considerably longer* and extends almost to costa with the *pointed apex weakly incurved.*

FEMALE GENITALIA. Differ principally from those of *celsa* in that the membranous appendage at the base of the ductus-funnel projects at right angles on the right side and *is not recurved.* The funnel is scarcely as long as in *celsa* and the entrance to bursa somewhat nearer apex of same.

S. ANGULIDENS var. EXCELSA Ottol.
Plate I, fig. 10.

AUTOGRAPHA EXCELSA Ottolengui, 1902, Jour. N. Y. Ent. Soc., X, 71, Pl. VI, fig. 3; Wolley-Dod, 1913, Can. Ent., XLV, 236.

SYNGRAPHA EXCELSA ab EXCELSANA Strand, 1916, Arch. f. Naturgesch. A., (2), 47.

AUTOGRAPHA ALTA Ottolengui, 1919, Jour. N. Y. Ent. Soc., XXVII, 125 (*nom. nov.*).

AUTOGRAPHA EXCELSANA Barnes & Benjamin, 1923, Can. Ent., LV, 213.

Autographa excelsa Ottolengui is not a primary homonym of *Plusia excelsa* Kretschmar, and, as I disagree with Benjamin's ideas on secondary homonyms, I see no reason for the non-employment of Ottolengui's name as originally used. *Excelsana* is another of Strand's names that is not worth retaining.

Excelsa was based primarily on material from Jefferson, N. H. but the author mentions other specimens from the Lake Louise region of Alberta which he considered similar. We have a long series from various points in the Alberta Rockies and from South-central British Columbia but I have been unable to examine any eastern specimens. I can find no differences between the genitalia of *angulidens* and those of western *excelsa* sufficiently

great to be considered as of specific value, in spite of Ottolengui's claim; I treat, therefore, *excelsa* as the northern race of *angulidens,* somewhat smaller in size and darker in coloration of forewings.

The following group, which I have termed the *interrogationis-octoscripta* group, is one of the most difficult in the genus. Primarily the species may be distinguished from those of the preceding *rectangula-celsa* group by the nature of the t. p. line of primaries; in the present group this line is finely and evenly crenulate, especially in the costal half, whereas in the other group the line is irregularly wavy or sinuate, without any finer crenulations.

The species in the group are all very similar in general appearance and distinctly northern or even subarctic in distribution. The lack of adequate material, the difficulty in correctly identifying older existing names and the doubt existing concerning several names proposed by Ottolengui and based generally on single specimens have all added to the confusion; then, too, the not inconsiderable variation in coloration of the forewings in individual specimens of the species involved has made it difficult to judge as to whether we are dealing with good species, races or merely forms. Hampson for instance, sinks practically all of Ottolengui's names as "aberrations" of one species and has been more or less followed in this treatment in our existing Check Lists. With fairly adequate material before me I have made numerous slides of the genitalia of both sexes and have found, in certain instances, excellent characters for separation; these, in the case of the females, can generally be noted by removing a few hairs and scales from the ventral end of the abdomen. I have further been greatly assisted by a careful study of certain of Ottolengui's types, made available to me through the courtesy and co-operation of the authorities of the American Museum of Natural History, New York City.

Syngrapha u-aureum Gn.
Plate I, fig. 11; IV, fig. 8.

Plusia arctica Moeschler, 1884, Verh. z. b. Gesell. Wien, XXXIV, 296.

Plusia u-aureum Aurivillius, 1890, Bih. K. Sv. Vet.-Akad. Handl., XV, (4), 16, Pl. I, fig. 7.

Plusia u-aureum Smith, 1893, Bull. 44, U. S. N. M., 254.

Autographa u-aureum Ottolengui, 1902, Jour. N. Y. Ent. Soc., X, 68.

Autographa u-aureum Wolley-Dod, 1913, Can. Ent., XLV, 238.

Autographa arctica McDunnough, 1921, Can. Ent., LIII, 84.

Autographa u-aureum Benjamin, 1933, Pan Pac. Ent., IX, 61.

The status of *u-aureum* has long been a bugbear to North American entomologists. In the first place it was ostensibly based on material from Dalecarlia, Sweden; later investigation, however, (*vide* Wolley-Dod, *op. cit.*) led European workers to believe that the original specimens came from Labrador. I consider, therefore, that the synonymy as given by Aurivillius is correct and followed it in my recent Check List. The so-called type (a female) of *u-aureum* is now in the U. S. National Museum (*ex* Colls. Oberthur and Barnes); I examined it carefully several years ago and found that it matched Labrador specimens in the same collection; since then Mr. C. Heinrich has kindly made a slide of the genitalia and states that they agree with those of certain Labrador specimens which I sent to him. With a very long series from Labrador before me, and after a study of numerous genitalic slides, I have reached the still somewhat doubtful conclusion that *u-aureum* must be held as a distinct species and not as a race of *interrogationis;* this latter species, or at least a race of it, also occurs sparingly in Labrador. All the older authors (Guenée, Moeschler, Staudinger, Aurivillius) mention as the distinctive characters of *u-aureum* (*groenlandica, arctica*), as compared with the European *interrogationis,* the smaller size, greyer color of primaries and, more particularly, the *strongly white-checkered fringes*; these characters hold in general in my Labrador series and have enabled me to separate out a small number of larger specimens which I consider as representing *interrogationis* in this region. In the male genitalia I could find no thoroughly satisfactory characters for separation from *interrogationis* but in the females the condition of the chitinized ventral plate, which partially protects the ostium, seemed to offer a better character; in *u-aureum* this plate is normally weak and does not jut out caudad beyond the posterior margin of the eighth abdominal segment which also acts as a partial cover to the ostium; in *interrogationis* it projects distinctly for a moderate distance, and is much more expanded laterally in its terminal portion than is the case in *u-aureum.* Such conditions can generally be observed by simply removing a few hairs from the ventral sides of the female abdomens; in *interrogationis* the end of the plate may then be seen projecting over the hollow which represents the initial portion of the ostium; in *u-aureum* the plate is seldom visible at all; only in those specimens where the rear segments are less telescoped than usual can it be observed beneath the integument of the eighth segment, the posterior margins of the two practically coinciding. I must admit, however, that a few specimens have given trouble when examined in this superficial manner; while

everything in the way of coloration and maculation pointed to *u-aureum,* the ventral plate was distinctly projecting; in such doubtful cases slides are essential.

There is considerable variation in the coloration of the primaries, especially in the amount of dark suffusion in the inner median area; this may be very considerable at times and in one specimen covers almost the entire wing. The silver-mark normally consists of a V followed by a dot; in rare cases this dot may be lacking or may be joined to the V, either at the base or along the outer arm. Besides a long series from Hopedale, Labr. there is a single worn specimen from Churchill, Man. before me which, while lacking fringes, appears to belong here on size and general appearance.

Male Genitalia. Juxta rather weakly chitinized, narrowing apically from a broad base and terminated by a weak protuberance with rounded apex. Aedeagus long and with slightly bulbous base, weakly spiculate apically, armed with an apical spine, distinctly short and chunky, arising at one end of an irregularly broadened, chitinous base. Clasper of moderate width, costa slightly upturned at apex and terminating in a sharp point but not produced into a spine; harpe rather variable apparently, generally of moderate length, reaching nearly to costa, with broad base and pointed apex, somewhat incurved; at times of more even width throughout, and again longer and extending over costa; clavus also of variable length and apparently very unstable.

Female Genitalia. Ostium partially protected by the integument of the eighth abdominal segment which is moderately invaginated, forming the usual pockets at the sides of the ostium. The ductus bursae consists of an initial, long, broad, chitinous tube, extending almost to the bursa and connected with it by the very short membranous section with its usual granulations and chitinous strigations; this distal section is bent sharply to the right and enters the bursa well down on the left side. The proximal half of the chitinous tube gradually expands toward the ostium, *but not strongly so,* and is feebly strigate. It is produced on the ventral side for a short distance caudad, forming the ventral plate which partly protects the ostium. This plate is narrower than in *allied species,* being scarcely more than half the width of the caudal margin of the ductus; it is normally also *shorter* and is entirely *covered by the integument of the eighth abdominal segment;* it shows considerable variation in size, being at times almost vestigial, and its caudal margin may be either straight or with a broadly V-shaped median excavation, giving it a bilobed appearance. The bursa is a moderate-sized membranous sac, which normally, when containing a spermaphore, is sinuate or *shaped like a question-mark,* due to the fact that the apical portion

bends to the left behind (dorsad of) the ductus and then curves cephalad; the whole apex is distinctly granulose; the fine ductus seminalis arises at the extreme apex and, curving backward, runs caudad along the side of the bent portion of the bursa.

S.U-AUREUM var. PALLIDA Ottol.

AUTOGRAPHA PALLIDA Ottolengui, 1902, Jour. N. Y. Ent. Soc., X, 71, Pl. VI, fig. 7.

After a study of the type, a female from Salmonier, Newfoundland, there seems little doubt that *pallida* has been wrongly placed as a race of *octoscripta* and that the name should be transferred to *u-aureum*. The type is an old, worn specimen of Thaxter's collecting, which accounts for the pale nature of the basal 2/3 of the hindwings in Ottolengui's figure; when in good condition these wings would undoubtedly show the same smoky suffusion in this area as is found in *u-aureum*. Whether the shape of the silver mark, with the dot considerably enlarged and joined to the V-mark, is a normal one I have no means of knowing, as I have seen no other Newfoundland material; such a condition occurs, however, rarely in my Labrador series. For the present I am giving *pallida* racial status until such time as topotypical series can be examined.

S. U-AUREUM var. VACCINII Hy. Edw.

PLUSIA VACCINII Smith, 1893, Bull. 44, U. S. N. M., 254.

AUTOGRAPHA VACCINII Ottolengui, 1902, Jour. N. Y. Ent. Soc., X, 71, Pl. VIII, fig. 3.

AUTOGRAPHA ARCTICA var. VACCINII McDunnough, 1921, Can. Ent., LIII, 85.

Ottolengui's figure is a good one of this so-called race from the higher regions of the Presidential range, N. H., more particularly from the Alpine Garden of Mt. Washington. It has been recorded from the Adirondacks but Forbes in the "List of the Insects of New York" page 627, states that such references may be based on specimens of *alias*; the record needs verification. It is quite within probability, however, that the species occurs on the higher peaks of the Gaspé region (Mt. Albert) or of the state of Maine.

There is no difference in genitalia from those of *u-aureum*.

SYNGRAPHA INTERROGATIONIS Linn.

Plate IV, fig. 9.

SYNGRAPHA INTERROGATIONIS Hampson, 1913, Cat. Lep. Phal. Brit. Mus., XIII, 430.

Autographa interrogationis Benjamin, 1933, Pan. Pac. Ent., IX, 61.

I have a small series of European *interrogationis* from Scotland before me for comparison with the Labrador series of 3 ♂ 6 ♀ which I picked out, as already mentioned, from the *u-aureum* series on the strength of the larger size, the lack of pure white checkering in the fringes and the more pronounced purple-gray tinges in the pale areas of forewing. The two series appear to agree in the genitalia of both sexes and I am therefore placing the Labrador specimens as *interrogationis*. Eventually, possibly, a racial name may be required but at the present time it seems inadvisable.

As already stated the male genitalia (*vide* Pierce, 1909, Genit. Brit. Noct., Pl. XXIX) show no very marked differences from those of *u-aureum;* the apical portion of the harpe, in those slides examined, seemed to be more bent inwards, and the apical spine in the aedeagus somewhat longer and slightly curved. Whether these characters are definitely of specific value remains to be seen when more material is available for examination. In the female genitalia the mouth of the ostium and the beginning of the chitinous ductus seem definitely broader than in *u-aureum* and the lateral edges are turned downward (cephalad) to form the inner sides of the invaginated pockets; the ventral plate is longer and broader with either a straight or sinuate caudal margin, being at times weakly crinkly. The apical section of the bursa, when a spermaphore is present, is bent to the left below the ductus but *not curved cephalad,* the bursa, in consequence, being more L-shaped than S-shaped. In certain specimens where the bursa contained no spermaphore and was, in consequence, less fully inflated, the apex of the bursa projected caudad on the right side of the ductus without any bend to the left.

S. interrogationis var. herschelensis Benj.

Autographa altera ? Gibson, 1920, Rep. Can. Arct. Exp. III, I, 37, Pl. III, fig. 13.

Autographa interrogationis herschelensis Benjamin, 1933, Pan. Pac. Ent., IX, 61.

Benjamin based his name on a single male taken by Owen Bryant at Herschel Island, Yukon Terr. I saw this specimen several years ago and matched it pretty well with a male in our Collection from East Main River, James Bay, Que. Judging by the locality and genitalia the worn specimen mentioned doubtfully by Gibson as *altera* will also fall here. Besides these two males there are single large females before me from Dawson, Y. T., Churchill, Man., and Nordegg, Alta. which show a type of genitalia similar to those of Labrador *interrogationis*. It seems rather

presumptuous to base a racial name on a single specimen especially in a species of known variability, so the exact status of *herschelensis* must remain doubtful until much more material from northern localities is available; for the present I am employing the term to cover all our scanty material from the north-western section of Canada.

Syngrapha altera Ottol.
Plate I, fig. 12; IV, fig. 10.

Autographa altera Ottolengui, 1902, Jour. N. Y. Ent. Soc., X, 69, Pl. VIII, fig. 9.

Autographa variana Ottolengui, 1902, Jour. N. Y. Ent. Soc., X, 70, Pl. VI, fig. 10.

Both *altera* and *variana* have been generally misidentified, the former name being applied to specimens of *interrogationis,* whilst the latter was confused with *octoscripta.* A study of the type material and genitalia shows that both names apply to slightly different forms—possibly races—of a single distinct species, closely allied to *octoscripta.*

Altera was based on a female specimen from Nipigon, Ont., and a cotype from the Adirondacks, N. Y.; I have been able to match the holotype with a female from Larder Lake, Ont., both in maculation and genitalia. The species is a small one, considerably smaller than *octoscripta* as noted by Ottolengui whose description and figure are quite good. It might be added that on the primaries *altera* shows traces of the ruddy suffusion in the submedian fold, interior to the t. p. line, which is quite characteristic and better developed in *octoscripta* and scarcely ever found in *interrogationis* and *u-aureum.* The darker basal area of the hindwings in *altera* at once separates it from *octoscripta* where the basal 2/3 is largely pale grayish-ochreous.

Variana was based on a female specimen from St. John, N. B. and I have matched it very closely with a pair of specimens in our collection from White Pt. Beach, N. S. The abdomen of the type is glued on and I have doubts as to its authenticity; in consequence I have made no genitalic slide. However, my Nova Scotia female is such a good match for the type and agrees in genitalia so exactly with my *altera* female that I have no hesitation as regards the relationship of the two names.

Variana, as far as is known, would appear to be a sea-coast form and has the pale areas of the primaries more extended and accentuated than in the type form; this difference, however, is not as great, when the actual type specimens are seen side by side, as one would be led to believe from the figured photographs. Still it is probable that the name *variana* may be used in a racial sense.

MALE GENITALIA. (from a *variana* specimen) Juxta a bulb-shaped plate, terminating apically in a weak, blunted projection. Aedeagus long and moderately broad, strongly spiculate apically and armed with a *thin, long, apical spine* with weak base. Clasper narrow, costa terminating in a *distinct, short, spine* projecting beyond the rounded apical margin of cucullus; harpe *sickle-shaped,* tapering from a broader base.

FEMALE GENITALIA. Ostium well protected by the overlapping integument of the eighth abdominal segment and by a *strongly projected, ventral plate,* the sides of which are parallel and its caudal margin well-excavated centrally. Initial section of ductus heavily chitinized and well strigate in proximal half, *broader than usual,* and with *rounded, chitinous projection,* almost as broad as the ductus-tube, extending beyond the origin of the short, terminal, membranous section. This section is heavily strigate, arises ventrally from the chitinous section, bending slightly to the right and entering the bursa on the left side. Bursa rather *small and narrow* (all specimens examined without spermaphore), with the more strongly granulose apex projecting caudad on right side of ductus.

SYNGRAPHA OCTOSCRIPTA Grt.
Plate I, fig. 13; IV, fig. 11.

AUTOGRAPHA OCTOSCRIPTA Ottolengui, 1902, Jour. N. Y. Ent. Soc., X, 70, Pl. VIII, fig. 14.

AUTOGRAPHA OCTOSCRIPTA Hampson, 1913, Cat. Lep. Phal. Brit. Mus., XIII, 425, Pl. 236, fig. 17. (*partim*).

AUTOGRAPHA OCTOSCRIPTA Wolley-Dod, 1913, Can. Ent., XLV, 191; *id.* 1915, *op. cit.,* XLVII, 130.

AUTOGRAPHA OCTOSCRIPTA ab BETA Strand, 1916, Arch. f. Naturgesch. A. 2, 47.

Grote, since he attributed the species to Sanborn, apparently made no type designation. No specimens of Sanborn's exist in the Cambridge Museum, according to Dr. Banks, so I imagine the female specimen from the Grote Collection in the British Museum with Grote's blue-bordered name-label attached, as mentioned by Dod (*op. cit.*), will have to be considered as the holotype.

Ottolengui's figure, apart from being somewhat blurred, gives a fair idea of the species; Hampson's figure is distinctly poor, with much too yellow secondaries. The species may be distinguished from the other members of the group by its larger size, the square exsertion of the s. t. line below the apex of primaries, along with a ruddy suffusion on the inside of the t. p. line below the cell, and by the paler color of the basal 2/3 of the secondaries. The genitalia are quite characteristic.

Octoscripta is transcontinental in distribution, is quite common in certain sections of the Maritime provinces and extends

northward to Labrador and Churchill, Man. The species has been bred at Ottawa from a larva on *Vaccinium.*

MALE GENITALIA. Characterized by a *strong, preapical spine on costa of clasper,* projecting at right angles to the plane of the rounded cucullus; harpe also characteristic, being *broadly triangular,* with sharply pointed apex projecting beyond costa of clasper. Aedeagus slightly expanded at 2/3 and then contracted to form the heavily spiculate apical section; armed with a straight spine of moderate size with slightly expanded base.

FEMALE GENITALIA. Ostium with well-developed, invaginated, lateral pockets. Anal plate *very strongly projected caudad,* with *rounded sides,* often considerably fluted and strigate; caudal margin rounded or with a small V-shaped, median excision; the terminal portion of the plate is joined to the chitinized ductus by a narrower bar of chitin, the whole appearing *somewhat paddle-shaped.* The strongly chitinized ductus is similar to that of *altera* but narrower and with the *terminal projection confined to the right* side and only half the width of the ductus; the strongly strigate and membranous portion of the ductus is very short and enters the bursa on left side just below the apex. Bursa much as in *altera.*

S. OCTOSCRIPTA var. EPSILON Ottol.

AUTOGRAPHA EPSILON Ottolengui, 1902, Jour. N. Y. Ent. Soc., X, 70, Pl. VI, fig. 8.

This so-called species was based on a male, collected by the Harriman Alaska Expedition at Kodiak, Alaska, and now in the United States National Museum. Mr. C. Heinrich informs me that a slide of the genitalia shows that the apical portions of the claspers had been broken off and that in consequence the characteristic structural details could not be determined. However, basing my conclusion on other minor genitalic characters and on Ottolengui's excellent figure, I am of the opinion that *epsilon* has been correctly placed as a pale race of *octoscripta.*

S. OCTOSCRIPTA var. MAGNIFICA Ottol.

AUTOGRAPHA MAGNIFICA Ottolengui, 1919, Jour. N. Y. Ent. Soc., XXVII, 124, Pl. XV, fig. 13.

There seems little doubt that *magnifica,* the female type of which from Ucluelet, Vancouver Is. B. C. is before me, is a pale race of *octoscripta;* there is also a male from the same locality in our collection which shows to a somewhat lesser degree the characteristic pale suffusion of primaries which I would term a light lavender-gray rather than the "creamy white" mentioned by Ottolengui. *Magnifica* would seem to be a coastal form, bearing the same relationship to *octoscripta* that *variana* does to *altera.*

Syngrapha zeta Ottol.

Autographa zeta Ottolengui, 1902, Jour. N. Y. Ent. Soc., X, 70, Pl. VI, fig. 1.

The type is a female, bearing one of Neumoegen's old labels "Calgary, N. W. T.", which, as has already been several times pointed out, is a very ambiguous locality.

I have carefully examined the specimen and find that the figure given is excellent. Very characteristic are the deep brownish color (not black-brown) of the median area below the silver mark and the pale, almost whitish, terminal area; the shape, too, of the silver mark is curious but this is probably not constant. The deep brown color of the hindwings precludes reference to *octoscripta* and I have been unable to match the type with anything in our collection. The abdomen has been glued in two places and its authenticity may be doubted, especially as it originally was obtained from Jacob Doll, whom Dyar once termed "a notorious mender of specimens". A superficial examination shows a strongly protruding anal plate which would throw *zeta* into the *octoscripta* group if the abdomen belongs. For the present *zeta* must be placed as a good species following *octoscripta*.

Syngrapha surena Grt.

Plate I, fig. 14.

Autographa surena Ottolengui, 1902, Jour. N. Y. Ent. Soc., X, 73, Pl. VIII, fig. 10.

This rare species is adequately figured by Ottolengui. Besides a couple of specimens from Hopedale, Labrador, we have in our collection one from Rimouski, Que. and two from Smoky Falls, near Kapuskasing, Northern Ontario.

Male Genitalia. Juxta with small rounded apical protuberance. Aedeagus long and fairly bulbous at base, weakly spiculate apically, armed with a long, straight, sharply pointed, apical spine. Harpe well-developed, of nearly even width throughout, bent inward at apex and terminating in *two short spines*.

I have been unable, from lack of material, to examine the female genitalia.

Syngrapha epigaea Grt.

Plate I, fig. 16; IV, fig. 12.

Autographa epigaea Ottolengui, 1902, Jour. N. Y. Ent. Soc., X, 73, Pl. VII, fig. 16.

Autographa epigaea Wolley-Dod, 1905, Can. Ent., XXXVII, 252.

Syngrapha epigaea ab. epigaeella Strand, 1916, Arch. f. Naturgesch., A, (2), 47.

This well-known species is easily determinable by Ottolengui's figure. Strand's aberration is based on a specimen in which the tail of the silver mark is almost lacking. The larva is a Vaccinium-feeder and is not uncommon in peat-bogs around Ottawa. It is transcontinental in distribution.

MALE GENITALIA. Juxta without apical spine. Aedeagus broad and long, faintly spiculate apically, armed with a *long, bluntly pointed bar of chitin,* extending from base to well beyond middle of the organ. Clasper with a *strong, costal, preapical spine* and rounded apex; harpe long, thin, and tapering to a point.

FEMALE GENITALIA. Very characteristic. The long, strongly chitinized, proximal 2/3 of the ductus is extended caudad over the ostium as *two large asymmetrical, rounded lobes.* The distal portion of the ductus is narrow and membranous in its initial portion but quickly broadens and becomes heavily strigate, entering the bursa obliquely on the left side in a *broad opening that occupies the whole central portion of this side,* the caudal edge of the ductus at the point of entrance, as well as an adjoining section of the bursa, being chitinized. The fundus of the bursa is a smallish, bulbous sac, the bursa narrowing opposite the ductus-opening and expanding in the apical half, with *a large chitinous plate* and some membranous thickening on the right side. The fine ductus seminalis is given off on the left (inner) side of this section, just below the apex.

SYNGRAPHA SELECTA Wlk.

Plate I, fig. 15.

AUTOGRAPHA SELECTA Ottolengui, 1902, Jour. N. Y. Ent. Soc., X, 72, Pl. IX, fig. 7.

SYNGRAPHA SELECTA Hampson, 1913, Cat. Lep. Phal. Brit. Mus., XIII, 421, Pl. 236, fig. 11.

AUTOGRAPHA SELECTA Wolley-Dod, 1915, Can. Ent. XLVII, 130.

Another well-known species with transcontinental distribution, and extending into the far north; specimens are before me from Churchill, Man. and Whitehorse and Dawson, Yukon Terr. The stigma is very variable, both in shape and coloration.

MALE GENITALIA. Juxta without apical spine. Aedeagus long and broad, heavily spiculate apically, armed with a *long, thin spine* at *base* and a curved piece of tapering chitin in the median section, the point directed toward base. Clasper long and narrow, costa terminating in *a small, sharp spine;* harpe small, outwardly oblique, bluntly pointed.

Female Genitalia. Ductus bursae *entirely membranous* or extremely weakly chitinized; the funnel is represented by a short, broad section with sinuous caudal margin and broad, U-shaped base which slightly overlaps the following section on the ventral side. This is followed by a short, moderately broad, faintly granulose section which, after sending a large sac-like projection to the right, broadens enormously to over twice its previous width and continues thus to the bursa-entrance on the left side where it bends inward and narrows slightly. The bursa is a curved, membranous sac, the narrowed apical section *bending to the left* beneath (dorsad of) the ductus; the apex is heavily shagreened and of a *black-brown color.* The ductus seminalis *arises on the left side,* considerably below the extreme apex.

Genus **ANAGRAPHA** gen. nov.

Plate II, fig. 1; V, fig. 1.

Similar in vestiture and tibial spining to *Syngrapha.* The male genitalia, however, show a marked degree of specialization. Tegumen much more elongate than in *Syngrapha,* terminating in a long, thin uncus; vinculum broadly rounded terminally, clasper broadening gradually toward apex, the costal margin thickly clothed with fine hair which extends inward to middle of clasper in the apical half; attached to the ventral margin is a closely appressed series of long thick hairs, almost spinelike in character; the costa terminates in a small spine and below this the apical margin is abruptly and irregularly cut off and entirely free of hair. Sacculus rather broader at base than in *Syngrapha* with short, knobbed clavus; it is joined by a thin, upright band of chitin to the harpe which is a long, recurved hook, slightly bulbous at extremity, arising from the basal half of the clasper. Juxta a rather weakly chitinized plate with a rounded apical projection. Aedeagus rather long, gradually narrowing from base to apex and finely granulate around the apex; vesica strongly spiculate through its entire length and with a single, large basal spine.

Female Genitalia. Telescoping of ninth segment and ovipositor feeble. Ostium unprotected, circular, leading into a short, chitinized, quadrate, initial portion of the ductus bursae; beyond this the ductus narrows to a short sinuate, strongly chitinized and strigate tube which leads into a moderate-sized, chitinized and spiculate sac, situated on the right side of the ductus and probably representing the apical portion of the bursa. From the base (cephalic end) of this sac the ductus seminalis arises as a fine tube, curving immediately caudad and running parallel to the ductus bursae. The bursa proper is a large, membranous sac, projecting to the left at right angles to the chitinized apex and semilunate in shape.

GENOTYPE. PLUSIA FALCIFERA Kby.

The marked difference in genitalia between *falcifera* and the species included in *Syngrapha* would seem to justify a new generic term; *falcifera* is probably a highly specialized offshoot from this genus.

After an examination of the type of *simplicima* Ottol. a worn female simply labelled "Oregon", I incline to agree with Dod (1913, Can. Ent., XLV, 239) who maintains that it merely represents a small aberrant form of *falcifera*. The type specimen has the coloration of the primaries of the brown *simplex* form and the broad tail to the silver mark is entirely missing; the Dod collection contains a specimen of typical gray *falcifera* with similar reduction of this tail and there is also a specimen before me of *simplex* from Aweme, Man. with reduced tail but with the reduction scarcely carried to such an extent as in *simplicima*. All other maculation of *simplicima* is identical with that of *falcifera*.

SECTIONS B AND C.

Genus **AUTOPLUSIA** gen. nov.

Plate II, fig. 2; V, fig. 5.

Wings long and narrow with slight emargination of termen below apex. Tibiae as in *Syngrapha* with light spining on hind-tibiae between the spurs. Dorsal and abdominal tufting as usual.

MALE GENITALIA. Tegumen, vinculum and uncus much as in *Syngrapha*. Clavus *long and thread-like;* sacculus rather broadly expanded in basal portion, the clasper, in consequence appearing to be much narrowed in medial area; shortly before apex the costa forms a *rounded or pointed protuberance,* opposite which a *strong, curved spine projects over the ventral margin* (possibly representing the harpe or pollex); cucullus weakly chitinized, rounded and covered with fine hair. Aedeagus long, somewhat sinuate, with slightly bulbous base, and a weak, latero-apical thickening of chitin, bearing a few weak spines; vesica armed with a long band of fine spines and a very strong, pointed apical spine arising from a broad base.

FEMALE GENITALIA. With considerable similarity to those of *Syngrapha*. The semicircular ostium is well protected ventrally by the projecting integument of the eighth abdominal segment and by a broad, chitinous, tricorn plate. The ductus is broad, strongly chitinized for its entire length, and enters the bursa well down on the left side. The rather narrow, elongate, membranous bursa bends apically to the left below (dorsad of) the ductus bursae, the extreme apex being finely granulose and giving rise to the ductus seminalis.

GENOTYPE. PLUSIA EGENA Gn.

Along with *egena* Gn., my characterization of which is based on specimens from San Diego, Calif., *olivacea* Skin. must obvi-

ously be included; this species is represented in our collection by three specimens from Strontia Spgs., Colo., and Half Moon Bay, Calif., and looks to a casual glance like a very dark *egena*. There is just a possibility that *egenoides* Strand, based on Hampson's "Ab 1. Much Darker." may take precedence over *olivacea* but as Strand's type would probably be a Central or South American specimen I prefer, pending further information, to continue the usage of *olivacea* for our North American species. The male genitalia are quite distinct from those of *egena*, showing the sacculus drawn out to a long, fine, ventral point and the subapical projections on both sides of the clasper stronger and more pointed.

Genus **TRICHOPLUSIA** gen. nov.

Plate II, fig. 3; V, fig. 6.

Similar in abdominal squammation and lack of tibial spining to *Argyrogramma* Hbn. Wings narrower and more elongate. Strikingly different in genitalia, especially those of the female.

Male Genitalia. Clasper (typically) much broader than in *Argyrogramma* with broadly rounded cucullus, thickly covered with spine-like hairs, arising from small tuberculate bases; harpe situated (typically) halfway between base and apex of clasper, strong, bent at right angles, the tapering apex projected slightly over costal margin; sacculus weak with moderately long, finger-like clavus. Tegumen long and narrow; vinculum well-produced, but not nearly so abnormally long as in *Argyrogramma,* apex bluntly pointed. Aedeagus much as in *Argyrogramma.*

Female Genitalia. Characterized by the *extraordinary development of the ductus bursae* which is *tape-like* and weakly chitinized, extending to the cephalic end of the abdomen, then bending back almost to its point of inception and again recurved to about the central section of the abdomen where it enters the small membranous bursa, slightly expanded, on what appears to be the right, ventral side. The fine *ductus seminalis arises from the narrowed apex of the bursa.* Ostium unprotected, goblet-shaped, weakly chitinized, connected by a very short membranous section with the slightly enlarged, bulbous initial section of the ductus bursae.

Genotype. Plusia ni var. brassicae Riley.

I can find no difference in male genitalia between a Sicilian specimen of *ni* Hbn. and our North American *brassicae;* at the best it would seem only possible to retain the name *brassicae* as a doubtful North American race of the almost cosmopolitan *ni,* characterized by the somewhat darker color of the primaries. I include *oxygramma* Geyer in this genus as it shows the long lateral tufts of hair on the abdomen and possesses the same attenuated tape-like type of ductus in the female genitalia. It lacks the comb of spines on the basal half of the first joint of the male tibia and

the male genitalia vary in several details from those of *ni*. While the tegumen, uncus, vinculum, clavus and aedeagus are more or less in agreement, the clasper is very small and narrow, with a curious row of specialized, frond-like hairs along the ventral edge; the cucullus is spined but the harpe is an inconspicuous, fine, chitinous finger, situated near base of clasper. When more Central and South American material can be studied a further subdivision may be necessary.

Abrota Druce, a species unknown to me, I am including here temporarily on account of the abdominal tufting.

Genus **ARGYROGRAMMA** Hbn.

Plate II, fig. 4; V, fig. 2.

1823, Hübner, Zutraege z. Samml. exot. Schmett., II, 29 (includes *omega* Hbn. and *questionis* Fabr.).

In general characters similar to *Autographa* Hbn. (*Phytometra* Hamp.) but abdomen of male with lateral tufts of long hair on posterior segments. All tibiae unspined; on first joint of hind tarsus of male a comb of long, fine spines on inner side of basal half may be present or absent. Eighth abdominal tergites and sternites modified and strengthened with chitin and with specialized tufts of hair and hair-pencils.

Male Genitalia. Very small for the size of the insect. Tegumen long and narrow; uncus thin, long, and terminating bluntly; vinculum *produced to an abnormal extent* and either broadened to a large plate (typical) or narrower and rounded apically. Claspers small and very narrow; slightly expanded apically; cucullus rounded apically and *covered with fine spines,* arising from small tubercules; clavus a thin rod, arising from costo-basal angle of the weak sacculus; harpe a short, oblique rod, arising near base of clasper. Juxta a weakly chitinized plate of varying shape, attached to a long, tube-like, highly spiculate anellus. Aedeagus *very long and narrow,* with moderately bulbous base; it is partially supported by a chitinized strip on the ventral side which expands apically, forming a half-ring; the dorsal side projects beyond this, forming a weakly chitinized, truncate projection, feebly spiculate at its base. There are one or two thin, long spines in the bulbous basal portion.

Female Genitalia. Ostium unprotected and membranous, leading into a weakly chitinized and spiculate, goblet-shaped, initial section of the ductus bursae. The mid-section of the ductus is a short, narrow membranous tube (forming the stem of the goblet); this, in turn, leads into a longer, chitinized and at times strigate, terminal section which enters the bursa *on the dorsal side* below apex. The membranous bursa is variable in size but tapers to a *bluntly pointed fundus* from *which the long, fine ductus seminalis arises,* bending backward along the left side of the bursa.

Genotype - Argyrogramma omega Hbn. = verruca Fabr.

Hübner's generic term has not been heretofore employed but becomes available for certain North American species of presumable southern origin. It was based on the species *omega* from Georgia, figured in the "Zutraege" (figs. 373/4), and in the text Hübner also mentions *questionis* Fabr. (*sic*) which, judging by the data in the "Verzeichniss", he was inclined to confuse with *oo* Cram.; in this same work he proposed the new name *omicron* for Cramer's fig. F of Pl. 311 which he rightly considered to represent a different species from fig. E, to which the name *oo* is now restricted. *Omicron* (1821) would apparently have priority over *omega* but both are placed by Smith & Hampson in the synonymy of *verruca* Fabr., an action which I am presuming to be correct. To avoid any confusion regarding the genotype of *Argyrogramma* I designate *omega* Hbn. as such genotype. *Quaestionis* Fabr., a synonymy of *chalcytes* Esp., falls, in any case, into the genus *Chrysodeixis* Hbn. of which the European *chalcytes* is the genotype. This genus is evidently closely allied to *Argyrogramma* but in the male genitalia (the only sex examined) the harpe is entirely lacking.

Along with *verruca* Fabr. I am including in the genus *basigera* Wlk.; both species occur in the southern section of our faunal area and can be readily recognized by Ottolengui's figures. They agree in general characters of squammation, etc. but *basigera* lacks the comb of fine spines on the first joint of the hind tarsi found in *verruca*. The genitalia, while showing a number of differences which can be presumed to be merely specific, are, on the whole, of the same general type. I am emphasizing particularly the rather curious point of origin of the ductus seminalis in the female genitalia; this would seem to show very satisfactorily a close relationship of the two species. It is probable that other Mexican or Central and South American species can be included here when opportunity for study occurs.

Genus **PSEUDOPLUSIA** gen. nov.

Plate II, fig. 6; V, fig. 4.

Similar to *Autographa* in squammation, tufting and lack of tibial spining. Differs, however, very considerably in genitalia.

Male Genitalia. Tegumen narrow and elongate, giving rise at its lateral bases to two lobes, weakly chitinized, which nearly meet in the median line dorsally. Uncus thin and long, terminating in a small spine; vinculum produced *to a long, fine point*. Clasper of normal size, slightly broadened apically, the rounded cucullus being thickly *covered with fine spines;* harpe *very long and thread-like, arising from the extreme base* of the clasper; sacculus very weak with long, thin clavus, slightly thicker

than the harpe. Transtilla strong and beak-like apically. Juxta weak, terminating in a sharp spine. Aedeagus long, with bulbous base; central section much narrowed, spiculate in proximal section and partially chitinized; apical half again expanded and then tapering and conical, weakly chitinized and strongly spiculate; a transverse row of short, blunt spines occurs at the extreme base and two thin, longer spines are found at the neck of the bulbous section. The hair-pencils of the eighth abdominal segments are considerably reduced.

Female Genitalia. Ostium *broad, bowl-shaped, well-spiculate* and with the base folded and wrinkled. The ductus bursae originates in a narrow, raised central area attached to the margin of the bowl and is a narrow, membranous tube, somewhat expanded in the proximal half, then narrowed and feebly strigate and spiculate; it enters the bursa on the dorsal side just below the apex. The bursa is rather broad and chunky, the fundus drawn out to a *long tube which curves back along the left side* of the bursa almost to apex and *gives rise to the thread-like ductus seminalis.*

Genotype. Phalaena oo Cram . (fig. E, not F.).

The very divergent genitalia seem to warrant the erection of a new generic term for *oo* Cram. The genus is probably most closely related to *Argyrogramma* Hbn. but the lateral tuftings of hair on the abdomen are lacking, aside from the different genitalia.

Oo is a distinctly southern species but recently a few specimens have been received from points in Quebec Province.

Genus **RACHIPLUSIA** Hamp.

Plate II, fig. 5; V, fig. 3.

1913, Hampson, Cat. Lep. Phal. Brit. Mus., XIII, 410 (includes *nu* Gn. and *pedalis* Grt. (=*ou* Gn.)

The genus is characterized by the presence of spines on all the tibiae. I have been unable to examine specimens of the genotype *nu* Gn. and base my characterization on our series of *ou* Gn. which Hampson wrongly included in his genus *Phytometra,* although the ab. *pedalis* Grt. was correctly placed.

In *ou* the foretibiae show two terminal spines on the inner side; the mid- and hind-tibiae are moderately spined.

Male Genitalia. Tegumen short and broad; uncus thin, pointed; vinculum with *broadly truncate apex,* the terminal margin gently excavated. Clasper broadening toward apex which is rather squarely cut off, the cucullus being without spines or hairs; *harpe absent;* sacculus weak; clavus extremely *long and thread-like.* Juxta broad and weakly chitinized; anellus forming a conical sheath. Aedeagus rather thin and curved, with faintly bulbous

base; apex weakly shagreened; vesica with traces of a basal spine-cluster and with *two small median clusters* of short spines, 3-6 in a cluster. Hair-pencils well-developed.

Female Genitalia. Ostium partially protected ventrally by a *bilobed plate with square-cut, median excavation* of caudal margin; this plate projects from a weakly chitinized and faintly strigate, initial, barrel-shaped section of the ductus. The continuation of the ductus forms a *straight, rather narrow tube,* at first membranous, then weakly chitinized and finally, for the greater part of its length, membranous and strigate, the strigations increasing in intensity towards the bursa-entrance. The entrance to the large sac-like bursa is *ventrally in the median area* of the bursa, just distad of a *narrow invagination of the right-side* which extends inward for half the width of the bursa and partially separates it into two subequal sections. The ductus seminalis arises at the upper end of this invagination, just to the right of the ductus bursae, and is directed caudad across the ventral surface of the bursa.

Genus **CHRYSASPIDIA** Hbn.

Plate II, fig. 7; V, fig. 8.

1821, Hübner, Verz. bek. Schmett., 252 (includes *bractea* Schiff., *aemula* Schiff., and *festucae* Linn.).

1896, Grote, Proc. Amer. Philos. Soc. (1895), XXXIV, 3A, 417 (designates *festucae* Linn. as genotype).

1913, Hampson, Cat. Lep. Phal. Brit. Mus., XIII, 452. (designates *bractea* Schiff. as genotype, *ultra vires*).

Euchalcia Dyar (*nec* Hübner), 1902, Jour. N. Y. Ent. Soc., X, 81.

Phytometra Hampson (*nec* Haworth), 1913, Cat. Lep. Phal. Brit. Mus., XIII, 452, (*partim*).

Palaeoplusia Hampson, 1913, Cat. Lep. Phal. Brit. Mus., XIII, 581 (genotype *venusta* Wlk.).

Characterized chiefly by the lack of any tooth at the tornus of primaries and by the great reduction of the dorsal abdominal tuftings, especially on the third segment. As a rule there are one or two spines on the hind tibiae between the spurs.

Male Genitalia. Very similar to those of *Autographa* Hbn. (*vide* Pierce, 1909, Genit. Brit. Noct., Pl. XXIX, for fig. of *festucae*). Clasper shorter and broader, less expanded apically; harpe placed considerably further basad and rather stronger. Juxta with weak apical projection. Tegumen broader and chunkier; vinculum forming a long V. Aedeagus of moderate length, only slightly constricted medially, armed with a single short spine and with apical area weakly spiculate.

Female Genitalia. Ostium broad and largely unprotected, leading into a short, broad, chitinous pocket, the caudal margin of which is sinuate and weakly spiculate, the whole pocket being feebly granulose. The ductus bursae arises from the rounded base of the pocket as a narrow membranous tube, slightly sinuate and comparatively short and enters the bursa practically at its apex. The bursa forms a long leg-like sac, expanded somewhat at fundus to form the foot and at times strengthened over a good portion of the left side by a chitinous bar. The ductus seminalis arises from the apex of the bursa, dorsad of the entrance of the ductus bursae.

Genotype. Phalaena festucae Linn.

Grote's designation of *festucae* Linn. as the genotype is the first type fixation I have found and must be adhered to; *Palaeoplusia* Hamp., based on *venusta* Wlk., will fall as a synonym, both species being congeneric. This was recognized by Dyar in 1902 who, however, employed the wrong generic term for the group. Hampson's designation of *festucae* as the type of *Phytometra* is erroneous. The included North American species are *venusta* Wlk., *putnami,* Grt., *nichollae* Hamp. and *contexta* Grt.

Genus **AUTOGRAPHA** Hbn.

Plate III, fig. 1; V, fig. 9; VI, fig. 1.

1821, Hübner, Verz. bek. Schmett. 251 (13 species including *parilis* Hbn., *circumflexa* Hbn., and *gamma* Linn.).

1895, Grote, Abh. Nat. Ver. Bremen, XIV, (1), 61 (cites *gamma* Linn. as genotype).

1902, Dyar, Jour. N. Y. Ent. Soc., X, 81 (designates *circumflexa* Hbn. = *gutta* Gn. as genotype, *ultra vires).*

1913, Hampson, Cat. Lep. Phal. Brit. Mus., XIII, 404 (wrong usage with *parilis* Hbn. as genotype, *ultra vires*).

1916, McDunnough, Ent. News, XXVII, 400.

Phytometra Hampson (*nec* Haworth), 1913, Cat. Lep. Phal. Brit. Mus., XIII, 452, (*partim*).

The genus is characterized by the strong dorsal tufting on thorax and abdomen, the lack of lateral hair-tufts on the abdomen and by the practical lack of tibial spining, although individual specimens occur in which one or two spines are present between the hind-tibial spurs. The genitalia run, in both sexes, very true to type, with one or two slight exceptions.

Male Genitalia. *(vide* Pierce's figures, Genit. Brit. Noct., Pl. XXVIII). Tegumen narrow and high; uncus simple, long,

thin, terminating in a short spine; vinculum forming a long V, usually with two small, opposed projections on inner edges near apex. Juxta weak; apical spine present typically but generally lacking in our North American species. Clasper long and moderately broad, ventral margin slightly sinuate, cucullus expanding somewhat costo-apically but not differentiated and *clothed merely with long hair;* harpe a straight or outcurved thin rod, arising in median section of clasper; sacculus narrow and weak with thin, long clavus, arising costo-basally. Aedeagus long, with bulbous base usually containing a short spine, a much constricted median area, partially strengthened by chitin, and a more or less expanded apical section, weakly chitinized and spiculate. Hair-pencils well-developed.

FEMALE GENITALIA. Ostium largely unprotected, broad, leading into a short, *chitinous, goblet- or mitten-shaped, weakly granulose, initial section* from the base of which the *rope-like ductus bursae* arises. This ductus is variable in length, generally somewhat twisted, brown in color, and strigate and granulose; it enters the bursa just *below the apex on the right side,* (rarely on the left side). The bursa is variable in shape, depending partially on the number of sinuate spermaphores it contains; in general it is attenuate with rounded apex and frequently some membranous thickening in the region of the ductus-entrance, at times partially encircling this section. The ductus seminalis *arises from the apex of the bursa.*

GENOTYPE. PHALAENA GAMMA Linn.

The bulk of the species in Section B belong in this genus; they are as follows:-

bonaerensis Berg
biloba Steph.
precationis Gn.
ottolenguii Dyar
ampla Wlk.
v-alba Ottol.
corusca Stkr.
speciosa Ottol.
labrosa Grt.
pasiphaeia Grt.
sansoni Dod
rubida Ottol.
bimaculata Steph.
mappa G. & R.
pseudogamma Grt.
californica Speyer
metallica Grt.
flagellum Wlk.

Of the above species *bonaerensis* Berg. and *ottolenguii* Dyar have not been examined. *Biloba* Steph. shows in genitalia (Pl. V, fig. 9) considerable resemblance to species of *Chrysaspidia* and if it had not been for the well-developed dorsal abdominal tufting I should have been inclined to place it in this genus; the aedeagus is unarmed. *Precationis* Gn. (Pl. III, fig. 1; VI, fig. 1.) is also somewhat aberrant and tends toward the *Argyrogramma* group; the clasper is long and thin with the harpe more basad than is

typical for *Autographa;* the cucullus is covered with minute tubercles which, however, do not give rise to definite spines; the ventral margin is clothed with specialized scale-like hair; the aedeagus has a very bulbous spiculate base and a strongly contracted median section.

The remaining species fall into two minor groups on male genitalic characters. The listed species from *ampla* to *pasiphaeia* show a shorter and broader clasper. In the second group the clasper is long and narrow with considerable costo-apical widening; the harpe is generally thinner and the aedeagus noticeably longer and more contracted medially.

In the female genitalia the entrance of the ductus bursae is normally on the right side of the bursa; only in *californica* does the ductus- entrance appear to be on the left side. *Metallica* Grt. (which is closely allied to the European *bractea* Schiff.) is somewhat aberrant; the ductus bursae is longer than usual, much twisted, and with a small appendage near its origin. The bursa is shaped like a French horn, the main portion being disk-shaped, the tubular apical region arising on the left side near the middle and curving caudad closely appressed to the side of the bursa; the ductus bursae enters this tubular portion on the right side just below the apex.

Genus **CHRYSANYMPHA** Grt.

Plate III, fig. 4; VI, fig. 2.

1896, Grote, Proc. Amer. Philos. Soc. (1895), XXXIV, 3A, 417 (monotypical genus for *formosa* Grt.).

Scarcely separable from *Autographa* and with similar type of male and female genitalia. Third palpal joint longer and thinner than in *Autographa* and the squammation of the second joint more appressed with scarcely a trace of any long ventral hairs. Apex of forewing well-rounded and outer margin strongly convex and oblique with strong tornal tooth.

In view of the dissimilarity of *formosa* Grt. in general appearance to the species included in *Autographa* I retain Grote's generic term. Hampson's placement of *formosa* in *Abrostola* is quite erroneous.

Genus **EOSPHOROPTERYX** Dyar

Plate III, fig. 8; VI, fig. 3.

1902, Dyar, Jour. N. Y. Ent. Soc., X, 80 (monotypical genus for *thyatyroides* Gn.).

1913, Hampson, Cat. Lep. Phal. Brit. Mus., XIII, 446.

Similar to *Chrysanympha* in length of third palpal joint; second joint more heavily scaled beneath. Forewings much narrower and more pointed than in either *Chrysanympha* or *Autographa.* The genitalia seem to warrant the generic separation.

Male Genitalia. Tegumen chunkier and vinculum longer than in *Autographa*. Clasper with a *very strong medio-ventral bulge,* narrowing rapidly to a rather pointed and well-haired apical section; harpe a *small, finger-like projection,* situated medially; sacculus weak, with long, thin clavus. Aedeagus long, thin, unarmed except for a convolute and spiculate section of the vesica.

Female Genitalia. Ostium represented by a *broad lunate plate,* moderately spiculate, which leads into a *rectangular, chitinized section* of the ductus, twice as long as broad. The short terminal section of the ductus is sinuous and strigate, entering the bursa on *the left side below the rounded and narrowed apex* which is directed dorsad and fairly heavily granulose. The bursa is short and broad, tapering somewhat toward the fundus. The ductus seminalis arises from the dorsal side of the apex of the bursa.

Genus **POLYCHRYSIA** Hbn.

Plate VI, fig. 6.

1821, Hübner, Verz. bek. Schmett., 251 (monotypical genus for *moneta* Fab.).

1902, Dyar, Jour. N. Y. Ent. Soc., X, 80.

Chrysoptera Latreille, 1825, Fam. Nat., 476; Hampson, 1913, Cat. Lep. Phal. Brit. Mus., XIII, 439.

Deva Smith (*nec Walker*), 1893, Bull. 44, U. S. N. M., 246 (*partim*).

This genus is characterized by the long recurved palpi with fringes of hair on the knife-like third joint in front. It is evidently allied to *Autographa* as the genitalia only differ in minor particulars. In the male genitalia the clasper is shorter and broader, more as in *Chrysaspidia*; the harpe is longer and projects well over the costal margin; the clavus is somewhat reduced. The aedeagus is shorter and less constricted medially, being weakly spiculate apically and armed with a short spine. The female genitalia closely resemble those of *Autographa,* the short ductus bursae entering the bursa on the left side below apex.

Our North American form of *moneta,* for which Smith proposed the name *trabea,* (based on a specimen from Calgary, Alta.) has generally gone under the name, *esmeralda* Oberth., a name proposed for the Siberian and Asiatic paler race of *moneta.* While there is no doubt that the two forms are closely allied, judging by a single "Sajan" specimen of *esmeralda* before me, I think that, in view of the great distance between the type localities and the modern tendency to split into races on minor characters, it would be well to resurrect Smith's name. Along with *trabea* Sm. *morigera* Hy. Edw., a species I have not examined, will be included in the genus.

Genus **PSEUDEVA** Hamp.

Plate III, fig. 2; VI, fig. 4.

1913, Hampson, Cat. Lep. Phal. Brit. Mus., XIII, 447 (type designated as *purpurigera* Wlk.).

PANCHRYSIA Dyar (*nec* Hübner), 1902, Jour. N. Y. Ent. Soc., X, 80.

Separated from *Polychrysia* by the less recurved palpi and by the falcate external margin of the primaries. The eyes do not appear to be lashed. The genitalia appear to bear out the separation.

MALE GENITALIA. Obviously of the *Autographa* type but the *clavus is merely represented by a few hairs* on a slight rounded prominence of the sacculus. The clasper is short and broad; the finger-like harpe well basad of the middle of clasper; the sacculus very weak. The aedeagus feebly constricted medially and with moderately bulbous base, weakly spiculate apically and armed with a single basal spine and a cluster of small spines somewhat as in *C. hochenwarthi,* placed more apically. The apical portion of the vinculum is long and narrow.

FEMALE GENITALIA. Allied to those of *Autographa* species. Bursa short and broad (ham-shaped), tapering quickly to a rounded apex, just below which on the left side the entrance of the ductus bursae is situated. This ductus is short and rather broad, elbowed rectangularly just before bursa-entrance. Ostium bowl-shaped and feebly chitinized and spiculate. Ductus seminalis arises from apex of bursa. Besides *purpurigera* Wlk., the only species I have examined, the genus includes *palligera* Grt. and *rubigera* Hamp.

Genus **ADEVA** gen. nov.

Plate III, fig. 3; VI, fig. 9.

Palpi much as in *Autographa;* second joint clothed with long hairs beneath, third joint moderate, rounded, rather closely scaled. *Male antennae moniliform,* female antennae less so. Eyes large, rounded, feebly lashed. Thoracic and abdominal tufting much as in *Autographa* but the patagia with better defined terminal scaling, giving the appearance of tufts. Tibiae unspined. Forewing with pointed apex, well-rounded outer margin and no tornal scale-tooth.

MALE GENITALIA. Tegumen short and chunky; uncus long, thin; vinculum broadly V-shaped. Clasper short and broad, rounded apically; harpe *long and outwardly oblique,* finger-shaped; sacculus weak; *clavus undeveloped.* Juxta lengthily triangular, better chitinized than usual. Aedeagus short and broad, unarmed, slightly spiculate apically.

Female Genitalia. Ostium broad, weakly membranous, shallowly bowl-shaped. Ductus bursae *almost entirely membranous,* short and rather broad, with indications of striations and granulations before entrance into bursa; this entrance occurs on the dorsal side of the bursa just below the rounded apex. Bursa long and narrow, membranous. Ductus seminalis from apex of bursa.

Genotype. Autographa albavitta Ottol.

The genitalic differences between species under *Autographa* and *albavitta* would seem to warrant a generic separation, especially as the whole appearance of the insect is distinctly non-Autographine.

Typical *albavitta* from the coastal regions of California has a distinct pale brownish hue on the primaries; in the desert race *hutsonii* Sm. (described as a *Behrensia*) this brownish coloration is replaced by smoky-gray.

Genus **PLUSIA** Ochs.

Plate III, figs. 6, 7; VI, figs. 7, 8.

1816, Ochsenheimer, Schmett. Eur., IV, 89 (cites 19 species including *chrysitis* Linn.).

1829, Duponchel, Hist. Nat. Lep. Fr., VII, (2), 72 (names *chrysitis* as genotype).

1893, Smith, Bull. 44 U. S. N. M., 247 (employs in an extended sense).

1895, Grote, Abh. naturw. Ver. Bremen, XIV, (1), 60 (cites same genotype and employs as subgenus for *aerea, aeroides* and *balluca*).

1902, Dyar, Jour. N. Y. Ent. Soc., X, 80 (employs similarly as genus but adds *metallica*).

1916, McDunnough, Ent. News XXVII, 400 (suggests same usage as Grote).

Diachrysia Hbn. (Verz. 252) has been sunk by Dyar *(op. cit.)* to *Plusia* with genotype cited as *orichalcea* Fabr. I have had no opportunity of examining the genitalia of this European species but judging by Pierce's figure (Gen. Brit. Noct., Pl. XXIX) the male genitalia bear great resemblance to those of *Autographa* species.

Dyachrysia Geyer (Zutr. IV, 22) is given by both Neave and Hemming as a valid genus. It was based primarily on *balluca* but in the text *chrysitis* is also mentioned, a species included by Hübner in his genus *Diachrysia.* I imagine that Geyer's spelling is merely a mistake or a misprint for *Diachrysia* and was never intended for a new generic term. In any case it is doubtful whether the name would hold as "i" and "y" are regarded in the International Rules of Nomenclature as synonymous.

The three North American species at present included under *Plusia* do not show, according to genitalia, any close resemblance either to each other or to the genotype, *chrysitis* Linn. In this species (*vide* Pierce, *op. cit.*) the main genitalic differences from *Autographa* in the male appear to be the less elongate tegumen, the closer approximation of the harpe to the base of the clasper, the broader basal area of the sacculus, and the more even width and heavier chitinization of the aedeagus which is *split apically into two dissimilar lobes,* one of which is spiculate. In the female the similarity to *Autographa* is also marked. The initial portion of the ductus is, however, elongate-rectangular and not goblet-shaped, the ductus-tube is more membranous and the bursa top-shaped, the ductus (in the single specimen examined) entering ventrally in the middle of the upper, broad portion, and the ductus seminalis given off from a small finger-like projection immediately to the left of this entrance. I was unable to check as to whether such conditions were constant.

On account of the great divergence of genitalia (especially in the male) from the above type, I am removing *aerea* Hbn.—for which, fortunately, a generic term is available—from the genus *Plusia.* For the present I am leaving *aereoides* Grt. and *balluca* Geyer as they stand; such action at least saves a well-known generic term for our North American lists.

The male genitalia of *aereoides* approach closest to those of the genotype. Apart from the rounded apex of the clasper (pointed in *chrysitis*) which probably does not mean a great deal, the harpe is broad and knife-shaped, jutting obliquely over the costal edge. Other characters are similar.

In the female genitalia the ostium is broad and unprotected, the initial chitinized portion of the ductus being broadly oval (not elongate-rectangular); the remainder of the ductus tube is more weakly membranous, narrowing distally and entering the bursa on the right side below apex. The bursa is more normal in shape, being elongate with the narrowed and rounded apex giving rise to the thread-like ductus seminalis.

The above differences can easily be regarded as specific, in which case *aereoides* fits quite well into the genus *Plusia.* The wing shape, with the slightly falcate outer margin also agrees.

Balluca shows more divergence in genitalia from the generic type than does the previous species. In the male the claspers are shorter and broader with well rounded apex and less prominent sacculus; the harpe is a thin, upright rod, tapering and slightly incurved in its apical half; it arises from before the middle of the clasper and is rather reminiscent of the type found in certain species of *Syngrapha.* The vinculum is very much longer and drawn out to a blunt point. The shield-shaped juxta has two small raised chitinous flaps at base and a well-developed apical spine; the *anellus forms a narrow high collar,* strongly spined apically. The aedeagus is more typical with the apical lobes well

defined, one being spiculate. In the female the two *lateral invaginations* of the eighth abdominal segment (pockets) are well-developed. The ostium forms a shallow, chitinous, *broadly V-shaped pocket,* with sinuate caudal margin; from the dorsal (inner) side of this the short rope-like ductus (as in *Autographa*) arises, a *large, oval spiculate sac* being attached to its right side just before entrance into the bursa; this entrance is *dorsal,* slightly to the right, below the apex of the bursa. The bursa is a long, narrow sac with granulate, rounded apex, from which the ductus seminalis arises.

Combining, as it does, genitalic characters of both the *Syngrapha* and *Autographa* groups, it is possible that *balluca* is of very ancient origin, its close associations being lost in antiquity.

Genus **AGRAPHA** Hbn.

Plate III, fig. 5; VI, fig. 5.

1821, Hübner, Verz. bek. Schmett., 250 (includes *aerea* Hbn. and *ahenia* (*glauca* Cram.)).

1895, Grote, Abh. naturw. Ver. Bremen, XIV, (1), 60 (sinks to *Plusia*).

1902, Dyar, Jour. N. Y. Ent. Soc., X, 81 (cites *aerea* as genotype but sinks to *Plusia*).

While other characters agree with those of the genus *Plusia* the genitalia of *aerea* are so divergent as to afford justification for the resurrection of Hübner's generic term.

Male Genitalia. Tegumen short and chunky, vinculum very *long drawn-out,* narrowed slightly apically, but rounded and not pointed; uncus thin, pointed apically. Clasper short and broad with *strong broad sacculus* with rounded costo-basal section and apex forming a *scoop-shaped projection* which extends over the ventral edge of clasper at middle; harpe *broad and flat,* outcurved and arising from a *large rectangular base.* Clavus long, terminating in *a distinct, oval, slightly setose knob.* Aedeagus long and thin; in apical section strengthened laterally with chitinous bars, the left one showing a long *series of small teeth* or spines on its edge, the right one with a small cluster of 3 or 4 spines at apex.

Female Genitalia. Invaginations of eighth abdominal segment forming *well-defined pockets,* containing short tufts of hair. *Ventral plate well-developed,* spiculate, broadly rectangular with sinuate caudal margin. Initial portion of ductus membranous, broad, sac-like; the short, bent, terminal section narrowed and strigate, *entering the bursa ventrally,* a little to the left side and almost apically, the apex of the rather shortly elongate bursa forming a small rounded projection to the right (or dorsad) of the ductus-entrance and giving rise to the ductus seminalis.

KEY TO NORTH AMERICAN SPECIES OF *SYNGRAPHA* BASED ON MALE GENITALIA

1. Costa of clasper with preapical spine 2
   Costa without preapical spine..... 3
2. Aedeagus with thick rod of chitin extending from base to beyond middle; harpe long, thin.....*epigaea* Grt.
   Aedeagus with thin, straight, apical spine; harpe broadly triangular ..... *octoscripta* Grt.
3. Costa produced apically into a distinct, small, sharp spine 4
   Costa without apical spine; apex merely angled or rounded 5
4. Aedeagus with small basal and curved median spine; harpe small, outwardly oblique ..... *selecta* Wlk.
   Aedeagus with only a thin, straight, apical spine; harpe moderate, sickle-shaped ..... *altera* Ottol.
   variana Ottol.
5. Aedeagus unarmed, short, stout 6
   Aedeagus armed with one or two spines: usually longer and thinner 7
6. Juxta with strong apical spine; harpe tapering from broad base and terminating in sharp spine ..... *alticola* Wlk.
   Juxta with apical spine practically undeveloped; harpe narrower and without terminal spine ..... *parilis* Hbn.
7. Aedeagus with both basal and apical spines 8
   Aedeagus with basal spine lacking.....11
8. Basal spine minute; harpe long and pointed, extending beyond costal margin ..... *microgamma* Hbn.
   Basal spine well-developed, rod-like 9
9. Harpe long and strongly outcurved, decumbent; basal spine of aedeagus long; apical spine straight, pointed..*orophila* Hamp.
   Harpe not outcurved; basal spine of aedeagus shorter; apical spine strongly curved 10
10. Harpe of moderate length with broad base, tapering to a slightly incurved point ..... *angulidens* Sm.
    excelsa Ottol.
    Harpe very short and chunky with broad base and short, terminal spine ..... *celsa* Hy. Edw.
11. Aedeagus short and broad, of equal width throughout 12
    Aedeagus rather thin, long, with slightly bulbous base 14
12. Aedeagus very broad with broad, transverse, dagger-shaped apical spine; harpe thin and pointed ..... *diasema* Bdv.
    Aedeagus thinner with smaller and thinner, obliquely-placed spine with extended base 13
13. Harpe with truncate apex and very small terminal spine.....
    ..... *borea* Auriv.
    Harpe tapering to a strong terminal spine ..... *lula* Strand
14. Harpe terminated by a bifid spine; aedeagus with a long, straight, apical spine ..... *surena* Grt.
    Harpe not bifid at extremity 15
15. Harpe short and tubercle-like 16
    Harpe longer, thin, pointed, incurved apically 17
16. Harpe minute; sacculus with raised ridge at base; aedeagus with strong, curved, apical spine on broad base .... *alias* Ottol.
    Harpe somewhat larger, sacculus without raised ridge; aedeagus similar to preceding ..... *rectangula* Kby.
17. Harpe moderately long, gently tapering to a point with weakly incurved apex; spine in aedeagus short and stubby (rose-thorn) .....*u-aureum* Gn.
    vaccinii Hy. Edw.
    Harpe very similar but with more strongly inbent apex; spine in aedeagus somewhat longer ..... *interrogationis* L.

Sackeni Grt. and *snowi* Hy Edw., which also belong in *Syngrapha*, have been omitted in the key, owing to lack of material.

KEY TO NORTH AMERICAN SPECIES OF *SYNGRAPHA* BASED ON FEMALE GENITALIA

1. Entrance of ductus bursae on right side of bursa, somewhat below apex 2
   Entrance of ductus bursae on left side of bursa, below apex 7
2. Ductus bursae with proximal, funnel-shaped portion, weakly chitinized; without appendage 3
   Ductus bursae with funnel generally more strongly chitinized and with lateral membranous appendage on right side 4
3. Lateral chitinous flaps projecting caudad from margin of ostium; entrance of ductus definitely on right side of bursa ..... *alticola* Wlk.
   Ostium unprotected by chitinous flaps; entrance of ductus into bursa subventral ..... *parilis* Hbn.
4. Funnel of ductus short, broad, rounded at bottom and moderately chitinized; apex of bursa weakly granulate and hyaline 5
   Funnel of ductus long, gradually tapering, strongly chitinized; apex of bursa strongly shagreened and darkened in color .. 6
5. Membranous portion of ductus shorter than chitinized section; appendage quite small and scarcely chitinized.. *rectangula* Kby.
   Very similar, but membranous portion of ductus longer than the chitinized section and appendage slightly larger and better chitinized ..... *alias* Ottol.
6. Appendage of ductus-funnel recurved and running caudad, parallel to ductus .....*celsa* Hy. Edw.
   Appendage shorter, not recurved but jutting out at right angles ..... *angulidens* Sm.
   excelsa Ottol.
7. Ductus bursae practically entirely membranous, distal section very broad, apex of bursa strongly shagreened and brown, curved to left.....*selecta* Wlk.
   Ductus bursae with at least portions well chitinized 8
8. Chitinized portion of ductus long, extending as a straight, cylindrical tube almost to bursa-entrance 9
   Chitinized portion of ductus shorter 14
9. Caudad extension of ductus-funnel bifid, forming sublateral wings, partially enclosing ostium 10
   Caudad extension of ductus entire, forming a simple ventral plate 11
10. Wings large, rounded apically, somewhat asymmetrical; ductus strongly chitinized; apex of bursa with large, oval plate of chitin ..... *epigaea* Grt.
    Wings slight, subtriangular projections; ductus moderately chitinized; apex of bursa merely granulate .. *microgamma* Hbn.
11. Apex of bursa bent to left behind ductus-tube; projection of ventral plate over ostium weak or moderate 12
    Apex of bursa upright, on right side of ductus-tube; projection of ventral plate strong 13
12. Apex of bursa curved downward and pointing cephalad; ventral plate weak, usually not projecting beyond hind-margin of eighth abdominal segment ..... *u-aureum* Gn.
    Apex of bursa not downcurved, merely pointing to left; ventral plate stronger and broader, projecting distinctly beyond margin of eighth segment ..... *interrogationis* Linn.
13. Chitinous projection at distal end of ductus-tube small, situated on right side and about half the width of the tube..... *octoscripta* Grt.
    Chitinous projection larger, as wide as the ductus-tube ..... *altera* Ottol.
    variana Ottol.

14. Apex of bursa with chitinous plate; ductus-funnel strongly chitinized and strigate, extended caudad as two sublateral pointed projections (wings) ..... *orophila* Hamp.
Apex of bursa merely granulate or shagreened 15
15. Funnel portion of ductus long, tapering, strongly strigate, with two rounded, caudal projections (wings); distal portion of ductus wide, bulging to left from apex of funnel.... ..... *diasema* Bdv.
Funnel shorter and broader, more weakly chitinized and with caudal projections barely indicated 16
16. Apex of bursa very weakly granulate and entirely hyaline 17
Apex of bursa strongly shagreened, giving it a brown tinge; ductus with membranous bulge on left side below funnel ..... *sackeni* Grt.
17. Base of funnel produced into a small, blind, membranous sac, situated on right side and projecting somewhat beyond continuation of ductus ..... *borea* Auriv.
Very similar but membranous sac seems to be lacking .. *lula* Strand
Surena Grt. and *snowi* Hy Edw. have been omitted owing to lack of material.

SECTIONS B & C

KEY TO GENERA

1. Spining on all three tibiae ..... *Rachiplusia*
Spining only on hind tibiae between the spurs ..... *Autoplusia*
No spining on tibiae 2
2. Abdomen of male with strong lateral tufts of hair 3
Abdomen of male without lateral tufts of hair 4
3. In female genitalia ductus seminalis arises from fundus of bursa ..... *Argyrogramma*
In female genitalia ductus seminalis arises from apex of bursa; ductus bursae very long, sinuate and tape-like .... *Trichoplusia*
4. Cucullus in male genitalia spined; harpe long and thread-like, arising from extreme base of clasper ..... *Pseudoplusia*
Cucullus in male genitalia hairy; harpe short and finger-like, from near middle of clasper 5
5. Palpi long and recurved; third joint tufted with hair in front. ..... *Polychrysia*
Palpi not recurved, upright..... 6
6. Third joint of palpi long, acuminate 7
Third joint of palpi shorter, rounded 9
7. Forewings with outer margin excised below apex; third palpal joint hairy below ..... *Pseudeva*
Forewings with outer margin evenly rounded; third palpal joint smooth 8
8. Forewings short with rounded apex and strongly convex outer margin ..... *Chrysanympha*
Forewings long and narrow; apex pointed; outer margin more oblique ..... *Eosphoropteryx*
9. Dorsal abdominal tufting lacking or greatly reduced..*Chrysaspidia*
Dorsal abdominal tufting well-developed, especially on third segment 10
10. Clavus in male genitalia undeveloped; male antennae moniliform ..... *Adeva*
Clavus in male genitalia a long thin process; male antennae finely ciliate 11
11. Forewing with well-developed metallic sign; outer margin rounded ..... *Autographa*
Forewing without metallic sign; outer margin slightly falcate .. 12
12. In male genitalia clavus with distinct apical knob; sacculus terminating in a scoop-shaped projection extending beyond ventral margin of clasper ..... *Agrapha*
In male genitalia clavus thin, finger-like; no projection of sacculus across ventral margin of clasper ..... *Plusia*

EXPLANATION OF PLATES

PLATE I

Male Genitalia of:-

1. *Caloplusia ignea* Grt. ..... Denver, Colo.
2. *Syngrapha alticola* Wlk. ..... Laggan, Alta.

Right Male Clasper of:-

3. *Syngrapha microgamma* Hbn. ..... Harlan, Sask.
4. *Syngrapha borea* Auriv. ..... Dawson, Yukon Terr.
5. *Syngrapha orophila* Hamp. ..... Nordegg, Alta.
6. *Syngrapha diasema* Bdv. ..... Lapland, Europe
7. *Syngrapha rectangula* Kby. ..... Meach Lake, Que.
8. *Syngrapha alias* Ottol. ..... Gaspe, Que.
9. *Syngrapha celsa* Hy Edw. ..... Kaslo, B. C.
10. *Syngrapha excelsa* Ottol. ..... Nordegg, Alta.
11. *Syngrapha u-aureum* Gn. ..... Hopedale, Labrador
12. *Syngrapha variana* Ottol. ..... White Pt. Beach, N. S.
13. *Syngrapha octoscripta* Grt. ..... Mer Bleue, Ottawa, Ont.
14. *Syngrapha surena* Grt. ..... Rimouski, Que.
15. *Syngrapha selecta* Wlk. ..... Wellington, B. C.
16. *Syngrapha epigaea* Grt. ..... Duncan, Vanc. Is., B. C.

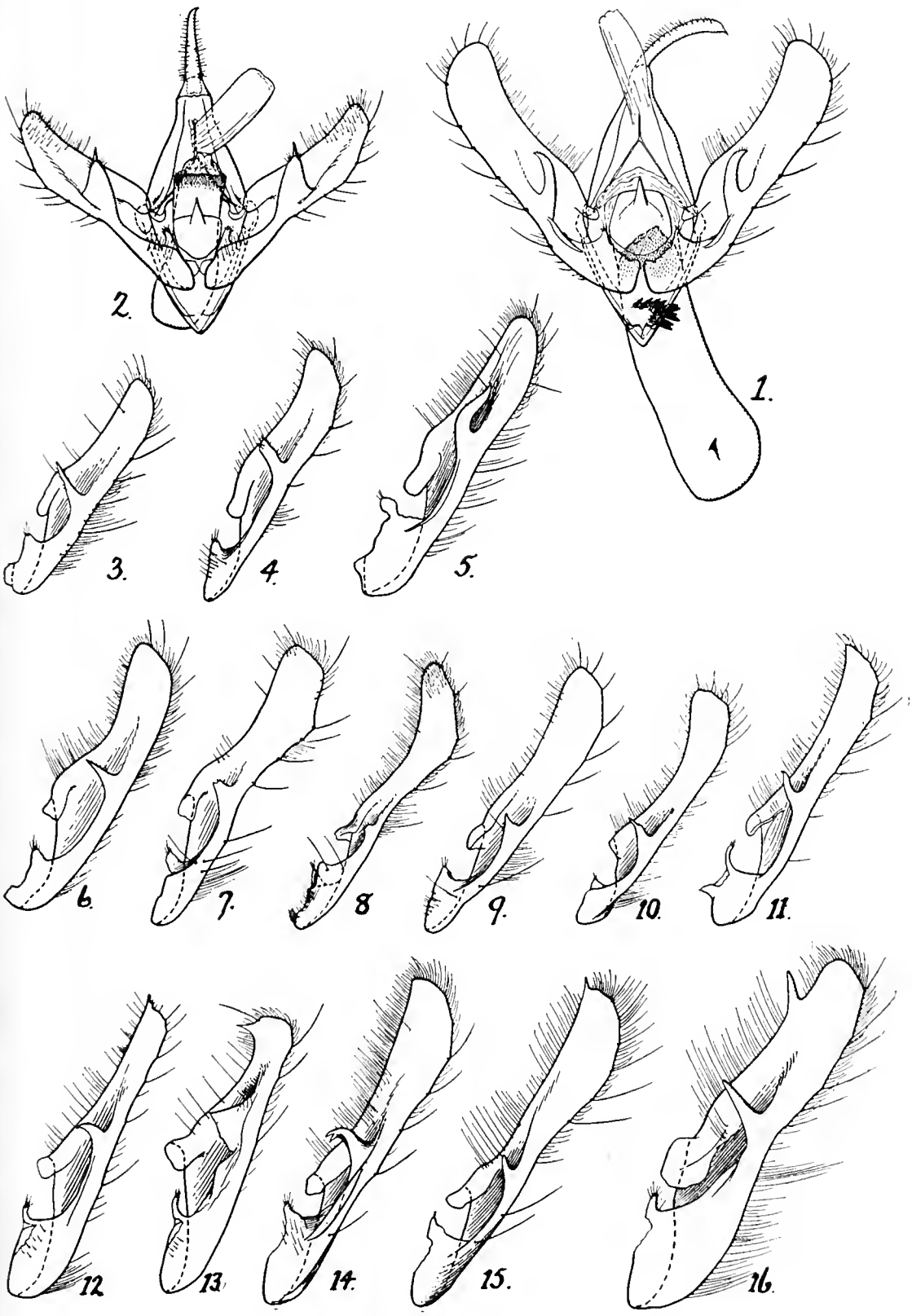

PLATE I

PLATE II

Male Genitalia of:-

1. *Anagrapha falcifera* Kby. ..... Logan, Utah
2. *Autoplusia egena* Gn. ..... San Diego, Calif.
3. *Trichoplusia ni* v. *brassicae* Riley ..... Chicago, Ill.
4. *Argyrogramma verruca* Fabr. ..... Orlando, Fla.
5. *Rachiplusia ou* Gn. ..... Georgetown, Tex.
6. *Pseudoplusia oo* Cram. ..... Hope, Ark.
7. *Chrysaspidia venusta* Wlk. ..... Baddeck, N. S.

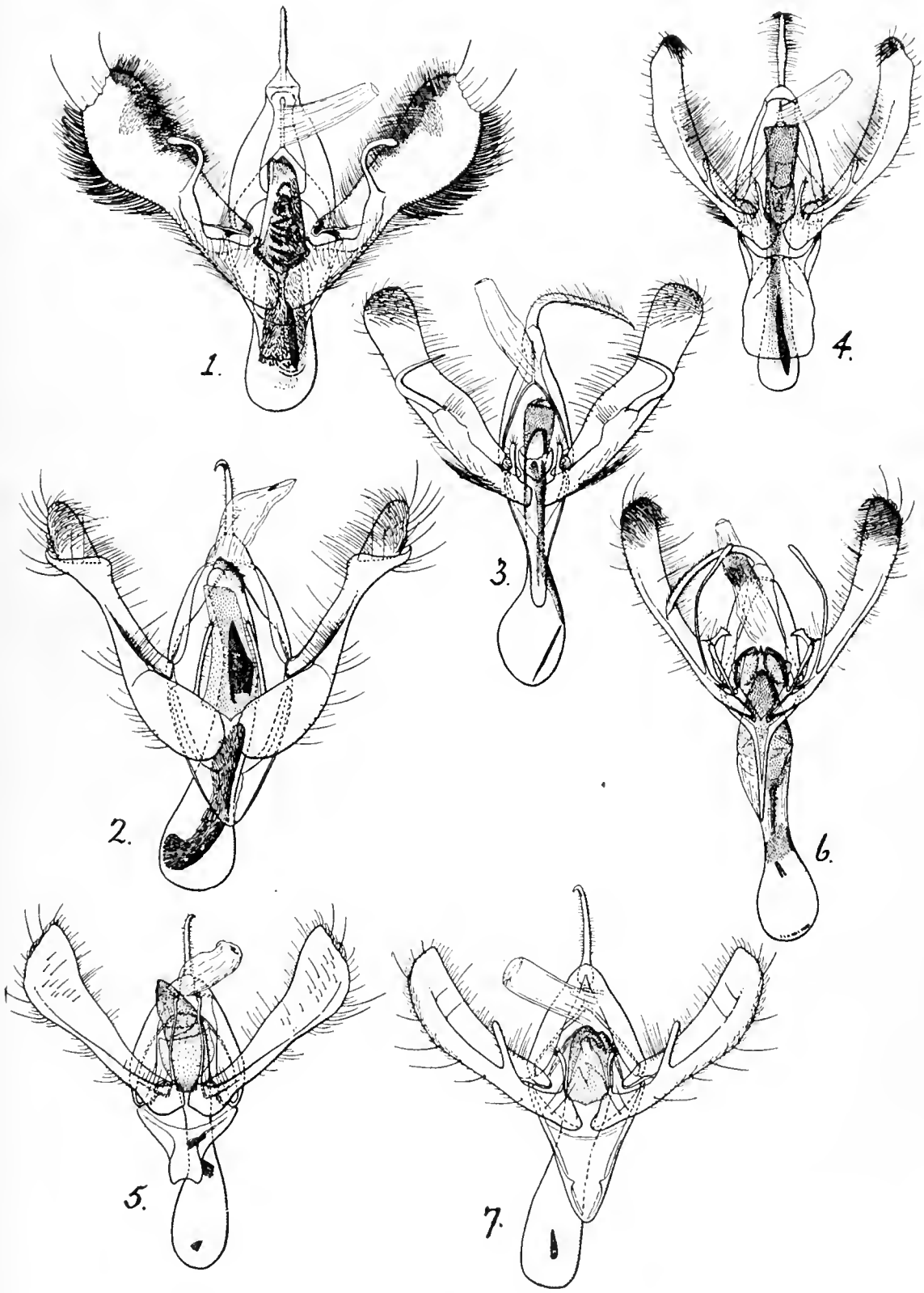

PLATE II

PLATE III

Male Genitalia of:-

1. *Autographa precationis* Gn. ..... Trenton, Ont.
2. *Pseudeva purpurigera* Wlk. ..... Calgary, Alta.
3. *Adeva albavitta* Ottol. ..... S. Calif.
4. *Chrysanympha formosa* Grt. ..... Winnipeg, Man.
5. *Agrapha aerea* Hbn. ..... Ottawa, Can.
6. *Plusia aeroides* Grt. ..... Baddeck, N. S.
7. *Plusia balluca* Geyer ..... Gracefield, Que.
8. *Eosphoropteryx thyatyroides* Gn. ..... Ottawa, Ont.

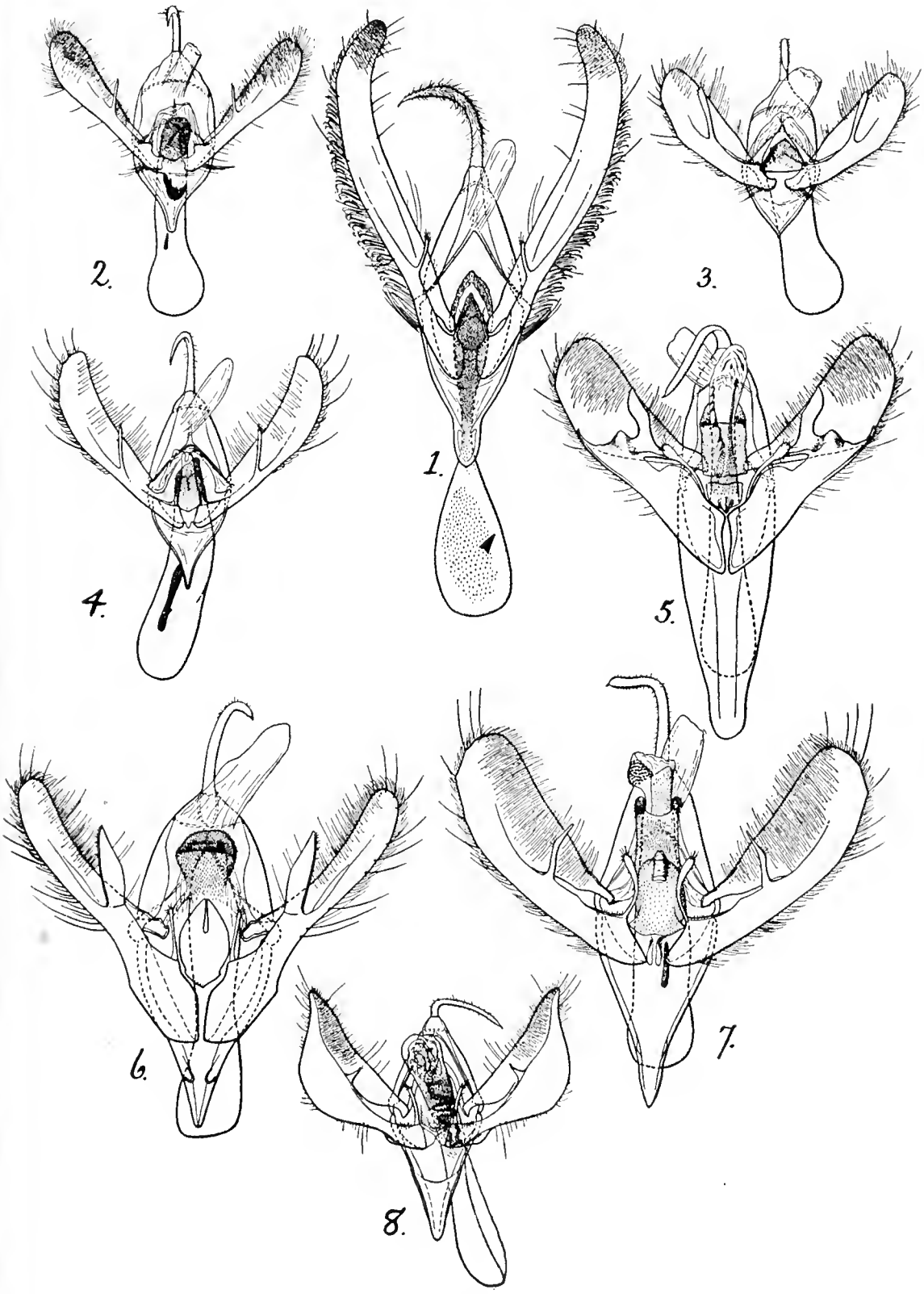

PLATE III

PLATE IV

Female Genitalia of:-

1. *Caloplusia ignea* Grt. ..... Banff, Alta.
2. *Syngrapha alticola* Wlk. ..... Nordegg, Alta.
3. *Syngrapha orophila* Hamp. ..... Kaslo, B. C.
4. *Syngrapha diasema* Bdv. ..... Hopedale, Labr.
5. *Syngrapha lula* Strand ..... Banff, Alta.
6. *Syngrapha rectangula* v. *nargenta* Ottol. ..... Seton Lake, B. C.
7. *Syngrapha celsa* Hy. Edw. ..... Duncan, Vanc. Is., B. C.
8. *Syngrapha u-aureum* Gn. ..... Hopedale, Labr.
9. *Syngrapha interrogationis* Linn. ..... Hopedale, Labr.
10. *Syngrapha altera* Ottol. ..... Larder Lake, Ont.
11. *Syngrapha octoscripta* Grt. ..... Bathurst, N. B.
12. *Syngrapha epigaea* Grt. ..... Trenton, Ont.

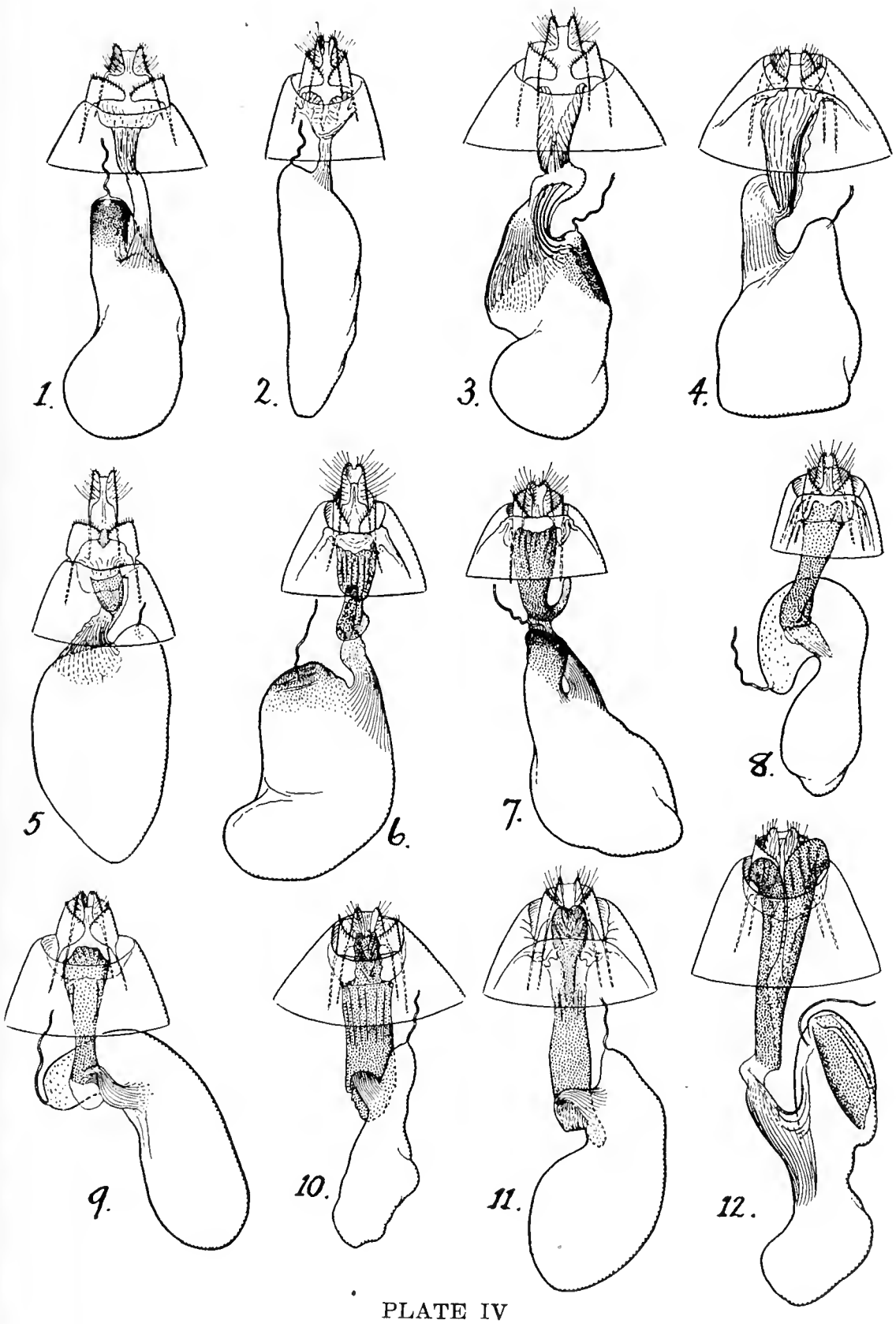

PLATE IV

PLATE V

Female Genitalia of:-

1. *Anagrapha falcifera* Kby. ..... Ottawa, Ont.
2. *Argyrogramma verruca* Fabr. ..... Orlando, Fla.
3. *Rachiplusia ou* Gn. ..... Georgetown, Tex.
4. *Pseudoplusia oo* Cram..... Knoxville, Tenn.
5. *Autoplusia egena* Gn. ..... San Diego, Calif.
6. *Trichoplusia ni* v. *brassicae* Riley ..... Chicago, Ill.
7. *Autographa corusca* Stkr. ..... Duncan, Vanc. Is., B. C.
8. *Chrysaspidia venusta* Wlk. ..... Trenton, Ont.
9. *Autographa biloba* Steph. .... Georgetown, Tex.

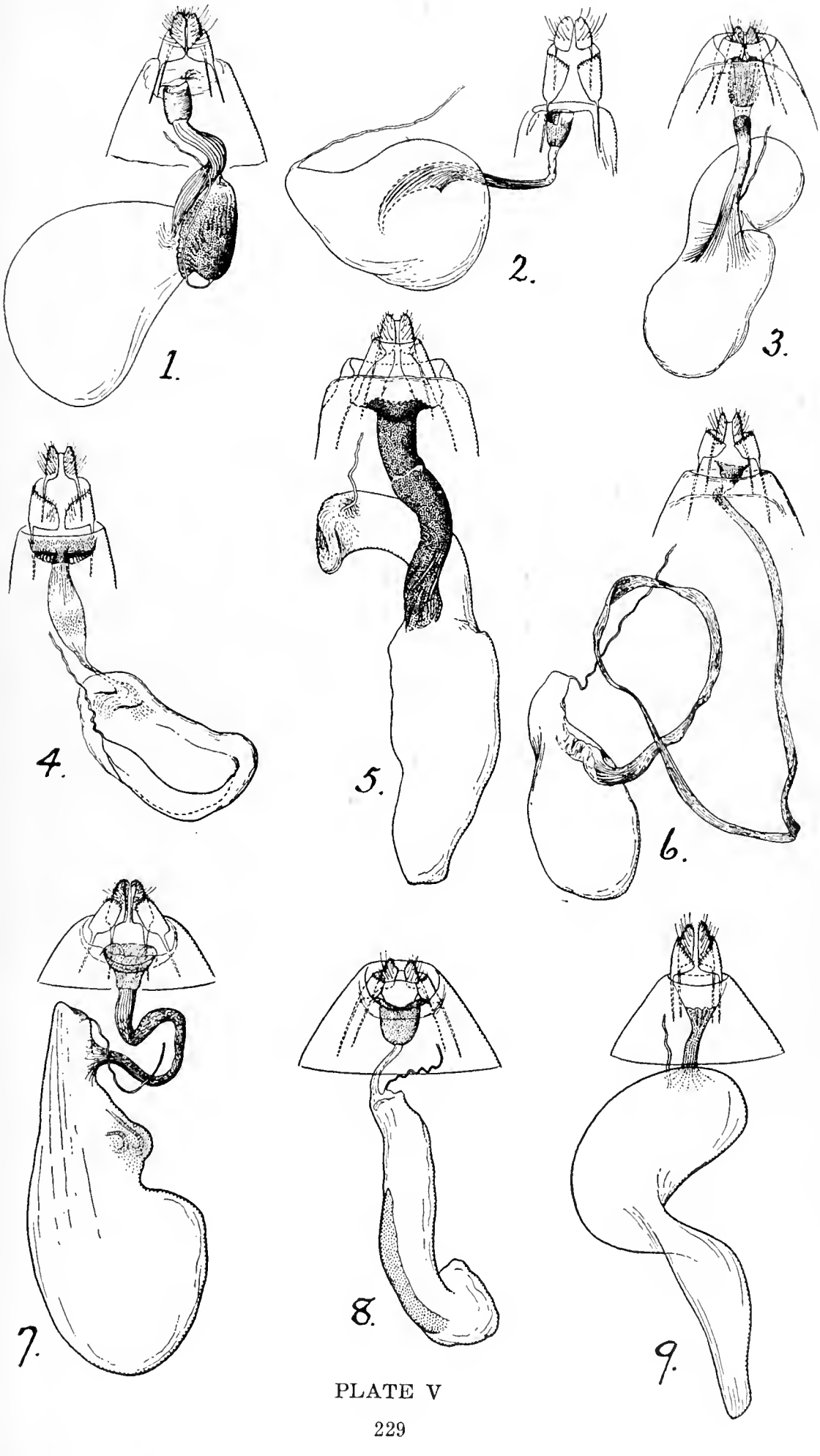

PLATE V

PLATE VI

Female Genitalia of:-

1. *Autographa precationis* Gn. ..... Ottawa, Ont.
2. *Chrysanympha formosa* Grt. ..... Laniel, Que.
3. *Eosphoropteryx thyatyroides* Gn. ..... Ottawa, Ont.
4. *Pseudeva purpurigera* Wlk. ..... Meach Lake, Que.
5. *Agrapha aerea* Hbn. ..... Bear, Mt., N. Y.
6. *Polychrysia moneta* v. *trabea* Sm. ..... Calgary, Alta.
7. *Plusia balluca* Geyer ..... Hastings, Co., Ont.
8. *Plusia aereoides* Grt. .....Hymers, Ont.
9. *Adeva albavitta* v. *hutsoni* Sm. ..... Mojave Desert, Calif.

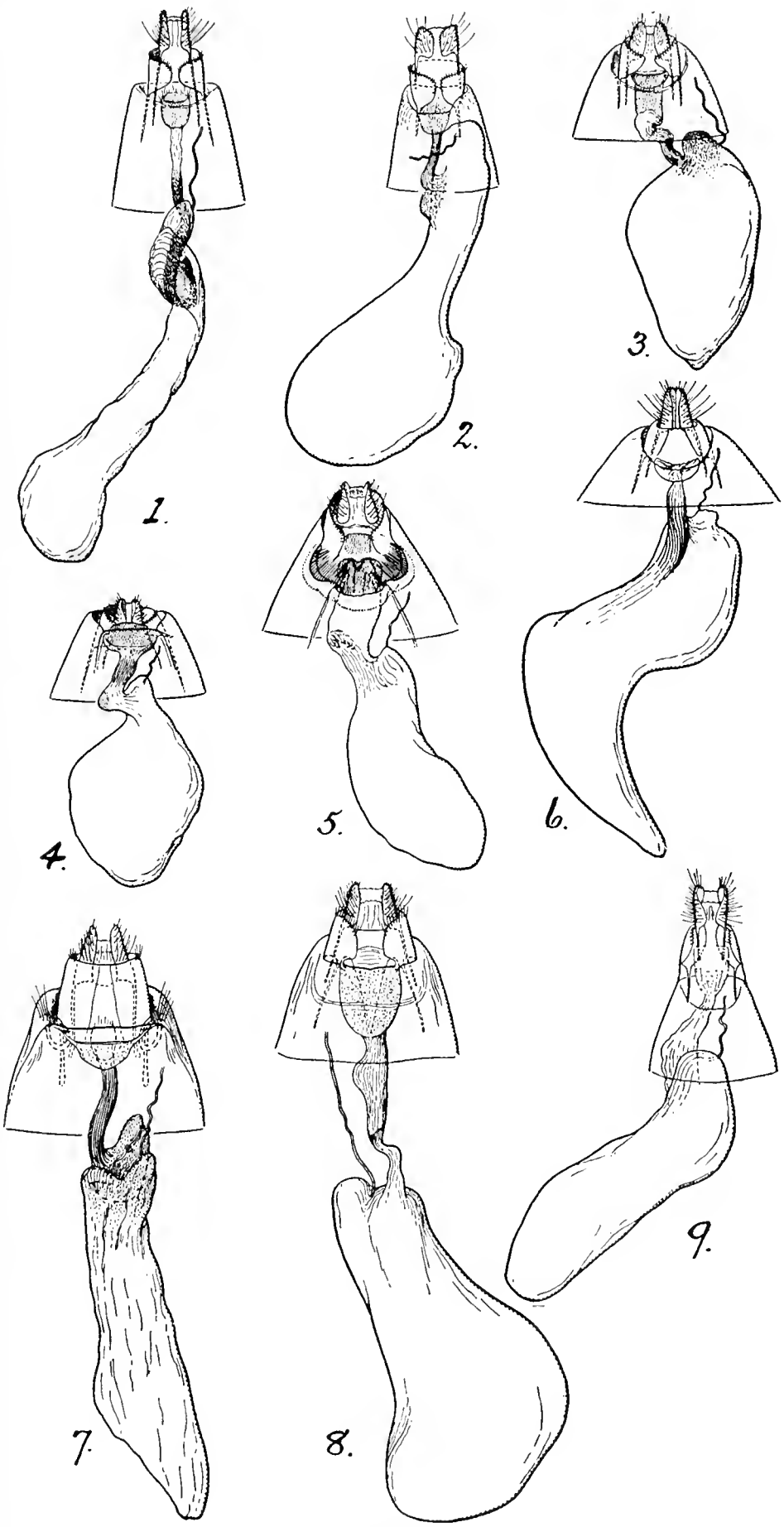

PLATE VI

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