

my Dear Professor Farlow:-

I hope that you will pardon the liberty that I have taken in the matter of your list of the Schottian algae, but I am anxious to have the "Plantae Schottianae" agree in style throughout, and have written out your determinations to save you that much time and trouble. The arrangement is that in Engler and Prantl, with which, if you do not agree, please change or throw out my work on it entirely if you prefer, and I will ~~simply~~ publish the list just as you send it.

In making out this matter there have come up the following queries:

Dasya Helenae Farl. in Herb.

Yes I should consider the locality correct, as the plant is firmly attached to the label.

Will you please underscore the initial number on this list of all such species as appear in Harvey's list of Schott's Algae. (I have not his list) and add such species as do not appear in our list at all.

When is Harvey's Herbarium?

Schmitz & Hauptf. in Eug Franet
~~say~~ the place *Centrocera* under
Ciramiu; and return *Jania* to
Corallina, do you agree?

The two genera on the last sheet
I cannot place in proper order
in the list

Should you desire any of the
specimens such as *Rytiphora*
40846 & 40903 back again for
further consideration, will you
please write to my assistant
O. E. Lansing Jr. at the Museum
he will send them in my absence.

If not more work than you desire
to expend upon this mss. would
you please add the more important
synonyms under doubly referred
species. I have not the literature.

Make up the mss all you
please I shall have it typewritten
~~and~~ before sending it to the printer,
then submit the proofs to you. No
need of returning this until March 1st
that best regards I remain. Sincerely yours
C. F. Muehlenberg

①
CHLOROPHYCEAE

Ulvraceae

1. *Ulva lactuca* (L.) Le Jolis.
Yucatan, Progreso, June 1865 (F.C.M.,
40205).

Cladophoraceae

2. *Cladophora fascicularis* (Mert.) Kütz.
Yucatan, Sisal, May 1865 (F.C.M., 40582).
3. *Cladophora lacturoides* Harv.
Yucatan, Sisal, May 1865 (F.C.M., 40253,
40256).

Bryopsidaceae

4. *Bryopsis* sp.
Yucatan, Sisal, May 1865 (F.C.M., 40254)
Specimen poor.
5. *Bryopsis hypnoides* Lamx.
Yucatan, Sisal, May 1865 (F.C.M., 40257)
6. *Bryopsis plumosa* (Wuds.) G. Ag.
Yucatan, Sisal, May 1865 (F.C.M., 40255).

Caulerpaceae

7. *Caulerpa cymosoides* (Vahl) G. Ag.
Yucatan, Celestun, May 1865 (F.C.M.,
40202)? The specimens ^{under this number} are undeveloped
but probably this species, they represent
Caulerpa simplex nom. nud.
8. *Caulerpa paspaloides* Kudemannii K.v.B.
Yucatan, Progreso, April 1865 (F.C.M.,
40210, 40209) Sisal, May 1865 (F.C.M., 40208).
These should be compared with *C. phylloplasta*
Ston Murray in Trans. Linn. Soc. ser 2. 3: 212
pl. 53., f. 3-6, in which the pinnales are
uniserial, these are biserial.

Yucatan, Sisal, May 1865 (F.C.M., 40156,
40158); Progreso April 1865 (F.C.M., 40157).

9. *Caulerpa pinnata* Mexicana ^(Sond) K.v. Boss
Yucatan, Sisal (F.C.M., 40251). C.
Mexicana Sond.
10. *Caulerpa prolifera* (Gussak) Lamx.
Yucatan, Sisal May 1865 (F.C.M., 40207)
11. *Caulerpa Ashmeadii* Harv.
Yucatan, Sisal, May 1865 (F.C.M., 40113).

Codiaceae

- 12. *Pencilus capitatus* Lamx.
Yucatan, Sisal November 1865 (F.C.M., 40575).
- 13. *Nealimeda Opuntia* (L.) Lamx.
Corallina Opuntia L. Cuba, Havana
1864 (F.C.M., 41572).
- 14. *Nealimeda Tuna* (Ell. & Sol.) Lamx.
Corallina Tuna Ell. & Sol. Yucatan,
Sisal May and November 1865 (F.C.M., 40343,
40576, 40577, 40578). Colombia, Cartagena
Nov. 1857 (F.C.M., 40891).
- 15. *Codium tomentosum* (Woods) Stackh.
Spongodium dichotomum Lamx. Yucatan,
Sisal Dec. 1864; Celestun May 1865
(F.C.M., 40114, 40691).

Valoniaceae

- 16. *Siphonocladus membranaceus* (C. Ag.) Bonnet.
Yucatan, Sisal May 1865 (F.C.M., 40583).

Ectocarpaceae

- 17. *Ectocarpus* sp.
The label on the specimens reads
"Ectocarpus octosporus", and, as Harvey had
the determination of Schott's Colombian
Algae in hand, this may be his naming
however if described I cannot say where,
and this material is so poor that it is
hardly to be determined except in general.
It seems to be near *E. pusillus* and
E. globifer. Colombia, Cartagena
Nov. 1857 (F.C.M., 41192)

Fucaeae PHAEOPHYCEAE

- 18. *Sargassum Filipendula* (C. Ag.) J. Ag.
Yucatan, Sisal May 1865 (F.C.M., 40250).
A form (*S. furcatum* Kz. which is con-
sidered by Agardh to be a form of *S.*
vulgare) is in the Schott collection from
the sea beach at the mouth of the Rio
Bravo, Mex. Bound. (F.C.M., 41378).

Dictyotaceae

19. *Padina Durvillaei* Bory.
Yucatán, Celestun May 1865 (F.C.M., 40247)
20. *Padina Pavonia* (L.) Baill.
Yucatán, Sisal May 1865 (F.C.M., 40248).
Another specimen apparently this species
is from Progreso May 1865 (F.C.M., 40249).
21. *Dictyota cervicornis* Kütz
Yucatán, Sisal May 1865 (F.C.M., 40245,
40246).
22. *Dictyota ciliata* J. Ag.
Yucatán, Progreso April 1865 (F.C.M., 40226).

RHODOPHYCEAE

Chaetangiaceae

23. *Galaxaura marginata* (Soland.) Lamx.
Brachycladia marginata Soland. Cuba,
Newana 1864 (F.C.M., 41513).
24. *Galaxaura rugosa* (Soland.) Lamx.
Brachycladia rugosa Soland. Cuba,
Newana 1864 (F.C.M., 41514).

Gelidiaceae

25. *Gelidium corneum caespitosum* J. Ag.
G. pusillum (Stackh.) J. Ag. Colombia,
Cartagena on rocks at the tide
line, November 1857 (F.C.M., 40895).

Gigartiniaceae

26. *Gigartina microphylla* Harv.
California, Santa Barbara (F.C.M., 41196).
27. *Gigartina leptorhynchos* J. Ag.
G. microphylla horrida Farlow. Calif =
ornia October 1864 (F.C.M., 44990).
28. *Gigartina spinosa* Kütz
California, Santa Barbara (F.C.M., 44998,
45000).
29. *Gigartina volans* C. Ag.
California, Santa Barbara (F.C.M., 45022)

30. *Stenogramma interrupta* (b. Ag.) Mont.
California, Santa Barbara (F.C.M., 44999, 44996).
31. *Gymnogongrus?* sp.
California, Santa Barbara, Oct. 1854 (F.C.M., 45021) Specimens sterile and imperfect.
32. *Callophyllis furcata* Farlow.
California, Santa Barbara Oct. 1854 (F.C.M., 45010).
33. *Callophyllis laciniata* (Vand.) Kütz?
So called, it is however doubtful whether the Californian plant is really the same as the European species, it may really be only a variety of *Callophyllis variegata* (Bory) Kütz.
California, Santa Barbara Oct., 1854 (F.C.M., 45017).
34. *Callophyllis rhyncocarpa* Rupr.
California, Santa Barbara Oct. 1854 (F.C.M., 45014).
35. *Callophyllis variegata* (Bory) Kütz.
California, Santa Barbara, Oct. 1854 (F.C.M., 45004, 45008).
36. *Callophyllis* sp.
The following numbers from California, Santa Barbara, are too imperfect for specific identification. (F.C.M., 44994, 45005, 45015, 45016).

Rhodophyllidaceae

37. *Agardhiella tenera* (Ag.) Schmitz
Rhabdonia tenera Ag. Gulf of Mexico, 1853 (F.C.M., 42623); Indianola Texas, growing on *Polysiphonia collata* (F.C.M., 42602); Sea beach at the mouth of the Rio Pecos del Norte, November 1853 (F.C.M., 42611); A very robust form, sterile but doubtless this species, Gulf of Mexico (F.C.M., 42613); sterile specimens but with

the evident frond of this species at Colombia
Cartagena, Nov. 1857 (F.C.M., 40927).

38. ✓ *Solieria chordalis* (C. Ag.) J. Ag. non Harw.
Colombia, Cartagena Nov. 1857 (F.C.M.,
40936); Yucatán, Sisal May 1865 (F.C.M.,
40688).
39. ✓ *Eucheuma acanthocladum* (Harw.) J. Ag.
Yucatán, Sisal May 1865 (F.C.M., 40342)
40. *Eucheuma isiforme* (C. Ag.) J. Ag. ^{40160,}
Yucatán, Progreso Apr 1865 (F.C.M., 40320);
Sisal May (F.C.M., 40318, 40319, 40323, 40324, Nov.
40322, Dec. 40120). The smooth form of the
species, *E. nudum*, Yucatán, Sisal Nov. &
Dec 1864 (F.C.M., 40117, 40118, 40119, 40122).
41. ✓ *Murdemannia setacea* Harw.
Cuba, Havana Nov. 1864 (F.C.M., 41510).

Sphaerococcaceae

42. ✓ ~~*Gracilaria cancellata* J. Ag.~~
A slender form from Colombia,
Cartagena Nov. 1857 (F.C.M., 40904).
43. *Gracilaria caudata* J. Ag.
Colombia, Cartagena Nov. 1857 (F.C.M.,
40919, 40935, 40920, 40909, 40921, 40912F.)
44. ✓ *Gracilaria cervicornis* (Turn.) J. Ag.
Cuba, Havana Nov. 1864 (F.C.M., 41505);
Yucatán, Sisal May 1865 (F.C.M., 40339, 40340),
Celestun May 1865 (F.C.M., 40328); Colombia,
Cartagena Nov. 1857 (F.C.M., 40910); another
specimen from the same locality
(F.C.M., 40933) approaches *G. ferox* J. Ag.;
another is labeled "*Alsidium Schottii*
Harw. n. sp." (F.C.M., 40940) but this is a
palpable error caused by labels being
mixed in Schott's material.
45. *Gracilaria compressa* (C. Ag.) Grw.
Gulf of Mexico 1853 (F.C.M., 42616);
Colombia, Cartagena Nov. (F.C.M. 40939);
Yucatán May 1865 (F.C.M., 40326, 40327, 40330,
40331, 40333, 40337.), a young and frag =

mentary specimen from Colombia, Cartagena Nov. 1857 (F.C.M., 40947) is also doubtless this species.

46. *Gracillaria confaroides* (L.) Grv.
Texas, Indianola Jan. to Feb. 1853 (F.C.M., 42609, 42610, 42612, 42614, 42615); Colombia, Cartagena Nov. 1857 (F.C.M., 40934); Jucatan, Sisal Dec. 1864 (F.C.M., 40121).
47. *Gracillaria cornea* J. Ag.
Jucatan, Sisal Nov. 1864 (F.C.M., 40124); Colombia, Cartagena Nov. 1857-8 (F.C.M., 40902, 40905, 40907, 40914, 40916, 40923, 40924), I doubtfully place F.C.M., 40901 from the same locality under this species; there is a doubt as to whether the plant was originally terete or flat.
48. *Gracillaria dentata* J. Ag.
Cuba, Havana Nov. 1864 (F.C.M., 41508)
49. *Gracillaria Domingensis* Sord?
Colombia, Cartagena Nov. 1857 (F.C.M., 40911, 40912) These specimens correspond to the figure of this species in Kützling Tab. Phyc., I am inclined to believe however, that they are not specifically distinct from *G. cervicornis* (Turn.) J. Ag.
50. *Gracillaria multipartita* (Lem.) J. Ag.
California, Santa Barbara (F.C.M., 44991); Cuba, Havana Nov. 1864 (F.C.M., 41506, 41507); Colombia, Cartagena Nov. 1857 (F.C.M., 40917, 40918, 40949). Jucatan, Sisal May 1865 (F.C.M., 40325).
51. — var *polycarpa* (Grv.) J. Ag.
Colombia, Cartagena Nov. 1858 (F.C.M., 40913, 40915, II, 40922).
52. *Gracillaria* sp.
Growing on *Cryptomenia luxurians* on coral at Cartagena, Colombia Nov. 1857 (F.C.M., 40906). F.C.M., 40938 from this station is too poor in material for specific determination. Texas, Indianola 1853 (F.C.M., 42617) not specific.

Yucatan, Calistun (F.C.M., 40233), Progreso (F.C.M., 40329) & Sisal (F.C.M., 40344) are too fragmentary for identification as to species

53. *Hyponia cornuta* J. Ag.
Colombia, Cartagena Nov. 1857 (F.C.M., 40931, and with doubt 40930).
54. *Hyponia divaricata* (Turn.) Grw.
California, Santa Barbara Oct. 1854 (F.C.M., 44997).
55. *Hyponia musciformis* (Kütz.) Lamx.
Colombia, Cartagena (F.C.M., 40929, 40951); Texas, Indianola Feb. 1854 (F.C.M. 42624); Yucatan, Progreso Apr. 1865 (F.C.M., ⁴⁰²¹⁴40335), Sisal, May 1865 (F.C.M., 40125, 40126, 40336, 40343).
56. *Hyponia pinnosa* J. Ag.
Colombia, Cartagena Nov. 1857 (F.C.M., 40937).
57. *Hyponia spinella* J. Ag. var
Colombia, Cartagena Nov. 1857 (F.C.M., 40932)
- (Do you wish to describe this?)
58. *Hyponia* sp.
California, Santa Barbara Oct 1854 fragments only (F.C.M., 45001, 45002); also Colombia, Cartagena (F.C.M., 40942, 40943).

Rhodymeniaceae

59. *Rhodymenia corallina* (Bory.) J. Ag.
California, Santa Barbara Oct. 1854 (F.C.M., 45009).
60. *Rhodymenia* sp.
Colombia, Cartagena Nov. 1857
A sterile form apparently near *R. Palmata* (Espr) Grw. (F.C.M., 40893, 40593).
61. *Lomentaria ovalis* (Huds.) Endl
Colombia, Cartagena Nov. 1857 (F.C.M., 40952).

62. — var *Conteri* Kew.
California, Santa Barbara Oct.
1854. (F.C.M., 45003)

Delesseriaceae

63. *Nitophyllum Durivillaei* (Bory.) Grev.
California, Santa Barbara, Oct. 1854
(F.C.M., 45013)
64. *Nitophyllum lacratum* (Gmel.) Grev?
Colombia, Cartagena (F.C.M., 40941)
Fragmentary and doubtful.
65. *Nitophyllum Ruprechtianum* J. Ag.
California, Santa Barbara Oct.
1854 (F.C.M., 45006, 45011, 45026).
66. *Nitophyllum violaceum* J. Ag.
California, Santa Barbara Oct.
1854 (F.C.M., 45006, 45007, 45018), and on
Romantaria walis Conteri from same
locality (F.C.M., 45003).
67. *Nitophyllum* sp.
A specifically indeterminate
fragment from California, Santa
Barbara Oct 1854 (F.C.M., 45012).
68. *Neuroglossum Andersonianum* J. Ag.
California, Santa Barbara Oct. 1854
(F.C.M., 44989, 41528).

Rhodomelaceae

69. *Laurencia cervicornis* Kew.
Cuba, Havana Nov 1864 (F.C.M., 41511)
70. *Laurencia obtusa* (Kütz.) Lamx.
Yucatan, Progreso, Apr. 1865 (F.C.M.,
40123, ⁴⁰²¹⁴40227, 40228, 40229, 40230, 40231,
40689); a specimen from Yucatan,
Sisal May 1865 F.C.M., 40232 is of a
slender form approaching *L. implicata*
J. Ag.
71. *Laurencia paniculata* (C. Ag.) Kütz.
Cuba, Havana Nov 1864 (F.C.M., 41509)
Colombia, Cartagena (F.C.M., 40908), a
fragment doubtless of this species
from Mex. Boundary at mouth of

Rio Bravo del Norte Nov. 1853 (F.C.M., 42622).

72. *Laurencia papillosa* (Forsk.) Grw.
Colombia, Cartagena Nov. 1858
(F.C.M., 40899).
73. *Laurencia tuberculosa* J. Ag.
Colombia, Cartagena Nov. 1858
(F.C.M., 40897, 40898).
74. *Laurencia* sp.
Colombia, Cartagena. a small
fragment (F.C.M., 40929).
75. *Chondria atropurpurea* Warw.
Yucatan, Sisal May 1865 (F.C.M., 40926)
Colombia, Cartagena (F.C.M., 40950).
76. *Chondria nidifica* Warw.
California, Santa Barbara, Oct.
1857 (F.C.M., 45019).
77. *Chondria tenuissima* (Gardner & Woodw.) C. Ag.
Yucatan, Progreso Apr 1864 (F.C.M.,
40212).
78. *Acanthophora Antillarum* Mont?
This form described by Montagne
in Kütz. Tab. Phyc., is probably not
different from the next species
Colombia, beach near Boca Grande,
Cartagena, Nov. 1857 (F.C.M., 40892).
79. *Acanthophora Thierii* Lamx.
Yucatan, Sisal May 1865 (F.C.M.,
40304).
80. *Digenea simplex* (Kütz.) C. Ag.
Texas, Indianola Jan. 1853 (F.C.M.,
42600, 42601) Yucatan, Celestun May 1865
(F.C.M., 40260).
81. *Polydiphonia Baileyi* (Warw.) J. Ag.
California, Santa Barbara, Oct.
1854 (F.C.M., 44995, 45024).
82. *Polydiphonia collabens* (C. Ag.) Kütz.
Texas, Indianola, (F.C.M., 42602). See
note under *Agardhiella tenera*.

83. *Polytrichum ferulacea* Lühr.
Texas, Indianola 1855 (F.C.M., 42607).
84. *Polytrichum hirta* J. Ag.
Texas, Indianola 1853 (F.C.M., ~~42602~~,
42606). Colombia, Cartagena (F.C.M., 41193)
85. *Polytrichum wacolata* (Lightf.) Lühr.
California, Santa Barbara Cal.
1854 (F.C.M., 44993).
86. *Bryothamnion Seaforthii* (Turn.) Kütz.
Colombia, Cartagena Nov. 1857 (F.C.M.,
40944). Cuba, Havana, Nov. 1864 (F.C.M.,
41503). Yucatan, Progreso April 1865
(F.C.M., 40201, 40202, 40203), Sisal May 1865
(F.C.M., 40295).
87. *Bryothamnion triangulare* (Sm.) Kütz.
Colombia, Cartagena Nov. 1857 (F.C.M.,
40945, 40946). Cuba, Havana Nov. 1864 (F.C.M.,
41504). Yucatan, Progreso Apr 1865 (F.C.M.,
40159) Celestun, May 1865 (F.C.M., 40687, 40298,
40299, 40300 the last three numbers are
of a slender form approaching *B.*
Seaforthii).
88. *Rytiphloea*
Colombia, Cartagena Nov. 1857 (F.C.M.,
40896, 40903).

(space for your decision on this)

89. *Vidalia obtusiloba* (C. Ag.) J. Ag.
Rytiphloea obtusiloba C. Ag. Colombia
 Cartagena Nov. 1857 (F.C.M., 40900).
90. *Dasya elegans* (Mart.) C. Ag.
 Texas, Indianola Jan'y. 1853 (F.C.M.,
 42608).
91. *Dasya Helenae* Farlow
 California, Harbour of San Diego
 Oct. 1854 (F.C.M., 45025).
92. *Dasya ramosissima* Harw.
 Yucatan, Progreso Apr. 1865 (F.C.M.,
 40580) a form of the species.

Ceramiales

93. *Spyridia aculeata* J. Ag.
 Yucatan, Sisal May 1865 (F.C.M., 40297)
 Celestun May 1865 (F.C.M., 40213).
94. *Spyridia filamentosa* (Kütz.) Harw.
 California, Santa Barbara (F.C.M.,
 44998 on ~~*Sigatima spinosa*~~), Colombia
 Cartagena Nov. 1857 (F.C.M., 40926). Yucatan,
 Progreso May 1865 (F.C.M., 40599).
95. *Spyridia* sp.
 Mex, Boundary on sea beach at
 mouth of the Rio Bravo del Norte
 Nov. 1853. So covered with parasites
 as to be indeterminate (F.C.M., 42621).
96. *Ceramium nitens* C. Ag.
 Colombia, Cartagena on shells
 (F.C.M., 40894).
97. *Ceramium subtile* J. Ag.?
 Yucatan, Progreso May 1865 (F.C.M.,
 40211, 40214, 40215, 40216, 40221, 40222,
 40223, 40224, 40225) Sisal May 1865 (F.C.M.,
 40218, 40220). All of these specimens
 are far from approaching too near
 C. fastigiatum Harw.
98. *Ceramium tenuissimum* Lyngh.
 Texas, Indianola Jan'y - Feby 1853
 (F.C.M., 42603, 42605, 42618, 42619, 42620). Yucatan,
 Sisal May 1865 (F.C.M., 40343).

99. *Leranium clavatum* (C. Ag.)
Texas, Indianola (F.C.M., 42604). California,
Santa Barbara Oct 1854 (F.C.M., 44994).
Colombia, Cartagena Nov. 1857 (F.C.M., 41191).
Yucatan, Progreso, Apr. 1865 (F.C.M., 40217).
100. *Microcladia californica* Farl.
California, Santa Barbara (F.C.M., 41195).
101. *Microcladia Coultteri* Kew.
California, Santa Barbara Oct.
1854 (F.C.M., 44999).

Grateloupiaceae

102. *Xalymenia floresia* (Clem) C. Ag.
Colombia, Cartagena Nov. 1857
(F.C.M., 40928).
103. *Cryptonemia crenulata* J. Ag.
Colombia, Cartagena Nov. 1857 (F.C.M.,
40925, 40948).
104. *Cryptonemia luxurians* (Mert) J. Ag.
Colombia, Cartagena on corals
Nov. 1857 (F.C.M., 40906)

Corallinaceae

105. *Amphiroa Orbigniana* Dec?
California, Santa Barbara (F.C.M.,
45023) Specimen much broken.
106. *Corallina chilensis* Dec. in Kew. Nov. Austr.
California, Santa Barbara (F.C.M., 45020)
107. *Corallina leuvenis* (Mont)
Jania leuvenis Mont. Colombia,
Cartagena Nov. 1857 (F.C.M., 40925). Cuba,
Havana Nov. 1864 (F.C.M., 41503). Yucatan,
Sisal May 1864 (F.C.M. 40305).
108. *Corallina rubens* L.
Jania rubens Lamx. Yucatan, Progreso,
Celestun and Sisal Apr.-May. (F.C.M., 40306,
40260, 40305).

Inserenda

109? *Waliseria delicatula* (Rams.) J. Ag.
Yucatán, Sisal Dec 1864 (F.C.M., 40584).

110? *Ascotamcon intricatum* Kütz.
Yucatán, Celestun May 1865 (F.C.M.,
40681).

19 Cambridge
Nov. 29, 1898

Dear Prof. Millspargh, I return with this
the package of Schott's algae by express
hoping that the snow blockade we
have had lately is now over so that
all the trains are running. In the
package I put a full list of all the
specimens numbered in the order they
were sent. With this I enclose a list
of the species arranged systematically
by localities.

I am unable to recognize among the
specimens sent any which can be
referred to *Alsidium* Schott's n. sp. Horn.
The specimen marked with that name
is certainly a mistake for it is not
an *alsidium* nor is it closely related to
Alsidium. What was intended by
Harvey under that name I cannot
swear unless perhaps it is some
of the slender forms marked *Alsidium*
(*Bozothamnum*) *Lafortii*.

The *Pytiophora* marked n. sp. is repre-
sented by two specimens and the species
is probably a good one. It comes, however,
rather near *Pytiophora episcopalus* and
I should not think it well to describe

it until I am able - as I expect soon to be
- to compare with the type of *K. episcopalis*,
as is always the case in collections made
in the Gulf of Mexico, there is a large number
of forms of *Gracilaria*, *Laurencia* and
Glyphea, genera in which the species are
not well defined and in which ^{indeed too many} ~~the~~ species
have been described. The same is true of
the species of *Collophyllis* found on the
Californian coast. In the case of the genera
named, there will always be a difference
of opinion as to the species among algologists.

I notice that you are to leave soon for
Yucatan and I therefore return the specimens
which you sent the other day and the
names of which I sent in my last letter.
As I may be away some time and you also
I thought that you would prefer to have the
specimens at hand, I send the specimens
with this by mail and not in the large
package which goes by express.

I have kept a duplicate list of the
Schott algae so that, when you return,
if any information further is needed I
can give it by consulting the list. As I
wrote you, my handwriting is so bad that
I did not wish to deface the specimens
by writing on them. My list can easily
be copied by some one who writes a better
hand. I do hope to be in the West Indies
for a time this winter but I do not
know just when. Yours truly
W. G. Farlow

Algae collected by Arthur Schott,
Sent by Prof. Millspaugh from Field 19
Columbian Museum. in 1898.

I

Yucatan algae, coll 1864, 1865,

Chlorophyceae

- Ulva lactuca* (L.) Le Jolis Progresso
Euteromorpha sp. not in good condition
Fresh-water Merida.
Cladophora laetevirens Harv. Lisal.
" *parvicularis* (Mert.) Kütz Lisal
Liphonocladus membranaceus (C. Ag.) Bonnet. Lisal
Ascothamnion intricatum Kütz. Celestun
Bryopsis plumosa (Huds.) C. Ag. Lisal.
Bryopsis hypnoides Lam. x vel aff. Lisal
Caulerpa Ashmeadii Harv. Lisal
Caulerpa cypripedioides (Vahl) C. Ag. Lisal
Caulerpa parvifolia (Boyd) Harv. Progresso
var. *Wurdenmanni* Weber van Bosse, Lisal.
Caulerpa pinnata (L.) Weber van Bosse
var. *Mexicana* Weber van Bosse Lisal
= *Caulerpa Mexicana* Lond.
Caulerpa protifera (Fensholt) Lam. x

Caulerpa simplex nom. nudum = imperfecto
 form of *Caulerpa cymosa* (Vahl) C. Ag?
Codium tomentosum (Huds.) Stack. Celestem
Penicillus capitatus Lamour. Lesab.
Halimeda tuna Lamour. Lesab.

Phaeophyceae

Dictyota cernuicornis Kütz? Lesab.
Dictyota ciliata J. Ag. Progresso.
Padina pavonia (L.) Gaillon. Progresso
 " *Dumillaei* Bon. Celestem
Halosira delicatula (Lamour) J. Ag. Lesab.
Sargassum filipendula (C. Ag.) J. Ag. Lesab.

Rhodophyceae

Solenia chordalis (C. Ag.) not of Harvey
 var. *am. Bon.* Lesab.
Eucheuma acanthocladium (Harv.) J. Ag. Lesab.
Eucheuma isiforme (C. Ag.) J. Ag. - Progresso.
Gracilaria cernuicornis (Lamour) J. Ag. Celestem
 " *compressa* (C. Ag.) Grun. Lesab. Progresso
 " *multipartita* (Clem.) J. Ag. Lesab.
Hypnea musciformis (Wulf.) Lamour. Lesab. Progresso
Laurencia obtusa (Huds.) Lamour. Progresso.

a. Schott. algae cont. Yucatan ¹⁹ Carthage ³

- Chondria atropurpurea* Harv. Lissal
 " *tenuissima* (Grav. & Wood.) C. Ag. ? Lissal
Acanthophora Thierrii Lamour. Lissal
Digenea simplex (Wulf.) C. Ag. Lissal
Bryothamnion Seafortii (Turn.) Kütz.
Bryothamnion triangulare (Emelin) Kütz. Lissal. Progresso.
Dasya ramosissima Harv. Progresso. Celestam
Spyridia aculeata J. Ag. Lissal. Celestam
 " *filamentosa* (Wulf.) Harv. Progresso.
Ceramium subtile J. Ag. Progresso. Lissal.
Ceramium tenuissimum Lyngh. Lissal
Jania cubensis Mont. Lissal
Jania rubens (L.) Lamour. Progresso. Lissal



Carthage Algae. Coll. Nov. 1857.

Chlorophyceae

Halimeda Tuna Lamour

Rhodophyceae

- Gelidium corneum* var. *caesariosum*
 = *Gelidium pusillum* (Lachn.) J. Ag.
Agardhiella tenera (J. Ag.) Schmitz
Solieria chordalis (C. Ag.) J. Ag. non Harvey

- Groenlandia caudata* J. Ag.
 " *cernicornis* (Turn.) J. Ag.
 " *compressa* (C. Ag.) Grev.
 " *confervoides* (L.) Grev.
 " *cornea* J. Ag.
 " *Dominicensis* Lord.
 " *multipartita* (Lem.) J. Ag.
 " " *var. polycarpa* (Grev.) J. Ag.
Hypnea cornuta J. Ag.
 " *musciiformis* (Hud.) Lam. &
 " *paucosa* J. Ag.
 " *spinella* J. Ag.
Rhodomenia sp. an *R. corallina* (Boyd) Kütz.
Lomentaria ovalis (Hud.) Eudl.
Nitophyllum. Fragment perhaps
N. lacernatum (C. Melin) Grev.
Laurencia paniculata (C. Ag.) Kütz.
 " *papillosa* (Forsk.) Grev.
 " *tuberculosa* J. Ag.
Chondria atra purpurea Harv.
acanthophora Antillarum Mont. ~~var~~ ⁱⁿ
 Kütz. Jah. Phyc. Probably not dif-
 ferent from *a. Thierryi* Lam. &
Polydora viridis J. Ag.
Bryothamnion perforata (Turn.) Kütz.
 " *triangulare* (C. Melin) Kütz.

a. Schott. Algae Cuba, Cartagena Havana 5.
19

Rytiphloea n. sp. Harvey, near *R. chiscon-*
holis (Mont.) Soudl.
Vidalia obtusiloba (C. Ag.) J. Ag.
Spyridia filamentosa (Wulf.) Harv.
Ceramium nitens C. Ag.
Halymenia florens (Clem.) J. Ag.
Cryptomenia crenulata J. Ag.
" *luxurians* (Mert.) J. Ag.
Gania cubensis Mont.

111

Havana Algae. Coll. Nov. 1864.

Chlorophyceae

Halimeda Opuntia (L.) Lam. x

Rhodophyceae

Galaxaura marginata (Leland.) Lam. x

= *Broochycladia marginata* Schmitz.

Galaxaura neozoa (Leland.) Lam. x

Meridemannia setacea Harv.

Gracilaria cernicornis (Turn.) J. Ag.

" *dentata* J. Ag.

" *multipartita* (Clem.) J. Ag.

Laurencia cernicornis Harv.

" *paniculata* (C. Ag.) Kütz.

Bryothamnion triangulare (Emelin) Kütz.

Gania cubensis Mont.

IV

Indianola Algae, Coll. Jan & Febr 1853.

Rhodomyces

- Agardhiella tenera* (Grav.) Schmitz
Myrionecta musciformis (Huds.) Lamour.
Gracilaria compressa (C. Ag.) Grun.
" *confervoides* (L.) Grun.
Digenea simplex (Wulf.) C. Ag.
Polysiphonia collabens (C. Ag.) Kütz.
" *ferulacea* Lamour.
" *hirta* Gr. Ag.
Dasya elegans (Mont.) Gr. Ag.
Thyridia Rio Bravo
Ceramium tenuissimum Lyngb.
Centroceras clavulatum (C. Ag.) Mont.

V

Santa Barbara Algae, Coll. Oct. 1853

Rhodomyces

- Cladophora leptorhynchos* Gr. Ag. = *C. micro-*
phylla var. *horrida* Sartor.
C. microphylla Harv.
C. spumosa Kütz.
C. volans C. Ag.
Stenogramma interrupta (C. Ag.) Mont.

- Callophyllis furcata Farlow
" laciniata (Hada) Kütz?
" rhynchocarpa Ruprecht
" variegata (Bory) Kütz
Cracilaria multo-partita (Clem.) J. Ag.
Hypnea divaricata (Turn.) Gr. ex.
Rhodymenia corallina (Bory) J. Ag.
Neuroglossum undulatum J. Ag.
Nitophyllum violaceum J. Ag.
" Ruprechtianum J. Ag.
Nitophyllum Durvillaei (Bory) Gr. ex.
Chondria nidifica Horn
Polysiphonia wracolata (Lign.) Gr. ex.
" Baileyi (Horn) J. Ag.
Dasysphaera keluae Farlow in Herl.
Spiridea filamentosa (Malf.) Horn
Centracera clavulata (C. Ag.) Gr. ex.
Microcladia Cautleyi Horn
" Californica Farlow
Amphiroa orbizumana Decaisne
Corallina Chilensis Decaisne in Horn
" nebulosa?

Specimens from Mills & Jaeger
Nov. 1386. *Phaenogramma* 19

Schott, 24 & 14, West Texas,
Head of the Limpia.

Batrachospermum
near *Dillenii*

1385. *Chara Hornemannii*

Waldsleut

Yucatan Cañon

Schott, Puget Sound 33

Desmarestria intermedia

Schott, Puget Sound ^{Rubri} 32

Rhodonella floccosa

1384, Yucatan Cañon ^{Tarn} 2

Bryoctonum *union* *Leofertii*
approaching *B. triangularis*

Schott, Cañon 28.

Ectocarpus octosporus

Schott 34, Boca de Rio Bravo.

Largesseum ferganense Kz.
Cañon 307. San Felipe

34, 35 *Indicium* Schott

Ceramium *terrestris*

Lists and letters
on A. Schott's algae
returned to Prof. Millspaugh
Nov. 29. 1898.

40113. *Caulerpa Ashmeadii* Harv.
 40114. *Codium tomentosum* ^(Hudson) Stackh.
 40117. *Eucheuma isiforme* (C. Ag.) J. Ag.
 40118 & 40119. marked *Laurencia gemmifera*

These are both smooth forms of *Eucheuma isiforme* sometimes called *Eucheuma nudum*.

40120. *Eucheuma isiforme*.
 * 40122. " " f. *elongata*.
 # 40123. *Laurencia obtusa* (Huds.) Lamour. a large form.
 40125. 40126. *Hypnea musciformis* ^(Wulfen) Lamour.
 40156, 40157, 40158, *Caulerpa cypripoides* (Fahl) C. Ag.
 40159. *Bryothamnion triangulare* (Ag.) (Gm.) Kütz.
 40160. *Eucheuma isiforme* (C. Ag.) J. Ag. fruct!
 40161. " " "
 40205. *Ulva lactuca* (L.) Le Jolis.
 40207. *Caulerpa prolifera* (Forssk.) Lamour.
 40208, 40209, 40210. *Caulerpa paspaloides* (Bory) Harv.
 var. *Murdemanni* Weber van Bosse
 com A. C. *Phyllophloston* Murray in *Trans. Linn. Soc.*
 2nd Ser. III, 212, Pl. 53, f. 36. in which
 the pinnales are uniseriate. These are
 biseriata.
 X 40121. *Gracilaria coupervande*
 XX 40124. *Gracilaria comua* J. Ag.

40211, 40212, 40213, 40223, all on one sheet but not all the same species 19

40211 & 40223 are *Ceramium* see 40215.

40212 is a *Chondria* (*Chondropsis* J. Ag.),

perhaps *C. tenuissima* J. Ag. but the specimen is too fragmentary to be determined with certainty. *Chondria tenuissima* (Good. & Wood.)

40213. *Spyridia aculeata*, J. Ag. C. Ag.

40214. Mixed. *Hypnea musciformis*.

Laurencia obtusa & *Ceramium* see 40215.

40215. *Ceramium* same as 40211, 40216, 40223

& 40224, 40222, 40221, 40218, 40220, 40225.

These which are marked *Ceramium* *subtile* J. Ag. may be kept under that name but they come too near *Ceramium fastigiatum* Harv.

40216. *Ceramium* and *Centrocecas clavulatum*

40219 bad specimen. 40216

40220. *Ceramium*, see 40215

(C. Ag.) Mont.

40224
40225. see 40215

40226. Marked *Dictyota dichotoma*. It is not characteristic of that species but the margin is spiny and seems to me to be *Dictyota ciliata* J. Ag.

40227. *Laurencia obtusa* (Huds.) Lamour.

40228. *Laurencia obtusa*.

40229. *Laurencia obtusa*.

40230 " "

40231 " "

40232. *Laurencia obtusa* a slender form approaching *L. implicata* J. Ag.

40233. Imperfect fragments of some *Gracilaria*. 19

40245, 40246. marked *Dictyota fasciola*?
This is not typical *D. fasciola* but
rather *Dictyota cervicornis* Kt.

40247. *Padina Durvillaei* Borg

40248. *Padina Pavonia* (L.) Gaillon

40249. *Padina Pavonia* (apparently) L. Gaillon

40250. *Sargassum filifendula* (C. Ag.) J. Ag.

40251. *Caulerpa pinnata* (L.) Weber var. *Bosse*
var. *Mexicana* Weber var. *Bosse*
= *C. Mexicana* Lond.

40252. Marked *Caulerpa simplex* mihi.
Who is the "mihi" Harvey or Schott? The
species was apparently never described
under that name. ^{an interesting form which}
~~of *Caulerpa capensis* Schott.~~

40253. Marked *Cladophora flexuosa*. I should
think that this was the *Cladophora*
laetevirens ^{Harvey} mentioned by Harvey in
his list of Schott's plants.

40254, & 40255. The latter appears to be
Bryopsis plumosa (Huds.) C. Ag. 40254 is not
in condition to be named.

40256 = 40253. *Cladophora laetevirens* Harv.

40257. *Bryopsis hypnoidea* Lamour.

40258. Marked *Batechoospermum*. This
is not an alga but eggs of
some animal.

This specimen is
a small envelope
form of some species
probably *Codium*

- 40 260. *Digema simplex* (Nulf) Colz IV
 & *Jania rubens* (L.) Lamour 19
- + 40 295. *Bryothamnion Seaforthii* (Turn.) Kütz.
 40 296. *Chondria atropurpurea* Harv. (Turn.)
- + 40 297. *Pyridia aculeata* J. Ag.
 - 40 298. *Bryothamnion triangulare* (Emeli) Kütz. slender
 form and approaching *B. Seaforthii*,
 40 299. ditto. (Turn.) Kütz.
 40 300. ditto.
- + 40 301. *Bryothamnion Seaforthii* (Turn.) Kütz.
 40 302 & 40 303 " "
- + 40 304. *Acanthophora Thierci* Lamour!
 40 305. Mixed. *Jania rubens* (L.) Lamour & *Jania*
Cubensis Mont.
- 40 306. *Jania rubens* (L.) Lamour.
 40 319. *Eucheuma isiforme* (C. Ag.) J. Ag.
 40 320. " "
 40 322. " "
 40 323. " "
 40 324. " "
- + 40 325. *Gracilaria multipartita* (Clem.) J. Ag.
 40 326 } *Gracilaria compressa* (Ag.) Grun. f. angus
 40 327 }
- + 40 328. Marked *Gracilaria compressa*. It
 does not seem to me to be that species
 but to be *Gracilaria cervicornis*
 (Turn.) J. Ag.

40329, a *Gracilaria* but the specimens too poor to be named. 19

40330, 40331, 40333. *Gracilaria compressa*

40335, 40336. Probably both *Hypnea musciformis* but the specimens are imperfect. (Wulf.) Lamour.

40337. *Gracilaria compressa* (C. Ag.)

X 40339, 40440, *Gracilaria cernicornis* (Grev.) Lamour.

X 40342. *Eucheuma acanthocladum* (Harv.) J. Ag.

40343. Mixed. *Hypnea musciformis*, *Ceramium* & *Halimeda tuna* Lamour.

40344. *Gracilaria tenuissimum* Lyngb. covered with incrustation

40575, *Penicillium capitatus* Lamour.

40576 & 40577, *Halimeda tuna* Lamour.

40578. Not *Halimeda* & *punctata* but *H. tuna*. Lamour.

40579 *Phyridia filamentosa* (Wulf.) Harv.

40580. As marked on specimen this seems to be a form of *Dasya ramosissima* Harv.

X 40582. *Cladophora fascicularis* (Mert.) (C. Ag.) Kütz.

X 40583. *Liponodadus membranaceus* (Kütz.) Bonm.

X 40584. *Halysoria delicatula* (Lamour.) Ag.

X 40681. *Ascolthamnion intricatum* Kütz.

X 40687. *Bryothamnion triangulare* (Gmelin) Kütz.

40688. *Lolieria chordalis* (C. Ag.) J. Ag. 19 VI

40689. *Laurencia obtusa* (Huds.) Lamx var

40690. *Euteromorphia*, Not in good condition
and species cannot be named.

40891. *Holimedia Tana* Lamx

40892. *Asanthophora antillarum* Mont
in Kütz. Jah. Phys.

40893. Marked *Cryptomenia luxurans*?
Not a *Cryptomenia* but like 40853 must
be referred to *Rhodomenia* near
R. Palmetta (Esper) Griseb.

40894. *Ceramium nitens* C. Ag.

40895. *Gelidium corneum* var. *caespitosum*
J. Ag. = ? *pusillum* (Staehm.) Le Jolis

40896. *Rytiphloeas* sp? near *R. episcopalis*
(Mont.) Edm.

40897, 40898. *Laurencia paniculata* (C. Ag.) Kütz.
It is often ^{very} difficult to distinguish
L. paniculata from *L. tuberculosa* J. Ag.
I should be inclined to call these
specimens *L. tuberculosa*.

40899. *Laurencia papillosa* (Forsk.) Griseb.

40900. *Vidalia obtusiloba* (C. Ag.) J. Ag.

40901, 40902. It is not clear whether this
was originally terete or flat. I think the
former and I should call 40902, *G. cornea*
J. Ag. and call 40901. *G. cornea*?

40903 (I) *Rytiphloeas* = 40896. II is a *Polysiphonia*
near J. Ag. near J. Ag.

- 40904. *Gracilaria cancellata* J. Ag. slender form
- 40905? *Gracilaria cornea* J. Ag.
- 40906. Marked *Gracilaria divaricata*; There is a small fragment of an imperfect *Gracilaria* but the main specimen is *Cryptonemia luxurians* (Mont.) J. Ag.
- 40907. *Gracilaria cornea* J. Ag.
- 40908. *Laurencia paucicellata* (C. Ag.) Kütz.
- 40909. *Gracilaria cancellata* J. Ag.
- 40910. *Gracilaria ceruicornis* (Arn.) J. Ag.
- 40911, 40912 Marked *Gracilaria douglasensis* Lond. These correspond to the figure of that species in Kützinger Jah. Phyk. I am inclined to believe, however, that they are not specifically distinct from *G. ceruicornis*.
- 40913 I is the same as 40921
- 40913 II the same as 40915 and 40922. They are 40913 (I) & (II) the same species! I is fertile, the others are not. *Grac. rangiferma* is now put in *G. dentata* J. Ag. but if your specimens are *G. dentata*, they are an unusual form. I should be inclined to call 40913 (II) / 40915 & 40922 *Gracilaria multipartita* (Clem.) J. Ag. var. *polycarpa* (Crem.) J. Ag. 40913 (I) & 40921 I should call *Gracilaria cancellata* J. Ag.
- 40914. *Gracilaria cornea* J. Ag.
- 40915, see 40913 (II)
- 40916. *Gracilaria cornea* J. Ag.
- 40917, 40918. *Gracilaria multipartita* (Clem.) J. Ag.
- 40919, 40920. *Gracilaria cancellata* J. Ag.
- 40921, see 40913 (I)
- 40922, see 40913 (II)

- 40923, 40924, *Gracilaria cornea* J. Ag. VIII*
40925. *Gamia cubensis* Mont. & *Cryptomenia*
crenulata J. Ag. 19
- 40926 *Lpyridia filamentosa* (Wulf.) Harv.
40927. Sterile but frond seems to be that
of *Rhabdonia tenera* J. Ag. = *Agardhiella*
tenera Lemm. J.
40928. *Halymenia Florescia* (Clem.) C. Ag.
40929. Small bit of *Laurencia*. In the envelope
is *Hypnea musciformis* (Huds.) Lam. J.
40930. *Hypnea cornuta* J. Ag. ?
40931. *Hypnea cornuta* J. Ag.!
40932. *Hypnea spinella* J. Ag. ?
40933. I should call this *Gracilaria feroculosa*
rather than *G. cernicornis* (Turn) Ag. of *G. feroculosa* J. Ag.

40934. *Gyrodia confusoides* (L.) Grev. 40935. *Gyrodia caudata* Grev. VIII

X 40936. *Solieria chordalis* (C. Ag.) J. Ag.

40937. *Hypnea pannosa* J. Ag. 19

40938. Too poor to name. a mixture of *Hypnea* and *Gracilaria*

40939. *Gracilaria compressa* (C. Ag.) Grev.

40940. Marked *Alsidium Scottii* n. sp.

This must be an error, the specimen is not an *Alsidium* but a *Gracilaria*,

+ *G. cernicornis* (Turn.) J. Ag.

+ 40941. A ~~no~~ *Nitophyllum* too fragmentary to name. Perhaps *N. laciniatum* (Gmel.)

40942. ~~Hypnea~~ *Hypnea*. a mere fragment. Grev.

40943. ditto.

40944. *Bryothamnion leafy* (Turn.) Kütz.

40945. *Bryothamnion triangular* (Gmelin)

40946 " " Kütz

40947 *Gracilaria*. Perhaps young *G. compressa*

X 40948. *Cryptomenia crenulata* J. Ag.

40949. *Gracilaria multipartita* var. *maritima* with animals

40950. Probably *Chondria atropurpurea* Harv.

40951. *Hypnea musciformis* (Wulf.) Lamour.

40952. *Lomentaria ovalis* (Huds.) Endl.

40953. ~~*Gracilaria dichotomo-flabellata*~~
Marked *Rhodomenia*. *Léveillé* and uncertain.
Resembles *Rhodomenia corallina* (Bory) but that should not be West Indian.
The species must remain doubtful until fruit is seen

- Bayo 41503. *Jania cubensis* ^{Mont} or
 Bryothamnion *Seafortii* } 19
41504. *Bryothamnion triangulare* (Turn.) Kütz.
 41505. *Gracilaria cervicornis* (Turn.) J. Ag. (Emel.) Kütz.
 41506. *Gracilaria multipartita* (Clem.) J. Ag.
 41507. " " "
 41508. This is too small for me to tell
 whether it is *Gracilaria cervicornis*
 or *G. danacorum*, *Gracilaria dentata* J. Ag.
41509. *Laurencia paniculata* (C. Ag.) Kütz.
 41510. *Wardmannia setacea* Harv.
 41511. *Laurencia cervicornis*, Harv.
 41512. *Kalimnema Opuntia* (L.) Lamour.
 41513. ^{Bryochyloides} ~~*Galaxaura*~~ *marginala* (Lamour.) ^{Foland} ~~Lamour~~ ^{Schunz}
 41514. *Galaxaura rugosa* (Foland) Lamour.
42600. 42601. *Sigenea simplex* (Wulfen) C. Ag.
 42602. ^{*Azardiella verticillata*} ~~*Phaeodonta*~~ on which is growing
Polysiphonia collabens (C. Ag.) Kütz.
 42603. *Ceramium tenuissimum* Lyngb.
 42604. *Centroceras clavulatum* (C. Ag.) Mont.
 42605. *Ceramium tenuissimum*, Lyngb.
 42606. *Polysiphonia* ^{*hirta* J. Ag.} ~~*verticillata*~~ ^{Lyngb.}
 42607. " *ferulacea* Lamour.
 42608. Not *Dasya ramosissima* but
Dasya elegans (Mont.) C. Ag.
 42609. *Gracilaria confervoides* (L.) Geelv.
 42610. ^{*Azardiella*}
 42611. ~~*Phaeodonta*~~ *tenera* (J. Ag.) Schunz

42612. *Gracilaria confervoides* (L.) Grev. X
42613. Sterile but pond has structure of 19
Agardhiella and it's probably a very robust
form of *A. tenera* G. Ag. Schmidt
- 42614, 42615. *Gracilaria confervoides* X
42616. *Gracilaria compressa* (C. Ag.) Grev.
42617. As the note on label says, this might
be either *G. compressa* or *G. confervoides*.
It is not characteristic.
- 42618, 42619, 42620. *Ceramium tenuissimum*
42621. *Spyridia* covered with parvites Lyngh
42622. a fragment only, probably *Laurencia*
paniculata
42623. Poor specimen of *Rhobolonia* ^{*Agardhiella tenera* G. Ag. Schmidt}
42624. *Hypnea musciformis* (Wulf.) Lam. f.
42625. Not a chlorosperm but a rhoeosperm.
Fragment of a ~~*Rhobolonia*~~ ^{poor name} ~~specimen~~
44988. *Spyridia filamentosa* (Wulf.) Harv.
44989. *Neuroglossum Andersonianum* G. Ag.
44990. *Gigartina leptorhynchos* G. Ag.
= *Gig. microphylla* var. *harrida* Harv.
44991. *Gracilaria multipartita* (Clem.) G. Ag.
44992. ~~*Rhobolonia*~~ ^{poor specimen & name} ~~*Andersonianum*~~ Harv.
44993. *Polysiphonia urceolata* (Lightf.) Grev
poor specimen
44994. *Centroceras clavulatum* (C. Ag.) Mont,
and fragment of a *Callophyllis*
44995. *Polysiphonia Baileyi* (Harv.) G. Ag.
44996. *Stenogramma interrupta* (C. Ag.) Mont.

44997. *Hypnea divaricata* (Turn.) Griseb. XI
44998. *Gigartina spinosa* Kütz. In the envelope is *Gigartina microphylla* Harv.
- 44999 (1) *Microcladia Coulteri* Harv. 19
(2) *Microcladia Californica* Harlow
45000. *Gigartina spinosa* ^{Kütz.} In the envelope is *Microcladia Coulteri* Harv.
- 45001, 45002. Fragments of *Hypnea* too imperfect to name
45003. *Nitophyllum violaceum* J. Ag. on *Lomentaria ovalis* (Huds.) Endl. var. *Coulteri* Harv.
45004. *Callophyllis variegata* (Bory) J. Ag.
45005. Fragment of *Callophyllis*
45006. This is an inextricable mixture in which I see bits of *Nitophyllum Ruprechtianum* and *Nitophyllum violaceum*.
45007. In the envelope is *Neuroglossum Andersonianum* J. Ag. On the sheet is *Nitophyllum violaceum* J. Ag.
45008. *Callophyllis variegata* (Bory) J. Ag. ^{Kütz.}
45009. *Rhodomenia Corallina* (Bory) J. Ag.
45010. *Callophyllis furcata* Harlow
45011. *Nitophyllum Ruprechtianum* J. Ag.
45012. *Nitophyllum*, a fragment only.

- 45013. Nitophyllum Durvillae ^{but sterile} 19
- 45014. Callophyllis rhyzocarpa ^{in envelope Herbarium, Colombia} 19
- 45015, 45016. Imperfect specimens of Callophyllis
- 45017. This is what is called Callophyllis laciniata (Huds) Kütz of the Californian coast. It is doubtful whether it is really the same as the European species of that name and it may, after all, only a variety of C. variegata
- 45018. Nitophyllum viduatum J. Ag.
- 45019. Chondria viduatica Harv.!
- 45020. Corallina Chilensis Decaisne in Harv. Herbarium
- 45021. This is not a Grateloupia certainly. It may perhaps be a Gymnogongrus but the specimen is sterile and imperfect.
- 45022. Not Grateloupia Gobbesii but Gigartina volans C. Ag.
- 45023. an Amphiroa much broken up. Probably Amphiroa Arbizuiana Decaisne
- 45024. Not a Ptiloto but Polysiphonia ^{Decaisne} Baileyi (Harv.) J. Ag.
- 45025. Is there not a mistake in the locality? This certainly is not Dasya plumosa. It may be Dasya Dasya pacifica. I have called it previously Dasya Heleval Taslow
- 45026. Fragment of Nitophyllum ^{in Herbs} Ruprechtianum J. Ag.

- Y. 209. ~~6~~ (40113) *Caulerpa aspera* Léal 1865
 Y. 210. (40114) *Codium tomentosum*! Léal 1864

- Y. (40117) 221, *Ecklonia* isiforme naked?
 Y. 222. 222^a (40118. 40119) marked *Laurencia*
gemmifera, is naked *Ecklonia*
isiforme.
 Y. 223. (40120) " " ! Léal. 1864
 Y. 225 (40122) " " elongate - Léal 1864
 Y. 230 (40123) *Proserpinaca laurenciae* obliosa?
 near
 Y. 233. 233^a (40125) (40126) *Hypnea musciformis*
 Léal.

Y. 277. ^{typical} 277. ^{prospers} 277. ^{typical} (40156, 40157, 40158)
Caulepa cupressoides

Y. 279. (40160). *Eucheuma* *isiforme*! ^{fruct.} ^{prospers.} 1865

Y. 281 (40161) " " " " 1865

Y. 343 (40205) *Ulva lactuca* L. Projerus

Y. 344^a (40207) *Caulerpa prolifera*! Tisal 1865.

Y. 345^a 345^b (40210, 40208)
Caulerpa kochii Sides. Projerus. Tisal 1865.

Y. 345^a (40209) *Caulerpa phyllanthoides*
 Murray

40210 see 40208

Y. 402 346, (40215, 40214, 40223
 (40211) 40216 40224 } = *Ceramium*
 40225 } = *subtile*
 but host + spores of *fastigiatum*.
 cf. *C. flourensianum*

40214

40215

40216 see 40211

Y. 347 (40226) marked *Dicystos dichotoma*. Not
characteristic and a little spiny
approaching *D. ciliata*.

Y. 348^a (40227) *Laurencia obtusa*? Progresso,

Y. 348^b (40228) *Laurencia obtusa*? Probably
that species. Progresso. 1865

Y. 348^c (40229) *Laurencia paniculata*!
Progresso. 1865.

Y. 348^d 348^e (40230, 40231)

Laurencia paniculata. probably. Progresso. 1865
" *obtusa*? " "

Y. 348^f *Laurencia obtusa*. slender form
(40232) approaching *L. implectens*, Fiscal 1865

Y. 348^g (40233) excellent fragment

Y. 365, 365^a (40245, 40246) *Lisal. Dielysta*
cervicaris Kz.?

Y. 366^b & 366 (40249 & 40247) *Padina pavonina*
prospensa Kütz.

Y. 367 (40250) *Largosora* aff. *inermis*
= *L. filipendula* (C. Ag.) J. V. S.

Y. 368 (40251) *Caulerpa crassifolia* Ag. *Lisal.*
var. *Mexicana* J. Ag. = *C. Mexicana* Soud.

Y. (40252) 369, *Caulerpa simplex* (J. V. S.)
same as *C. cyprioides*.

Y. 370 (40253) *Cladophora* marked *flouosa*
cf. *laetevirens*, seems to be

" 372 (40256) *laetevirens* as understood by Harvey

Y. 371. 371^a (40254, 40255) marked *Bryopsis*
flouosa. Perhaps right

40256, see 40253

Y. 373 (40257) small *Bryopsis* near
like *B. hypnoides*

Y. 375 (40258) marked *Patoclethrum*
Cleatrum 1865. Animal eggs?

Y. 378. (40260) *Sargassum simplex*
& *Sargassum rubens*.

Y(40297) 420. *Spyridia aculeata*

Y. 422^a (40303) 422 (40301) 418 (40295)

Progressus ———— Hoel.

Alsedium Lebertii

Y. 423 (40304) *acanthophora Thierii*. Hoel 1865.

Y. 424. (40305) 424^a (40306) *Jama rubens* Hoel
 & Progressus.

- Y. 437 (40319) *Euthria* *isiformis* *isiformis* *isiformis*
- Y. 439 (40320) " " ! *isiformis* 1865
- Y. (40322) 441. *Euthria* *isiformis*
- Y. 441^a (40323) " " ! " " 1865
- Y. 441^b (40324) " " ! *isiformis* 1865
- Y. 445. (40325) marked *E. multipartita*.
May be *isiformis* (but in perfect and
might be *E. dentata*)
- Y. 446 (40326) *Gracilina compressa* marked
- " 448 (40344) ? *isiformis* *isiformis*
- Y. 446^a (40327) *isiformis* *isiformis*
- Y. 447 (40328) *Cleistania* *isiformis* *isiformis*
compressa *isiformis* *isiformis*
- " 447^a (40329) *isiformis* *isiformis* *isiformis*
- Y. 447^b (40330) *isiformis* *isiformis* *isiformis*
- Y. (40331) 447^c. *Gracilina* *isiformis* *isiformis*
isiformis *isiformis* *isiformis*

- Y. (40333) 449. *Proressa*, *Gracilaria*. Pooe,
 Y. 453 (40335) *Hypnea*, *Proressa*
 Y. 454 (40336) *Hypnea musciformis* Kütz.,

Y. 454^a. (40337) *Gracilaria* fragment
 probably *G. compressa*. Pooe, 65

Y

Y. 456 (40339) 456^c (40440) *Gracilaria cervicornis*
compressa & *divaricata*

Y. 464 (40342) *Eucheuma acanthocladum*
 var. off.

40344 see 40326

Y. 785 (40576) 785^a. *Halimeda Yana*

40577 ~~40577~~ 40576

Y. 786 (40578) *trial*. Marked *Halimeda*
opuntia but quite as much
like *H. tridens*. Not in good condition

~~Y. 787~~
Y. 40579. (787) *Hyridia filamentosa*,

Y. 788 (40580) Marked *Dasya ramosa* *me aff.*
May be that but not certain. 1865

Y. 789^a *Cladophora fascicularis* *trial*. 65
40582

Y. 791. (40584) *Nolisera delicatula*. *trial*.

Y. 348 (40689) *Proveso*. *Laurencia oblusa* *poor*

Y. 981, ascotromum in Tri catem, Celestem.
(40681) 1865

20

40687 = albidum triangular

Y. no number (40688). A. Thera. Lichordalis?

Y. no number (40690) Fresh Water Merida
Enterow of her. too poor. on clathrate?

Cart. 24 (40891) *Hali vedda tenuis*

Cartagena (40892) marked *Acanthopora
Antillarum*. Mont. may be that
species.

Cartagena (40893) marked *Cryptogonum*
auriculus seems to be *Cyrcillaria*
diachotoma-florellata.

" 40953. " " " " " " " " " " " "

Cart. 451 (40894) *Cercaria nitens*

Cartagena (40895) *Cyrcillaria* *Hyacinth*

Cart. (40897, 40898) marked *Laurencia* *pumilio*
seems rather *L. tuberculosa*

20

Cart. 50 (40899) *Laurencia papillosa*.

Cartagena (40900) *Rhytiphysa obtusiloba*.

40902 see 40905

Carthozena (40904) All same of racilaria
 " (40920) ²⁰ ~~racilaria~~ & caudata) More like
 (40909) than the others but
 very doubtful.

Carthozena 40907 named *E. dura*
 " 40914 " " *caudata*
 " 40924 " " *dura*
 " 40916 " " *caudata*
 " 40923 " " "
 " 40905 " " *caudata*
 " 40902. Seen all the
 same and appear to be *E. cornua*

Carthozena 40906. Mixed *E. racilaria*
divaricata & *Cryptoneuria luxurians*

40907 see 40905

~~Carthozena~~ 40908, Carthozena (40908) *Leucocera humidalata* ^{but new} *L. lateralis*

40909 see 40904

40914 see 40905

40916 " "

Carthagenae (40921) marked *C. ranziferina*
" (40935 " *C. dura*) all seem to be
" (40919) the same and not dura
or ranziferina but
rather *C. Poitei*.

40921 see 40919

40

40923 see 40905

40924 " "

Carthagenae (40925) *gamma cubensis*?

Carthagenae (40926) *Thyridia filamentosa*
perhaps but poor specimen.

Carthagenae (40927) *Rhabdonia uncinata*. Has
microscopic structure of this.

Carthagenae (40928) *Polysiphonia flexuosa*

Carth. (40929) *Laurencia hamulata* poor.

Carth. 12. (40917) 18. (40918) *Gracilaria multiseptata*

Carthagenae (40931) 14. *muco comata*

" (40930) " *musiformis*.

Centropogon (40933) *Q. cervicornis* &
rather *Q. ferox*

Centropogon 21. (40934) *Gracil. confusoides*
40935 see 40919

Cart. (40936) *Solitaria chordealis*.

Centropogon (40939) marked *Chondrus*
dasyphylla is *Q. neidleri*
probably *Q. compressa*?

Cart. (40942) *Hymen* very poor

Cart. (40943) *Hymen* very poor

Centropogon 3. 40944. *Alsiotium leafletus*,

Caldasera (40945) (40946)
 421 (40298)
 Y. (4068) (no number Merida) 421^a 421^b 278 (40159)
 Cuba (41504) (40299) (40300)
 all *Alpicium* *trivulgum*
 Indianote 42617. *Eroica* ~~*cupreovides*~~ *cupreovides*.

20

Catepud (40948) *Cryptogramma* ~~*erecta*~~
 J. B. G.

(40950) no locality. *Merkel Chondria*
 may be *Chond. atropurpurea*

Catepud (40951) *Hypnea musciformis*.

Catepud (40952) *Merkel Chrysomenia ramosissima*
 is *Lomentaria ovalis*.

40953. see 40893

Havana 964 (2648) 41503 *Gamnia cubensis* or
Bryothamn. Seafortii

Havana (41504) *Bryoth. triangularis*

(41505)

20

Havana (41506) *Groenlandia multifida*

Havana (41507) *Groenlandia multifida*

Havana (41508) *Groenlandia cervicornis*
vel *damascensis*

Havana (41509) *Laurencia pumilata*

Cuba (41510). Mashed *Gelidium* ? seems
to be *Wardlawia elaeagnifolia*

Havana (41511) *Laurencia cervicornis*

Havana (41512) *Halimnolobos pentata* & *Jana*

Havana (41513) Mashed *Hymenocera*
pumilata & *Galaxaura marginata*

" (40514) *Galaxaura rugosa*

Indiavola {42600} 8 genera number
{42601}

20

Indiavola (42603, 42605, 42618, 42619, 42620)
Cramurus tenuissimus

Indiavola (42604) *Centoceras devulabari*
var.

42605 see 42603

42606

42607

Indiavola (42608) marked *Dasya ramosissima*
rather *D. elegans*.

(Indiavola (42609)
(42612) *Gracilaria confusoides*
(42614)
(42615)
(42616)

42611

42612 see 42609

Gulf of Mexico, 42613, *Rhabdium*

42614, 42615 see 42609

Gulf of Mexico (42616) *Gracilaria compressa*

(42618) Indiantole see (42603)

(42619) " " (")

(42620) " " (")

Rio Bravo (42621) *Physidia* covered with
parasites

Rio Bravo (42622) *Laurencia puniculata* ? Prox

Gulf of Mexico (42623) ~~*Bh. ...*~~

Indiantole (42624) worked *Laurencia saugifera*
w. *Hyphae musciformis*

Gulf Mexico, 42625. Fragments of *Rhizoglyphus*

St. Barbara 44988, *Hyphidia filamentosa*
" " 44992, *Gracilaria confertifolia*?

(44989) Santa Barbara, *Neuroglossum andersoni* acm.

Santa Barbara (44990) *Egertina* *Cyrtolophos*
= *Eg.* *microphylla* var. *porrida*

Santa Barbara (44991) marked *Egertina*
manillosa & poor *Gracilaria*
multipartita

St. Barbara (44992) see 44988. 20

St. Barbara (44993) *Polysiphonia urceolata*,

St. Barbara 44994, *Centroceras clavulatum*
& *Callophyllis* fragment.

St. Barbara (44995) *Polysiphonia* *Baileya*,

Santa Barbara (44999) One *Microcladia*
Caulerpi & one *M. Californica*.

" " (44998) marked *Gig.* *Microphylla* but
may be *G. spirosa*.

" " (44997) *Hyphus* (*divaricata*?)

" " (44996) *Stenoporella interrupta* Harv.

St. Barbara (45000) *Egertina spirosa*
& *Microcladia Californica* (in envelope)

St. Barbara 45001 *Hymenozoa* fragment 20

St. Barbara 45002 *Hymenozoa* fragment.

St. Barbara (45003) *Groenlandia multipartita*
& *Nitophyllum woolacense*

St. Barbara (45004) *Callophyllis varixta*

St. Barbara (45005) *Callophyllis* fragment.

St. Barbara (45006) *Nitophyllum* Ruprecht,
mixed in cover. *Holosees*
deltoidea?

St. Barbara (45007) *Neurospora* in cover
& *Nitophyllum* spec?

St. Barbara (45008) *Calli variegata* var

St. Barbara (45009) *Rhodomenia* *Coralina*

St. Barbara (45010) *Callophyllis furcata*,

" (45011) *Nitophyllum Ruprechtianum*

St. Barbara (45012) *Nitophyllum* in perfect.

St. Barbara (45013) *Nitophyllum*.

St. Barbara (45014) *Callophyllis rhynocarpa* ?

Santa Barbara (45015) Calceophylloides ²⁰ integrifolia

Santa Barbara (45016) Calceophylloides fragment

Santa Barbara (45017) Calceophylloides laciniatus

Santa Barbara (45018) named N. laciniatus
& N. violaceum

" " 45019 Chondria vichitica

Santa Barbara (45020) Corallina thuberosa

" " (45023) Amphiroa arborescens

(45022) Santa Barbara, Gigartina volans

(45023) see 45020

Santa Barbara (45024) washed Ptilota plumosa
is Rhodanella floccosa

Santa Barbara (45026) Nit. Ruprechtianum fragment