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# TRANSACTIONS OF THE SOCIETY FOR BRITISH ENTOMOLOGY

VOL. 13

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PART 8

## THE BRITISH SPECIES OF THE GENUS *ALAPTUS* HALIDAY IN WALKER (HYM., CHALC., MYMARIDAE)

By W. D. HINCKS (Manchester Museum)

### Introduction

The genus *Alaptus* includes a number of usually rather weakly pigmented insects celebrated for their small size; indeed it has been claimed for *A. magnanimus* Annandale, from India, that it is the smallest known insect, measuring only 0.21 mm. It is probably true that the lowest limit of size for an insect has been reached if we consider the morphological and physiological implications entailed, together with the physical properties of the environment. The smallest British specimen I have examined is about 0.3 mm. in length.

Various hosts have been noted in the literature for these egg-parasites but as far as the British species are concerned reared material has only been examined from the eggs of Psocoptera which are usually agreed to be the common hosts of species of this genus.

Specimens are rarely obtained by sweeping no doubt because they are overlooked owing to their minute size and pale coloration. Occasionally they are found on windows where the incidence of the light renders them visible, but undoubtedly the best method of collecting these insects is to rear them from the egg-masses of their hosts. The arboreal Psocoptera, whence most of the reared specimens have been derived, lay small batches of eggs on leaves, covered by a net of white silk threads. Such egg-masses are very easy to detect on the leaves of trees and bushes and those which are parasitized appear to develop a colour change to a reddish tint, distinguishing them from the purplish colour of the normal groups of eggs.

It should be mentioned here that whatever may be the merits of dry-mounting in the case of larger Mymarids, enabling surface sculpture, etc., to be studied, such mounts are clearly unsuitable for species of the present genus as the details of their structure, such as wing-trichiation, antennal proportions, etc., cannot be properly examined except from slide-mounts. Consequently only material which has been slide-mounted is included in the present paper except in the case of some additional reared material.

In the present paper all the names brought forward for British species have been dealt with.

### Sources of material studied and acknowledgments

My sincere thanks are due to Miss Geraldine Roche and to the authorities of the National Museum of Ireland (D.M.) for the loan of specimens of *Alaptus* from the Haliday collection, and for permission to remove a specimen from its card-mount in order to prepare it for microscopic examination. Mr. J. F. Perkins kindly lent me dry mounts and slides from the Waterhouse

collection in the British Museum (Natural History) (B.M.). Mr. Perkins also granted me facilities for the removal of a dry mount to a micro-slide. To Professor G. C. Varley I am indebted for the loan of eleven slides from the Blood collection in the Oxford University Museum (O.M.). Messrs. Flatters & Garnett Ltd. kindly gave permission for information to be used derived from Enock's slides in their private collection (F.G.). Dr. E. Broadhead, of Leeds University, kindly sent reared material from known Psocid hosts and Mr. C. H. Ison allowed me to use slides from his collection and enabled me to see specimens from the late J. K. Enock's collection. Finally the fullest use has been made of the F. Enock slides in the Manchester Museum (M.M.), together with slides and dry mounts contributed by the late Mr. Harry Britten and myself.

### *Alaptus* Haliday in Westwood, 1839

*Alaptus* Haliday in Westwood, 1839, *Introd. Mod. Class. Ins.*, 2: 79. Haliday in Walker, 1846, *Ann. Mag. nat. Hist.*, 18: 50. Soyka, 1937, *Natuurh. Maandbl.*, Maastricht, 26: 75; 1939, *loc. cit.*, 28: 17-20, 27-31. Debauche, 1948, *Mém. Mus. Hist. nat. Belg.*, 108: 53-62; 1949, *Expl. Parc National Albert*, Mission G. F. de Witte, 49: 9. Kryger, 1950, *Ent. Meddel.*, 26: 31-36.

Type of genus: *Alaptus minimus* Haliday in Walker, 1846.

*Alaptus* is easily distinguished from the other genera of the Mymaridae by the following combination of characters: Tarsi 5-segmented; abdomen sessile; antennae of female 8-segmented; of male 10-segmented; marginal vein short; lower margin of basal portion of anterior wings with deep excision.

The species are very closely allied but it appears possible to separate five British species without great difficulty in the material before me.

### Historical

The genus *Alaptus* was erected by Haliday in 1839, in Westwood's "Synopsis" (1839). The type species was indicated as *M(ymar) minimus* W(alker), a *nomen nudum* at that time. This species was first listed by Curtis in the first edition of his "Guide" (1829) as *M. minimus* Walker, and it also appeared in that author's "Illustrations" (1832) under the same name. In the second edition of the "Guide" (1837) it appeared as *Litus minimus* (Walker) but it was not until 1846 that the first brief description appeared by Haliday in a paper by Walker (1846). At the same time a second line of description introduced *A. fuscus* Haliday.

*A. excisus* was described by Westwood in 1879, but was accidentally omitted from the "Check List" of Kloet and Hincks (1945). In 1939 Soyka described *A. foersteri* and included in his original material a specimen from Ireland. Four other names were added to the British list in 1950 when Kryger unfortunately validated, quite unconsciously I believe, four manuscript names of Frederick Enock, namely *A. antennatus*, *crassus*, *terebrans* and *uncinatus*, by publishing extracts from the Waterhouse manuscripts in the British Museum (Natural History).

In 1939 Soyka published a revision of the European species in which he clearly distinguished seven species, including *A. minimus*, but excluding

*A. fuscus* as unrecognisable. Debauche (1948) reproduced Soyka's key and recognised three species from Belgium, including *A. minimus*.

## The identity of Haliday's species

### (a) In the literature

Confusion exists regarding the identity of Haliday's species, namely the genotype *A. minimus* and *A. fuscus*. This is quite understandable if we recollect Haliday's five-word diagnoses, though it is perhaps less excusable when it is realised that his original material has been available in the Dublin Museum since about 1880. This material was examined by Waterhouse and Enock in 1909. Prior to that date it would appear that any species of *Alaptus* slide-mounted by Enock received one of his printed labels "*Alaptus minimus*" and these slides were widely distributed by him, by way of business. I have seen a number of them representing several different species. Perhaps as a result of examining the Haliday collection or more probably because of his association with Waterhouse other slides subsequently had the printed word "*minimus*" struck out and another label added carrying a designation such as "*Alaptus fuscus*," "*Alaptus* sp. no. 1," "no. 2," "no. 3," etc.

Slides with unaltered printed labels were evidently received by Dr. L. O. Howard, of Washington, prior to 1908, for in that year Girault published a redescription of *A. minimus* based on these slides. In 1939 Soyka stated that Girault's interpretation of *A. minimus* was the same as that of Enock and that the latter also redescribed *A. minimus* in "Trans. ent. Soc. London, 1909," a reference, further amplified by Debauche (1949) as page 103, which I have completely failed to trace. Soyka also stated that his own redescription, based on specimens from Holland, agreed in all particulars with Enock's material in the British Museum (N.H.). At the same time he pointed out that Foerster's *A. minimus* represented another species which he described as *A. foersteri*. I shall show later that *A. minimus* of Girault is very different from Soyka's interpretation and is probably identical with *A. antennatus* Kryger. Enock's ideas on *A. minimus* have already been mentioned as so varied as to include several distinct species and it should be added that the only slides of his bearing that name in the British Museum consist of a male and female of *A. fuscus* Haliday. Soyka stated that it was necessary to accept Enock's interpretation as Walker's type could not be found, evidently not realising that the author of the species was actually Haliday and that his specimens were still extant in the Dublin Museum.

It will thus be evident that there are several possible interpretations of *A. minimus* but only two are of any real importance namely that of Girault based on a redescription of 1908 and that of Soyka published in 1938 in the course of the fullest revision of the genus so far undertaken and subsequently followed in the important contributions of Debauche (1948, 1949). To settle this important matter of the identity of the genotype reference is necessary to Haliday's collection and if a settlement can be made in accordance with the somewhat arbitrary nomenclature adopted in these important modern works, without doing violence to what the original author had in mind when he characterised his species, such a course has much to commend it.

(b) **Haliday's material of *A. minimus***

There are nineteen specimens in the Haliday collection in the National Museum, Dublin, above the label "*minimus*," all securely gummed on nine pieces of card, each card bearing a printed number on blue paper attached to the pin, from 90 to 99, except that card 93 is missing. In addition to two cards which bear species of other genera (94, 96) and which clearly could not have been so placed by Haliday, it is evident that the actual *Alaptus* material includes several species. These very small, rather light-coloured insects, especially when about 120 years old, embedded in old and now almost varnish-like gum arabic, and in addition often folded, twisted or broken, and obscured by a century's accumulation of crystals and debris, cannot be identified specifically with certainty, because the microscopic specific characters are obscured by gum or otherwise invisible. All that can be said from an ordinary microscopic examination is that they include two or three distinct species.

Permission was therefore sought and very kindly granted by the Museum authorities for a specimen to be removed from its card and transferred to a microscope slide. This hazardous task required the greatest care and also careful preliminary consideration as to the specimen to select since it was intended that this individual should become the lectotype and should establish the identity of the species.

First all broken, very badly folded and heavily gummed specimens, unlikely to be removable without damage, were rejected. It was also necessary to reject cards with more than one specimen on them as they were mounted too close to enable them to be separated without possible damage to their fellows. The field of choice was now much narrowed and the final selection was made of a perfect female, relatively lightly gummed, as typical as possible in general appearance of the whole series. This specimen was mounted on card No. 97.

After soaking the card several times in Barber's fluid and after several gentle boilings in a little water in a small ignition tube in a water-bath, it was ultimately possible to remove the insect intact from its matrix of gum, despite its great age and fragility. It was impossible, however, to remove all the accretions of particles which had combined with the gum to form crystal-like attachments to the antennal segments, legs and some of the wing cilia, the specimen being far too fragile to handle or clean in the normal way. It was therefore mounted in Gum Chloral mountant in the hope that the oxydised gum, the basis of the accretions, might be partially cleared by the mountant. The result is not a pretty slide from the microscopist's point of view, but the specimen has been preserved intact and sufficient of its characteristics can be observed to establish its identity with complete certainty. This specimen, later selected as the lectotype of *A. minimus* Haliday, is conspecific with the interpretation of Soyka, thus maintaining the identity of Haliday's species as understood by modern continental authors.

**Key to the species of *Alaptus* Haliday (females only\*)**

- I (6) Anterior wings with a row of discal cilia in addition to the usual sub-marginal cilia.

- 2 (3) Anterior wings with a row usually composed of 9 to 12, rarely more, discal cilia; fourth antennal segment relatively short, about four times longer than wide; ovipositor occupying about two-thirds length of abdomen; W.R. about 8; average size smaller, length 0.33-0.4 mm. . . . . *A. minimus* Haliday in Walker, p. 141
- 3 (2) Discal cilia more numerous, forming a row of 14 to 20 cilia; fourth antennal segment relatively longer, about six times longer than wide; average size larger, length 0.45-0.5 mm.
- 4 (5) Ovipositor hardly longer than abdomen, exposed at most for a very short distance beyond tip of abdomen; third antennal segment about as long as second; length 0.45-0.5 mm. . . . .  
. . . . . *A. fuscus* Haliday in Walker, p. 144
- 5 (4) Ovipositor much longer than abdomen, exposed for a considerable distance beyond its tip; third antennal segment about one-quarter longer than second; length 0.45-0.5 mm. . . *A. extremus* Soyka, p. 145
- 6 (1) Anterior wings with the usual sub-marginal cilia but without a row of discal cilia.
- 7 (8) Second antennal segment clearly shorter than third; antennae proportionately longer, as long as anterior wing; ovipositor very short (fig. 7); length 0.43-0.48 mm. . . . . *A. antennatus* Kryger, p. 145
- 8 (7) Second antennal segment longer than third; antennae usually shorter than anterior wing; ovipositor occupying at least about half length of abdomen; length 0.375-0.43 mm. . *A. pallidicornis* Foerster, p. 146

### *Alaptus minimus* Haliday in Walker

(Figs. 1, 2, 8)

*Alaptus minimus* Haliday in Walker, 1846, *Ann. Mag. nat. Hist.*, **18**: 51. Soyka, 1939, *Natuurh. Maandbl.*, Maastricht, **28**: 17. Debauche, 1948, *Mém. Mus. Hist. nat. Belg.*, **108**: 59, pl. 7, f. 57, 61, 62, 65; 1949, *Expl. Parc National Albert*, Mission G. F. de Witte, **49**: 10. Kryger 1950, *Ent. Meddel.*, **26**: 35.

*Alaptus crassus* (Enock Ms.) Kryger, 1950, *loc. cit.*: 33 (**syn. nov.**).

*Alaptus uncinatus* (Enock Ms.) Kryger, 1950, *loc. cit.*: 36 (**syn. nov.**).

*Alaptus fuscus* Haliday in Walker, Kryger, 1950, *loc. cit.*: 34 (*partim*).

I hereby select the Haliday specimen No. 97 (already mentioned) as the lectotype of the present species. It is now mounted on a glass slide and although still slightly obscured by adherent debris which cannot be cleared without possible damage, its identity can be definitely established. It is clearly conspecific with *A. minimus* of Soyka and Debauche, thus maintaining the interpretation of these authors.

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\* I have only seen males of *A. minimus*, *A. fuscus* and *A. pallidicornis*, all of which are separable from one another by the characters of the wing trichiation noted in the key for the females. Males of *A. extremus* and *A. antennatus* are unknown. The former, presumably, will prove to have a row of 14 to 20 discal cilia as in the female, such cilia probably being absent in the male of the latter.

*A. minimus* is very closely related to *A. fuscus* but differs in the smaller size, fewer discal cilia and relatively shorter fourth antennal segment. It is just possible that it may represent only a small form of *A. fuscus* as one or two specimens have been examined having more than the usual maximum of 12 discal cilia, thus being intermediate between the two forms. However, these specimens have been included for the present as variants of *A. minimus* since the fourth antennal segment is relatively short. Both Soyka and Debauche are satisfied that the two species (under the names of *minimus* and *foersteri*) are distinct and make no mention of intermediate specimens.

*A. crassus* (Enock Ms.) was very briefly characterised by Kryger (1950) by an extract from Waterhouse's manuscript. I have seen three dry-mounted

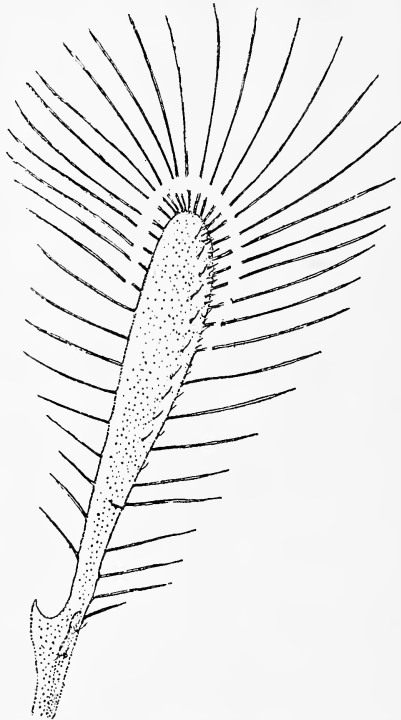


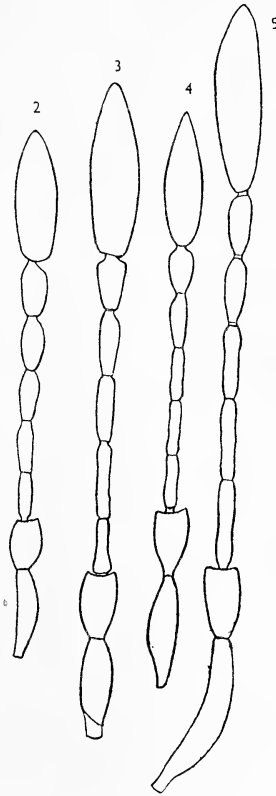
Fig. 1. Anterior wing of *Alaptus minimus* Haliday, ♀.

specimens (♂, ♀♀) bearing this name, from the Waterhouse Collection (B.M.), from Goring. A female (Goring, 17 vii, 1912, C. O. Waterhouse) has been transferred to a microscope slide and is hereby designated the lectotype of *A. crassus* Kryger. It is conspecific with *A. minimus* Haliday.

*A. uncinatus* (Enock Ms.) was briefly described from Waterhouse's notes by Kryger (1950) from a female taken at Richmond (18 ix, 1912) by C. O. Waterhouse. This specimen, mounted on a slide, is in the B.M., and is hereby selected as the lectotype. It is conspecific with *A. minimus* as here understood.



The slide in the B.M. from Goring (22 vii, 1912, *C. O. Waterhouse*) referred to in Kryger's (1950) extract from Waterhouse's papers and identified by the last authority as *A. fuscus* Haliday is merely a variant of *A. minimus*, having 12 discal cilia on one wing and 14 on the other. Another specimen in the F.G. collection bearing the same data, labelled by Enock as "*Alaptus* 6th sp."



Figs. 2-5. Antennae of females of:

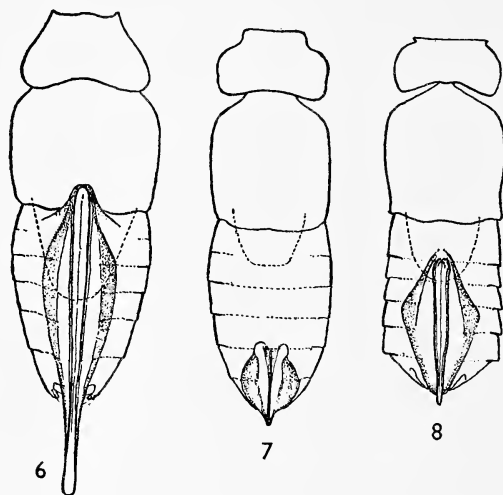
2. *A. minimus* Haliday. 3. *A. fuscus* Haliday. 4. *A. pallidicornis* Foerster.  
5. *A. antennatus* Kryger.

and by Harry Britten as *A. fuscus* appears to be identical except that it has 14 discal cilia on each wing. Both species were no doubt confused by both Waterhouse and Enock.

*A. minimus* is a widely distributed and probably common species. There appear to be no definite records of it having been reared, except Kryger's (1950) quotation from Waterhouse's notes (if they apply to the present species) that it is common and easily reared from Psocid eggs. Bakkendorf's (1934) records under *A. minimus* actually refer to *A. pallidicornis* Foerster.

*Material examined.* D.M.: without locality, 1 ♀, Haliday coll. No. 97, lectotype of *A. minimus* Haliday. B.M.: SURREY: Richmond, 18 ix, 1912,

1 ♀ (*C. O. Waterhouse*) lectotype of *A. uncinatus* Kryger; SUSSEX: Goring 22 vii, 1912, 1 ♀ (*C. O. Waterhouse*) (det. Waterhouse as *A. fuscus*); SURREY: Goring, 17 vii, 1912, 1 ♀ (*C. O. Waterhouse*) lectotype of *A. crassus* Kryger. O.M.: without locality, 1 ♀ (Blood coll.). F.G.: without locality,



Figs. 6-8. Body and ovipositor of females of:

6. *A. extremus* Soyka. 7. *A. antennatus* Kryger. 8. *A. minimus* Haliday.

1 ♀ (*F. Enock*) (det. Enock as *Alaptus* "4th sp." and by Britten as *A. fuscus*); SUSSEX: Goring, 22 vii, 1912, 1 ♀ (*C. O. Waterhouse*) (Enock coll., det. *Alaptus* "6th sp."). M.M.: SURREY: Richmond Park, 26 vii, 1 ♀ (*F. Enock*) (det. Britten as *A. fuscus*).

### *Alaptus fuscus* Haliday in Walker

(Fig. 3)

*Alaptus fuscus* Haliday in Walker, 1846, *Ann. Mag. nat. Hist.*, 18: 51.

Kryger, 1950, *Ent. Meddel.*, 26: 34 (*partim*).

*Alaptus foersteri* Soyka, 1939, *Natuurh. Maandbl.*, Maastricht, 28: 18.

Debauche, 1948, *Mém. Mus. Hist. nat. Belg.*, 108: 60, pl. 5, f. 40, pl. 7, f. 58, 59, 63 (**syn. nov.**).

The only specimen now placed above this name in the Haliday collection is a broken male, heavily encrusted and embedded in gum. Owing to its broken condition it has not been removed from its mount but was carefully examined after several immersions in Barber's fluid. This examination revealed nothing inconsistent with the view that this male is conspecific with specimens previously identified as *A. fuscus*. The latter also agree with *A. foersteri* Soyka, described from Ireland in 1939.

*A. fuscus* is probably a common British species and is closely related to the generotype *A. minimus*, but separable in most specimens by its larger size, more numerous discal cilia and the proportionately longer fourth antennal segment.

*A. fuscus*, as quoted by Kryger (1950) from Waterhouse's notes is probably a compound of *A. minimus* (see p. 143) and *A. fuscus*. The notes of Enoch (*Knowledge*, 1897: 204) regarding the rearing of the present species, quoted by Kryger, actually apply to *A. pallidicornis* Foerster, on the basis of specimens in the Enoch collection in the Manchester Museum. *A. fuscus*, however, has been reared in some numbers by Dr. E. Broadhead from the eggs of the psocids *Mesopsocus immunitus* (Stephens) and *M. unipunctatus* (Mueller).

*Material examined.* B.M.: without locality, 1 ♀ (*F. Enoch*) (det. Enoch as *A. minimus*); without locality, 1 ♂ (*F. Enoch*, same det.). O.M.: without locality, 1 ♀ (*B. N. Blood*) (det. Blood as *A. antennatus* ?); without locality, 1 ♀ (*F. Enoch*) (Blood coll.) (det. Enoch as *A. fuscus*); without locality, 2 ♂, 3 ♀ (*B. N. Blood*) (one slide det. Blood as *A. minimus*). F.G.: without locality, 1 ♂ (*F. Enoch*) (det. Enoch and Britten as *A. fuscus*). M.M.: without locality, 1 ♂, 1 ♀ (*F. Enoch*) (det. Enoch and Britten as *A. fuscus*). Also 26 ♀♀, 30 ♂♂, reared by Dr. E. Broadhead from eggs of *Mesopsocus immunitus* (Stephens) and *M. unipunctatus* (Mueller) from larch twigs, Harlow Carr plantation, Harrogate, spring 1956, em. 14 vi-23 vii, 1956.

### *Alaptus extremus* Soyka

(Fig. 6)

*Alaptus extremus* Soyka, 1939, *Natuurh. Maandbl.*, Maastricht, **28**: 19.  
Debauche, 1948, *Mém. Mus. Hist. nat. Belg.*, **108**: 56.

*Alaptus terebrans* (Enock Ms.) Kryger, 1950, *Ent. Meddel.*, **26**: 36 (**syn. nov.**).

*Alaptus fuscus* Bakkendorf (*nec* Haliday), 1934, *Ent. Meddel.*, **19**: 18, f. 27.

M.M.: HUNTINGDONSHIRE, St. Neots, 25 vii, 1912, 1 ♀ (Enock coll.) (labelled by Enoch as type of *A. terebrans*).

The above specimen is the type of *A. terebrans* (Enock Ms.) Kryger, which Kryger erroneously stated to be in the British Museum (N.H.). It is quite clearly synonymous with *A. extremus* Soyka, described in 1939. This species is easily distinguished in the female by the long exerted ovipositor; the male is unknown.

### *Alaptus antennatus* Kryger

(Figs. 5, 7)

*Alaptus antennatus* (Enock Ms.) Kryger, 1950, *Ent. Meddel.*, **26**: 33.

*Alaptus minimus* Girault (*nec* Haliday), 1908, *Ann. ent. Soc. Amer.*, **1**: 183, f. 1.

This species was brought forward by Kryger (1950) from Waterhouse's notes, incorrectly stating that the specimens are in the Waterhouse collection at the British Museum (N.H.). Two slides of females, both labelled "type," are in the Enoch collection in the Manchester Museum. Both the specimens were reared on the same day from material gathered at Burnham Beeches. One slide is hereby selected as the lectotype of *A. antennatus*.

It is a very distinct species, easily distinguished from the other members of the genus by its long antennae, which are about as long as the anterior wing, their proportions (72 : 34 : 38 : 42 : 35 : 34 : 30 : 94), and notably the comparative length of the scape; also in having the pedicel shorter than the third segment, the very short ovipositor (fig. 7), and the larger size (0.43-0.48 mm.).

Reference to Enock's notes on his rearings indicates that the two females were reared from "half a dozen grass-sods from Farnham Corner-Burnham Beeches," along with a third female *Alaptus*, several species of *Polynema*, including *P. fumipennis* Haliday, some *Ooctonus* and 35 ♀♀ *Litus cynipseus* Haliday, a total of 47 specimens.

The material on which Girault (1908) redescribed *A. minimus* has already been mentioned (p. 139). His description and figure of the antenna agree very closely with the present species. The only discrepancy relates to the anterior wings which he states have "two rows of discal cilia along the whole of the costal margin, one of the rows sometimes obscured." I believe that Girault was, in fact, referring to sub-marginal cilia of which there are two rows in the present, and other species, one being obscured by its proximity to the marginal cilia.

*Material examined.* M.M.: BUCKINGHAMSHIRE: Burnham Beeches, reared 7 vii, 1912, 2 ♀♀ (*F. Enock*) (including lectotype).

### *Alaptus pallidicornis* Foerster

(Fig. 4)

*Alaptus pallidornis* (sic!) Foerster, 1856, *Hym. Stud.*, 2: 120.

*A. pallidicornis* Foerster, Soyka, 1937, *Natuurh. Maandbl.*, Maastricht, 26: 75; 1939, *loc. cit.*, 28: 30. Debauche, 1948, *Mém. Mus. Hist. nat. Belg.*, 108: 56, pl. 7, f. 60, 64.

*A. excisus* Westwood, 1879, *Trans. Linn. Soc.* (2), 1: 586, pl. 73, f. 10, 11 (♂♀) (*syn. nov.*).

*A. minimus* Bakkendorf (*nec* Haliday), 1934, *Ent. Meddel.*, 19: 17, 18, f. 25, 26.

This species is unrecognisable from Foerster's original description but has been carefully redescribed by Soyka (1937) from the type in the Mayr collection in the Vienna Museum. It is a species without discal cilia on the anterior wings, having the antennal scape relatively long, being nearly twice as long as the pedicel and the latter clearly longer than the third segment. Soyka gives the following measurements, in hundredths of a millimetre:

65 : 35 : 30 : 35 : 32 : 30 : 30 : 110.

The size of the first and second segments appear to vary slightly but all the specimens examined compare reasonably satisfactorily with the measurements quoted above. On the other hand Debauche records the following measurements, in hundredths of a millimetre, for *A. pallidicornis* from Belgium:

56 : 40 : 30 : 34 : 32 : 34 : 34 : 112.

The British specimens examined do not agree quite so closely with these measurements, having the scape relatively longer in proportion to the pedicel and segments 6 and 7 slightly shorter than 5, instead of longer.

*A. pallidicornis* is a common species in Britain and has been reared by Enock from "Psocus" eggs collected at Chester, as mentioned by Kryger (1950) under *A. fuscus*. Slides from this material are in the Manchester Museum, where there is also a reared series from Psocid eggs on leaves of cherry laurel (*Laurocerasus officinalis* L.) from near Coychurch, Glamorgan. I have also reared it from Psocid eggs on the leaves of rhododendron taken in September at Wrea Head (VC 62), the adults emerging in late September and early October.

*Alaptus excisus* was described by Westwood from a pair sent to him by a Mr. Whitmarsh, of Wilton, near Salisbury. It is possible that these specimens were returned, as I am informed by Dr. Graham that they cannot now be traced in the Oxford Museum and must be presumed lost. The insects were stated to have been reared on 6th October, 1871, from white blotches on oak leaves collected on 9th September. Subsequently a Tinacid moth and several other parasites emerged, leading Westwood to conclude that the Mymarids were parasitic on the Tinacid leaf-miner. It is virtually certain that the leaves carried egg-masses of Psocids from which the Mymarids emerged. The emergence details coincide with my experience of rearing this species from material collected at Wrea Head and there is nothing in Westwood's description and figures of *A. excisus* opposed to the view that his species is identical with that of Foerster. Consequently, I regard *A. excisus* as a synonym of *A. pallidicornis* with which it agrees more closely than with *A. minimus* Haliday, as supposed by Kryger (1950: 35).

*Material examined.* M.M.: without locality, 1 ♀ (Britten coll.) (det. Britten as *A. minimus*). CHESHIRE: Chester, 2 ♀♀, 19 ix, 1896 (Enock coll.) (det. Enock as "*Alaptus* 1st sp." and by Britten as *A. minimus*); Chester, 1 ♂, 1 ♀, 14 iii, 1913, reared (Enock coll.) (det. Enock and Britten as *minimus*). YORKSHIRE: Wrea Head, near Scarborough, VC 62, a series of both sexes, reared from Psocid eggs on leaves of rhododendron, 8 ix, 1957, em. 25 ix, 1957, to early x, 1957. GLAMORGAN: Coed-y-mwstwr School, Coychurch, 15 i, 1948, from Psocid eggs on leaves of cherry laurel, em. iv, 1948, a series of both sexes (*B. M. Hitchings*).

O.M.: without locality, 2 ♂♂ (Blood coll.) (one det. Blood as *minimus*); without locality, 1 ♀, 29 vii, 1897 (Enock coll., labelled *A. minimus* and "A. 1st sp.") (Blood coll.).

B.M.: SURREY: Wimbledon Park, summer, 1929, on window, 1 ♀ (*J. K. Close*) (det. as *A. excisus* Westw.).

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