Pyrausta cingulata L. 1 Eksemplar 12. Juli 1946 i Mellemskoven, Falster (E. Pyndt).

Pyrausta hamalis Thnbg. 1 Eksemplar 2. Juli 1947 i Botanisk Have, København (E. Kjær).

### Celerio lineata livornica Esp. i Jylland. Af Hans Sigv. Pedersen, Virklund.

Et Eksemplar af nævnte meget sjældne Sphinx er taget her ved Virklund sidst i Juni 1946, ved blomstrende Lonicera, af Hr. Svend Jørgensen, Ryesgade 3, Silkeborg. Hr. Jørgensen meddeler, at han saa et Ekspl. mere. Dette Ekspl., der ogsaa var stort, kan muligvis have været *C. galii*, men udelukket er det ikke, at det godt kunde have været *livornica*. Saa vidt vides er det anden Gang Arten er taget her i Landet. Dyret er fejlfrit, saa Fejlbestemmelse er udelukket. Vf.  $9\frac{1}{2}$  cm.

# A comparison of a Mymarid from Baltic amber with a recent species, *Petiolaria anomala* (Micro-Hym.). By O. Bakkendorf.

While looking over some literature about insects in amber I met with a paper by von Duisburg in Schriften d. königl. physikal.-ökonom. Ges., Königsberg 1868, p. 23-28. The accompanying drawing (reproduced here as fig. 1) shows a Mymarid. which seems to be identical with *Petiolaria anomala* Bl. & Kr. Its habitus is very similar, the close-set antennae, the shrunk hind head and the broad petiolated fore wings with the long marginal ciliation. The figure shows a somewhat shorter abdominal petiole and shorter antennae, which possibly may be artificial owing to the position of the animal in the amber. A closer examination of the text gives further information about the species. In the collection of v. Duisburg it was labelled under the name of Proctotrupes, for though it was different from the Mymarids known at that time, it could be determined as a Mymarid. Especially it may be noticed that it was compared with Westwood's figure of Mymar pulchellus, which belongs to the other Mymarid genus with petiolated fore wings, and like *Petiolaria* with the hind wings without wing disc, but of a different habitus. F. inst. are the antennae widely separated as in other Mymaridae, so that evidently the species of Duisburg is not a *Mymar*.

The only species of *Petiolaria, anomala* (Fig. 2, microphoto), was described 1922 by Blood and Kryger after a male taken in New Forest, England. Later on, in 1936, the female was described



Fig. 1. Mymaridae sp. Drawing reproduced after Duisburg 1868.

from the fen of Holmegaard, South Sealand, Denmark, and a male was taken in the fen Salpetermosen near Hillerød, and another one in the fen of Lyngby, both in North Sealand; and finally Mr. Kryger has found a female in Bøtø Plantation on Falster, 5. 8. 1946.

Duisburg gives no technical description of his species, — it is to be remarked that *Petiolaria* is pentamerous with 2-jointed petiolus, and in the female 10-jointed antennae with 7-jointed funiculus, while *Mymar* is tetramerous with 1-jointed petiolus, and 9jointed antennae with 6-jointed funiculus in the female —, but other details are mentioned. The length is nearly .5 mm, the fore wings are broader and more disc-shaped than in *Mymar*, and the marginal ciliation proceeds from within the wing disc at about 1/3 of the wing breadth from the margin. The hairs are very rigid, broad at base and tapering towards apex. The sexual difference in the antennae is mentioned, as the drawn specimen was by the antennae determined to be a female.

The collection of Duisburg comprised 16 specimens of which 4 in one piece of amber. The thirteen are males, the three females.



Fig. 2. Petiolaria anomala Bl. & Kr. Microphoto: A. Øye. Mounting: J. P. Kryger.

Further 2 specimens were given away. The first specimen to be found was lost by polishing the piece of amber, since these small insects are lying very close to the surface of the amber, just where once they landed in the liquid resin.

Now, does all the specimens of Duisburg belong to the same species? Duisburg himself writes p. 27, that he finds such characters at hand, that he had been able to determine several species, but p. 26 he describes the marginal ciliation, which in all the specimens consists of long rigid hairs on the outer half of the wing, not proceeding from the margin, but from somewhat within the wing disc, and of a length about equal to the wing length. These details seem so characteristic that there can hardly be any doubt that all the specimens in question belonged to the same species, the variations only being individual.

Is then the species of Duisburg identical with anomala or can any differences be pointed out? With regard to the 5-jointed tarsi, then the drawing implies just 5 joints, and as this is a primitive trait there cannot be any doubt on this point. Next the petiolus, which as mentioned before is drawn shorter than in anomala. If this is not due to the position of the animal in the amber, but is a real character, and the petiolus possibly one-jointed, these primitive characters suggest that we have to do with a predecessor of anomala. The difference in the length of the antennae is not great enough for any conclusion to be drawn from it. It is not quite clear from the drawing whether the funiculus is 6- or 7-jointed. If it were 6-jointed, it would mean that the species were an early separated species of *Petiolaria*, as a 6-jointed funiculus cannot be taken as a primitive character. In the favour of this possibility is also the smaller number of marginal hairs in the wings, 30 to 40, while anomala has about 40 to 50. Thus three possibilities exist, of which I am inclined to support the first, viz. that the species of Duisburg is identical with *Petiolaria anomala*.

With the kind permission of Mr. J. P. Kryger I shall cite his description of the biotope etc. — "Petiolaria is the most peculiar animal I have met with. The dark abdomen and the two raised wings, which on account of their clothing of hairs seem black, give it the appearance of two small bits of dirt adhering to a new-born Green-fly nymph. And the very slow-moving gait — as an old man tired to death. It is a great surprise to discover that the animal is really a wasp. Besides it was quite an accident that I got this specimen. I had been sweeping for a length of time along a road in an old wood of firs — no result. The sweeping net was emptied and laid open on the ground. After a rest for a quarter of an hour I happened to look at the net — and the Petiolaria appeared, crawling among the last pieces of leaves, excrements of snails, etc.

All the specimens taken by me (Kryger) were found under quite the same circumstances. A road in a wood, not much frequented, but covered with low vegetation: Potentilla, Brunella, Bellis, etc. Not quite sunny, nor entirely shady. In the New Forest an old oak stood near the place where I got the first specimen. In the fen of Holmegaard and in the fen Salpetermosen low bushes of Salix were growing; and in the Bøtø Plantation low bushes of Alder. I think the little Fairy-Fly has something to do with the low vegetation. I should add, that the vegetation in the place in Bøtø Plantation has been swept thoroughly, but without further results."

A comparison of the present rareness of the species with the more abundant material which Duisburg has been able to provide by microscopical examination of pieces of amber, confirms the opinion of Duisburg, when he doubts, p. 27, its absolute rarity and writes, that it can hardly be the animals from a definite locality which by chance became in his possession. It is more likely, I should add, that the glades in the firwood are its original locality, where before it has been

more numerous than now.

At what time then has *Petio*laria anomala immigrated to Denmark? It may be noticed that the position of the localities is not indicative of a more recent immigration, it rather seems to indicate the traces of an older line of immigration to the North Sealand. Provided that the species are identical or nearly related, it may be reasonably as-



Fig. 3. *Petiolaria anomala*, head with mandibles, dorsal, optical view. Orig.

sumed that *anomala* is a northern middleboreal species, belonging to those, which according to Spärck (1942, p. 87) immigrated in the first part of the boreal period, and for which the conditions of life are now seriously reduced.

Finally it is to be noticed that the specimen, which Mr. J. P. Kryger kindly has presented to me, as seen in optical view (Fig. 3, head) shows the mandibles in a peculiar situation. The whole mandible with its 2 teeth and a rounding has its inner side turned outwards, with the base (of muscles) twisted. I only know outwards directed mandibles from the Dacnusinae among the Braconidae and from a few larvae.

Another peculiarity is the reticulated fore wings. With a somewhat strong power lens they show two layers of a design of cells, where the individual cells have not got a common wall, but are seen as isolated circles. It seems to be the hypodermal cells, which are not dissolved as usual in the wings of adult insects, but rather chitinised. The largest cells measured 16  $\mu$  (measured by comparison with the red blood corpuscles from the human blood, 8  $\mu$ ). The smaller cells measured 8  $\mu$ . The design of cells on the mesoscutum, which corresponds to the underlying hypodermal cells (Imms 1925, p. 6), have cells of 8  $\mu$ ; on the metathorax 12  $\mu$ ; and the separate facets of the compound eyes, 4  $\mu$ .

#### Literature.

- Blood and Kryger, 1922, Entomologist's Monthly Magazine, 3rd ser., vol. VIII, p. 229-230.
- 2. Blood and Kryger, 1936, Journ. Soc. Brit. Entom. p. 115-116.
- 3. Duisburg, 1868, Schriften d. physikal.-ökonom. Gesellsch. Königsberg IX, p. 23-28.
- 4. Imms, 1925, Textbook of Ent. 698 pp.
- 5. Spärck, 1942, Den danske Dyreverden, 116 pp.
- 6. Westwood, 1840, Intr. mod. Classif. Ins.

## Hadronotus laticeps siamensis nov. var. (Scel. Proct.).

### By O. Bakkendorf.

By the courtesy of Dr. Axel M. Hemmingsen I have had the opportunity of examining 3 females of a parasitic fly mentioned in a former note in this journal, 1947, p. 200. The 3 small Hymenoptera were taken on October 3rd, 1940, in Singora, South Siam on the egg-cluster (fig. 1) of a bug, *Physomerus grossipes* F., which may be a host of the wasp, as the latter attempted to deposit its eggs in the egg-cluster, and as the Scelionidae are known as egg parasites, especially on Hemiptera and Orthoptera.

By the use of Kieffer's key to the Scelionidae (1926), comprising 10 palaearctic species it was soon realized, that the species could be determined as *Hadronotus laticeps* Först. The 3 species described from the Indian region seemed not to have any relation to this species. By a closer examination, however, some deviations were found, which caused me to propose the following new variety of the species *laticeps*, which was created by Förster (1856)

- 1. Physomerus grossipes F., arrangement of eggs.
- 2. Hadronotus laticeps siamensis n. v., dorsal view.
- 3. Do. lateral view.
- 4. Do. antenna.
- 5. Do. mandible (left?).
- 6. Do. do. (right?), with an imaginary section.
- 7. Do. do. the same, outer view.
- 8. Do. maxillae and labium; max, maxillary palpi; lab, labial palpi; g, galea
- 9. Do. part of fore wing.
- 10. Do. legs.
- 11. Do. anal segment, dorsal view.

Explanation of the figures.