## Some remarks on the Ichneumonid fauna of Iceland.

By

W. Hellén, Helsingfors.

Through the kindness of Dr. S. L. Tuxen, Copenhagen, a large collection of Ichneumonidae from Iceland was handed over to me for determination. The greater part of this material was collected by Dr. Tuxen himself, but some of it belonged to the museums in Reykjavik and London.

As a complete list of all the collections will be given by Dr. Tuxen in connexion with the treatment of the other Hymenoptera from Iceland, I will here only give some systematic considerations arisen from my study of the collections.

Our recent knowledge of the Ichneumonidae of Iceland is based upon the great work by Dr. Carl H. Lindroth (Zoologiska Bidrag från Uppsala, Band 13, 1931), in which all the species found by Dr. Lindroth as well as all the previously mentioned Ichneumonids from Iceland are enumerated. The collections of Lindroth were determined by Dr. A. Roman, who published some notes on the more interesting species (Göteborgs Kungl. Vet. Samh. Handl. V, B. 2. N:o 4, 1931).

**Coelichneumon ?occidentalis** Rn. In his dissertation (Ichneumoniden aus dem Sarekgebirge 1909 p. 15—16) Roman gives a complete description of *C. solutus* Hlmgr., and I possess a female from Sarek (det. Roman) and a male from Lapland (Kilpisjärvi) of this species. The Iceland-collection contains 4 specimens, which seem to be closely related to solutus. The yellow spots on the side of the face an the clypeus are absent in the male. They would seem, therefore, to belong to the subspecies occidentalis Rn. ( $\mathcal{A}$ ), described from Greenland, though the colour of the legs does not quite correspond to the description. On closer examination other differences will be found between the real solutus and this supposed occidentalis, of wich I have further three specimens ( $\mathcal{A}$ ) from Lapland. In my opinion, therefore, the lastnamed species is a well defined species. In ?occidentalis all the segments of the flagellum are bunchy, the temples are a little longer and more rounded, the propodeum is also more rounded, with a shorter area basalis and a longer and broader areola. The post-petiole is a little more strongly aciculated, the gastrocaeli are wider than the intermediate space, and segments 2-4 are evidently more shining and coarsely punctate.

Ichneumon ligatorius Thunb. v. thulensis Ruthe. The antennae of the females are sometimes white-banded in the same way as in the ordinary *ligatorius*. Often the band is narrower and may sometimes quite disappear. The bases of segments 2 and 3 are commonly infuscate in the males but the segments may also be almost entirely dark.

I. extensorius L., which is common in the whole of Europe, has not previously been mentioned from Iceland, but it seems possible to me that Romans albiger v. Lindrothi (1931 l. c. pg. 5) was described on specimens of extensorius, in which the scopulae of the coxae are absent. Such specimens are not particularly rare. — In the Q of this species, as in *ligatorius*, melanism of the antennae band may be observed.

I. latrator Grav. All the females are melanic, the white spots on the last segment of the abdomen being absent (v. *nigricauda* m.).

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**Cratichneumon rufifrons** Grav. The only male in the collection is considerably more fuscous than normal specimens. Thus all the white spots on the thorax are absent, the face in the middle and all the coxae are black.

**Barichneumon locutor** Thunb. In the only female the hind legs except for the coxae are quite red. The thorax of the male is usually entirely black.

**Microcryptus picticornis** Ruthe. Roman's assumption (1931 l. c. pg. 6), that *gravenhorsti* Thoms. is synonymous with this species, seems to be right. The description of *gravenhorsti* agrees with one specimen in this collection and another of my own, except for the frontal orbits, which are not red. *M. picticornis* (*gravenhorsti*) is only found in North Europe.

**Phygadeuon detestator** Thunb. (*fumator* Grav.) has not been found before in Iceland, but perhaps it does not differ from *trichops* Thoms.

**Ephialtes (Epiurus) brevicornis** Grav. v. **pratensis** Pfank., which is distributed over the greater part of Europe, has not formerly been known from Iceland.

**Plectiscus peregrinus** Ruthe. The specimen described by Ruthe seems to be a male, no *Plectiscus* without exserted terebra being known to exist. One  $\mathcal{J}$ -specimen in the Iceland collection agrees with the description of *peregrinus*. However, the first abdominal segment is finely aciculated but not finely rugose. The hind coxae and the upper side of the femora are dark. The only differences from the description are that the clypeus is not light on the anterior margin, and that the palpi and mandibles are not yellowish but dark. — This species is distinguished from the other Plectiscid occurring in Iceland (*hyperboreus* Hlmgr.) by its short and broad petiole, being scarcely twice as long as wide, and by the strongly exserted spiracles placed in the middle of the petiole. The flagellum has 19 segments.

Diplazon deplanatus Grav. (ornatus Grav.). The areola

**D.**?melanogaster Hlmgr. Roman has determined some specimens from Iceland as ?incisus Thoms. (I. c. pg. 9.) with the remarks, however, that they may perhaps be *melanogaster* described from Greenland. The specimens in this collection do not seem to me to belong to *incisus*. The female differs from the description in having an emarginate clypeus, a not aciculated petiole, a nonspotted epistoma, and an entirely black scutellum. The cheeks are light in the male, the scutellum black, and the abdomen often faintly marked. Hence the specimens should probably be referred to *melanogaster* Hlmgr.

**D. cfr. longipes** Hlmgr. On account of its long hind tarsus and slightly areolated propodeum, a female in the collection seems to be related to *longipes* Hlmgr. It is different in the radius not being inflexed at the end and the nervellus being intercepted far below the centre. The abdomen is, in the main, black, except for its red base.

**Promethes pulchellus** Hlmgr. v. **ruthei** Rn. Roman described *ruthei* as a subspecips of *laticarpus* Thoms., which last-mentioned species seems to me to be only a colour variety of *pulchellus*. However, *ruthei* Rn. seems to be a good race of *pulchellus* because of its larger size and the characteristic pattern on the male abdomen.

Mesochorus punctipleuris Thoms. A female of this species never found in Iceland was present in the collection.

**Ophion nigricans** Ruthe. Roman (l. c. pg. 10) considered *nigricans* a variety of *distans* Thoms. In my opinion they are two different species though very closely related to each other. *O. nigricans* has apparently shorter antennae, each segment being distinctly shorter. The head is narrower, the mesonotum is smoother, and the colour of the smaller body is always fuscous.

Agrypon flaveolatum Grav. The melanic variety sep-

*tentrionale* Hlmgr. that occours in Iceland differs so little from the normal *flaveolatum* that a special name for it is unnecessary. Such darker specimens occur frequently in Central and North Finland.

Sagaritis varians Thoms. (crassicornis Rn. nec. Tschek.). Roman combines varians Thoms. with crassicornis Tschek.; this, however, I cannot accept. S. crassicornis has thicker hind legs, the area superomedia is open behind, and the recurrent nerve is inserted at the middle of the areola. The mesonotum is punctate and rather smooth, while in varians it is quite alutaceous.

Limnerium geniculatum Grav. (*rufifemur* Thoms.). Roman seems to be right in suspecting that many of the *Limnerium* species of Thomson are not well separated. I believe that *juniperinum* Hlmgr., *rufifemur* Thoms., *crassifemur* Thoms. and *planiscapus* Thoms. might be grouped as varieties of *geniculatum* Grav. All these seem to differ only in the colour of their legs.