VEGA-EXPEDITIONENS

VETENSKAPLIGA IAKTTAGELSER

BEARBETADE

AF

DELTAGARE I RESAN OOH ANDRA FORSKARE

UTGIFNA

A. E. NORDENSKIÖLD.

FJERDE BANDET.

(MED 47 TAFLOR.)

STOCKHOLM, F. & G. BEIJERS FÖRLAG,

REPORT

ON THE

NEUROPTERA

COLLECTED BY BARON NORDENSKIÖLD DURING THE VOYAGE OF THE "VEGA",

IN

1878-1879

 $\mathbf{B}\mathbf{Y}$

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At the request of Baron Nordenskiöld I have examined the few Neuroptera (sensu Linn.) collected during his voyage in 1878—1879. They were received by me from Dr Chr. Aurivillius, of the Entomological Museum in Stockholm. All are in alcohol, and are contained in 9 glass tubes. Only 5 species are represented, and of these it is possible to determine only two with certainty; these two are Chilostigma præteritum Walker and Microsema scissum Mc Lachlan (sp. nov.), both pertaining to the Trichoptera and found in abundance.

Pseudo-Neuroptera.

Fam. Ephemeridæ.

Baëtis, sp.? — Two small nymphs were submitted to the examination of Mr Eaton, who says they certainly pertain to the genus *Baëtis;* specific identification is not possible. They are from Chabarowa, July 31st, 1878.

Fam. Odonata.

Cordulia (Somatochlora) sp.? — One tube contains the posterior wing of a Cordulia (Somatochlora) from Dickson's Haven, August 1878. I know not under what circumstances this wing was found, and it is not possible to identify the species to which it belonged. The high northern latitude would point to C. arctica Zett., but I do not think it belonged to that species, for in its general form, &c., it agrees better with C. metallica, Van d. Linden. All that can be said is that it is the wing of a Cordulia (sub.-g. Somatochlora Selys). The discoidal triangle is empty, and there is an internal triangle.

Trichoptera.

Fam. Limnophilidæ.

Chilostigma præteritum, Walker (Mc Lach., Revision and Synopsis, Supplement p. xlii). — Five tubes contain this species, all from the winter station (Pitlekaj & vicinity), July 1879, about 30 examples in all, of both sexes.

This species was originally discovered by Sir John Richardson in the district of the Slave and MacKenzie Rivers, Arctic America. Recently Dr J. Sahlberg found a or at Nikandrow Island, Yenissei, Sibiria. No doubt the species is circumpolar.

I do not find that the small nervule connecting the subcosta and radius near the end (Cf. Revision & Synopsis, Suppl., p. xliii) is constantly present in the >Vega> examples.

Fam. Sericostomatidæ.

Micrasema scissum sp. nov. — Nearly 30 examples (of which only one is a \mathfrak{P}) of a *Micrasema* were found at St. Lawrence Island, Behring Straits on August 2^{nd} , 1879. It is certainly undescribed, and I append a description.

Black: head, basal joint of antennæ, and apical portion of abdomen clothed with greyish-yellow hairs. Antennæ uniformly blackish-fuscous. Palpi fuscous: maxillary pair in the or rather short, upcurved, the second and third joints nearly equal. Legs blackish-fuscous, the tarsi with a testaceous tinge. Abdomen blackish, with grey lateral lines. Wings somewhat elongate, pale-grey with short yellowish pubescence; pterostigmatic region darker and more opaque in the anterior wings; neuration fuscescent: in the anterior wings the discoidal cell is elongate and narrow; 1st apical fork very oblique at its base, 2nd apical fork with a long footstalk, 3^d apical fork sessile or nearly so; nervule closing the discoidal cell in an oblique line with that below it.

In the 3th dorsal segment is narrow, produced into a small median triangle; below it is the *dorsal lobe* which is divided nearly to its base into two stout slightly-curved obtuse finger-shaped processes. Intermediate appendages (?) tes-

taceous, broad laterally, the apex upcurved and furnished with three bristles proceeding from denticulations of the edge, and on the upper edge near the base are about four similar bristles and denticulations on a dilated portion. Penis broad, flat, obtuse, placed below the last-named appendages. Inferior appendages large, widely divergent, rather narrow at the base, but gradually dilated so that the extremities are broad and very obtuse, convex externally and concave internally, fringed with long yellowish hairs; on the upper edge, near the apex, there is a deep excision in which is a strong curved spine and one or two ridges or teeth (precise conformation of this structure is difficult to discriminate). No ventral teeth.

Expanse about 15 mm.

The above description is taken from dry examples.

In examples of the σ in alcohol the abdomen above and beneath presents blackish chitinous plates separated by broad pale segmental divisions.

The only Q (in alcohol) has the abdomen elongated, and the wings apparently somewhat abbreviated.

M. scissum is distinct from all the described species of the genus in the form of the anal parts of the o, and especially in the divided odorsal lobe, which finds no parallel in any known species. This is satisfactory because the genus is one of the most difficult in which to define the species with any approach to certainty.

Micrasema sp. nov. — One Q from Port Clarence, Alaska, 20^{th} July, is abundantly distinct from M. scissum, but it is useless to give it a name in the absence of the O. Judging from the example in alcohol it should be nearly entirely of a yellowish hue instead of the dark colour usual in the genus. The generic position appears certain, and the genus is becoming of great interest in consequence of the position it is gradually acquiring in the arctic insect-fauna.

