On the Insects other than Coleoptera obtained by Dr. Anderson's Collector during Mr. T. Bent's Expedition to the Hadramaut, South Arabia.

By W. F. Kirby, F.L.S., F.E.S.

[Read 7th March, 1895.]

The insects to which the present paper relates, as well as the *Coleoptera*, *Arachnida*, and *Myriopoda* noticed in the succeeding papers, were presented to the British Museum (Nat. Hist.) by Dr. John Anderson, F.R.S., on condition that, after being worked out, a set of the duplicates should be forwarded to the Museum at Cairo. The *Coleoptera* have been dealt with by Mr. C. J. Gahan, and the remaining insects by myself. There were no *Lepidoptera* in the collection, and the *Neuroptera* and *Diptera* were represented only by a single species each. The *Arachnida* and *Myriopoda* have been worked out by Mr. R. I. Pocock.

A considerable number of specimens were obtained, but most of them belonged to three or four species only, and the total number of species in the collection (many of which were represented by a single specimen only) was very small. Many of the specimens, too, were bleached by spirit, which ought never to be used for collecting any insects except hard-shelled and smooth *Coleoptera*, *Hemiptera*, &c., which are not liable to be discoloured by it, and have no hair to be matted or delicate exposed wings to be torn.

Nevertheless, though most of the species were common and wide-ranging insects, there were a few interesting forms among them which were either new to, or badly represented in, the Museum Collection. One species I have ventured to describe as new to science; and two or three I am at present unable to determine with certainty, from want of sufficient material.

I will first give a complete list of the species in the Collection (amounting to about 20 in all) and will then discuss them in detail.

I should, perhaps, mention that, as usual in drawing up such small lists as the present, I use the names of the families only in the broadest sense.

ORTHOPTERA.

Blattidæ.

Polyphaga syriaca, Sauss.

Phasmidæ.

Phasma ægyptiacum, Gray (?).

LOCUSTIDÆ.

Sphingonotus nebulosus, Fisch.
Schistocerca ægyptia, Linn.
S. peregrina, Oliv.
Euprepocnemis littoralis, Ramb.
Pœcilocera vittata, Klug.
Anepisceptus horridus, Burm.
(2 species of *Locustidæ* undetermined.)

NEUROPTERA.

TERMITIDÆ.

1 nymph, undetermined.

HYMENOPTERA.

CHRYSIDIDÆ.

Stilbum cyanurum, Forst.
Var. *amethystinum*, Fabr.

FORMICIDÆ.

Aphænogaster barbara, Linn.

SCOLIIDÆ.

Compsomeris vestita, Klug.

LEPIDOPTERA (unrepresented).

HEMIPTERA HETEROPTERA.

PENTATOMIDÆ.

Aspongopus viduatus, Fabr.

LYGÆIDÆ.

Lygæus militaris, Fabr.

REDUVIIDÆ.

Ectrichodia Andersoni, sp. n. See p. 284.
(3 undetermined species.)

NEPIDÆ.

Laccotrephes ruber, Linn.

DIPTERA.

ŒSTRIDÆ.

Cephalomyia maculata, Wiedem. (larva).

Order ORTHOPTERA.

Blattidæ.

Polyphaga syriaca, *Sauss.*

Polyphaga syriaca, *Saussure, Revue et Mag. de Zoologie,* (2) xvi. p. 346 (1864).

Heterogamia conspersa, *Brunner de Wattenwyl, Nouv. Syst. des Blattaires,* p. 358 (1865).

A single female specimen.

This species is recorded from Egypt and Syria.

Phasmidæ.

Phasma ægyptiacum, *Gray* (?).

Bacteria ægyptiaca, *Gray, Syn. Phasm.* p. 18 (1835).

Bacillus ægyptiacus, *Westw. Cat. Phasm.* p. 4 (1859).

A single damaged specimen, possibly belonging to this species.

I have shown (Proc. R. Dublin Soc. (2) vi. p. 569) that the true type of *Phasma*, Oliv., is *P. rossia*, Fabr.

Locustidæ.

Sphingonotus nebulosus, *Fisch.*

Œdipoda nebulosa, *Fisch. de Waldh. Ent. Ross.* iv. p. 290, pl. 27. fig. 1 (1846).

A single bleached specimen.

A species widely distributed in Central and Western Asia, extending from "Zungaria" to Asia Minor.

Schistocerca ægyptia, *Linn.*

Gryllus Locusta ægyptius, *Linn. Mus. Ulr.* p. 138 (1764).

A single specimen only.

A common species throughout the Mediterranean district, but not extending much farther.

Many authors call this species *Acrydium tataricum*; but it appears not to be the species thus named by Linné; while if it is generically distinct from *Schistocerca*, a new name will be required for the genus, for I have shown (Proc. R. Dublin Soc. vi. p. 592) that *Gryllus bipunctatus* and *subulatus*, L., are the true types of *Acrydium*, Geoffr.

Schistocerca peregrina, *Oliv.*

Acrydium peregrinum, *Oliv. Voy. Empire Ottoman,* ii. p. 424 (1807).

A single specimen only.

Common in North Africa, Syria, and occasionally in the extreme south of Europe.

Euprepocnemis littoralis, *Ramb.*

Gryllus littoralis, *Ramb. Faune de l'Andalusie*, p. 78, pl. vii. figs. 1, 2 (1838).

Three specimens of this species, which is recorded by Brunner von Wattenwyl from Spain, Rhodes, Beyrout, Cairo, and Kordofan. There is a large specimen in the British Museum from Quetta.

Pœcilocera vittata, *Klug* (?).

Dectisus vittatus, *Klug*, *Symbolæ Physicæ*, iii. pl. 25. figs. 6, 7 (1832).

A great number of specimens of the genus *Pœcilocera*, but all so much bleached or altered by spirit as to be almost unrecognizable. Several of the specimens, however, appear to belong to *P. vittata*, which Klug described from Dongola, and specimens of which are in the British Museum from Aden.

Anepisceptus horridus, *Burm.*

Hetrodes horridus, *Burm. Handb. Ent.* ii. p. 679, n. 2 (1839).

A small and rather pale-coloured male specimen, probably belonging to this species, which has a wide range in Syria, Arabia, and Egypt, but which was not previously represented in the Museum Collection.

Two more species of *Locustidæ* (one immature) which I am unable at present to determine.

NEUROPTERA.

Termitidæ.

A single nymph belonging to this family.

HYMENOPTERA.

Chrysididæ.

Stilbum cyanurum, *Forst.*

Chrysis cyanura, *Forst. Nov. Spec. Ins.* p. 89 (1771).

A very common and somewhat variable species, occurring in all the warmer parts of the Old World and in North America.

A single specimen was obtained of the following form:—

Chrysis amethystina, Fabr. Syst. Ent. p. 359, n. 12 (1775).

Formicidæ.

Myrmicinæ.

Aphænogaster barbara, *Linn.*

Formica barbara, *Linn. Syst. Nat.* (ed. xii.) i. pt. 2, p. 962, n. 2 (1767).

A large number of winged specimens, among which were two males only, the rest being all females.

A common species in South Europe and North Africa.

Scoliidæ.

Compsomeris vestita, *Klug.*

Scolia vestita, *Klug, Symbolæ Physicæ*, iii. pl. 27. fig. 6 (1832).

Tiphia collaris, *Coqueb.* (an *Fabr.* ?) *Illustr. Ins.* ii. p. 54, pl. 13. fig. 3 (1801).

This is a common species in Spain, Northern Africa, and Arabia, and generally goes by the name of *collaris*, Fabr.; but as I doubt whether Coquebert has correctly identified the Fabrician species, I prefer to use a name about which there is no ambiguity.

Order HEMIPTERA.

Suborder Heteroptera.

Pentatomidæ.

Aspongopus viduatus.

Cimex viduatus, *Fabr. Ent. Syst.* iv. p. 117, n. 145 (1794).

A common and variable Mediterranean, West Asiatic, and African species.

Four specimens were obtained, of which two belong to the following form:—

Pentatoma nigroviolacea, Beauv. Ins. Afr. Amér. p. 83, *Hém.* pl. 7. fig. 4 (1805).

The other two specimens have the hind border of the scutellum, the lateral borders of the scutellum, except the hinder lobe, the base of the tegmina and of the abdomen, and more or less of the principal nervures of the wings reddish. In one of these the tegmina and wings are mostly black; in the other the tegmina are slightly tinged with reddish towards the base, and the wings are yellowish hyaline with brown tips.

Lygæidæ.

Lygæus militaris, *Fabr.*

Cimex militaris, *Fabr. Syst. Ent.* p. 717, n. 103 (1775).

Four specimens, one immature.

A widely distributed species throughout the Mediterranean districts and the warmer parts of the Old World.

Reduviidæ.

Ectrichodia Andersoni, sp. n.

Long. corp. 30 millim.

Female. Black, the upper surface of the thorax, the front angles and two spines on the scutellum, the base of the tegmina, and the inside of the front tibiæ rufo-testaceous. Thorax above divided into four lobes by a deep cross filled up with black, but the longitudinal groove not reaching to the extremity. Femora with two small teeth beneath, one on each side, before the extremity, preceded by one or two smaller ones on the medial line, smallest on the hind femora.

A single specimen, which has lost its tarsi and most of its antennæ. It is allied to *E. gigas*, Herr.-Schäff., from Africa, but the head and abdomen are entirely black, both above and below, and the legs almost so; and the thorax is much less coarsely punctured than in *E. gigas*.

I have named this new species after Dr. Anderson, to whom we are indebted for its discovery.

A single immature specimen of a black species apparently allied to *Pirates*, Burm., but with the tarsi only 2-jointed.

There are also one or two broken and immature specimens of *Reduviidæ*, not at present determinable, but apparently allied to *Conorhinus*, Lap.

Nepidæ.

Laccotrephes ruber.

Nepa rubra, *Linn. Syst. Nat.* (ed. x.) i. p. 440, n. 2 (1758); *Mus. Ulr.* p. 185 (1764).

Nepa rubra, part., *Fabr. Mant. Ins.* ii. p. 277, n. 6 (1787); *Ent. Syst.* iv. p. 62, n. 6 (1794); *Syst. Rhyng.* p. 107, n. 6 (1803).

Nepa grossa, *Fabr. Syst. Rhyng.* p. 107, n. 5 (nec *Mant. Ins.* ii. p. 277, n. 5; nec *Ent. Syst.* iv. p. 62, n. 5).

A long series of this species, which is common all over Africa.

The Linnean description applies better to this than to the allied Asiatic species; and Fabricius correctly separated the latter (from China) in his 'Mantissa' and 'Ent. Syst.' by the shorter setæ, though he gives Tranquebar as the locality of *N. rubra*, and quotes a figure of Stoll's representing the Asiatic species. But in his 'Syst. Rhyng.' he gives *N. grossa* as an African species, and *alters the descriptions of both* grossa *and* rubra *to correspond*, thus reversing the names, in which Stål and other recent authors have carelessly followed him.

DIPTERA.

Œstridæ.

Cephalomyia maculata, *Wiedem.*

Œstrus maculatus, *Wiedem. Aussereur. zweifl. Ins.* ii. p. 256, n. 2 (1830).

A single larva of this species, which infests the camel.

Mr. E. Austen has kindly given me the name of the insect.

On the Coleoptera obtained by Dr. Anderson's Collector during Mr. T. Bent's Expedition to the Hadramaut, South Arabia.

By C. J. Gahan, M.A., of the British Museum (Natural History). (Communicated by W. Percy Sladen, Sec. Linn. Soc.)

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This small collection of Coleoptera includes little more than fifty species, and must represent but a very small proportion of the whole Coleopterous fauna of South Arabia. Of the species from the Hadramaut enumerated in the following list, some have already been recorded from the district of Yemen and other parts of Arabia; most of the remaining species are identical with, or closely allied to, forms occurring in Egypt, Nubia, and Abyssinia. A few have hitherto been known only from Persia and North-West India; while a few more have a range extending from Arabia to Senegal in West Africa. So far as the evidence, as a whole, of such a small collection can be of value, it seems to point to South Arabia as forming part of the Mediterranean subregion, with a slight admixture in its fauna of the Ethiopian element.