

BUPRESTID BEETLES FROM THE MARITIME PROVINCE OF SIBERIA

By W. S. FISHER

Of the Bureau of Entomology, United States Department of Agriculture

The present paper is the result of a study of the Buprestid beetles received from Prof. T. D. A. Cockerell, and which were collected on his journey through the eastern part of Siberia during July and August, 1923. The material of this family collected by Professor Cockerell and his associates consists of 11 species, 2 of which are described as new.

All of the species collected belong to the typical Palaearctic fauna; some of them are distributed eastward over the greater part of Siberia and Europe, and in one case the species is circumpolar in its distribution extending over the northern parts of both the Eastern and Western Hemispheres.

LAMPRA VIRGATA (Motschulsky)

Paecilonota virgata MOTSCHULSKY, Bull. Soc. Imp. Nat. Moscou, vol. 32, pt. 2, 1859, p. 490.

This species was originally described from the Amur River region in Siberia. Motschulsky's description is very short, but Solsky in his Coleoptera of eastern Siberia¹ gives a long description of this species and records it as having been collected during June in the vicinity of Lake Khanka, which is situated near Vladivostok, Siberia.

This beautiful species is represented by three examples, two collected at Vladivostok by V. Prinada, and the third example taken during July 1923, by T. D. A. Cockerell along the Kudia River, in the Province of Amagu. The specimens examined vary considerably in the number and arrangement of the violaceous spots on the upper surface, and the color is more cupreous or aureous on some of the specimens.

The species resembles *Lampira festiva* Linnaeus from Europe very closely, and is probably only a variety of that species.

¹ Horae Soc. Entomol. Rossicae, vol. 7, 1871, pp. 353-356

BUPRESTIS STRIGOSA Gebler

Buprestis strigosa GEBLER, Ledebours Reise, vol. 2, pt. 2, 1830, pp. 78-79.

This species was described by Gebler from Siberia, and was reported by him as having been collected frequently in the Alta Mountains and Davuria, and rarely at Barnaul. Motschulsky² reports it as common with *Buprestis haemorrhoidalis* Herbst (*B. punctata* Fabricius) in the forests of fir near the northern part of the Amur River, and gives it the varietal name *flavosparsa* without giving a description of it. It seems to be a common species and widely distributed throughout Siberia and Mongolia.

Nine specimens, five males and four females, were examined, of which seven were collected by A. I. Lavrushin along the Amagu River during July, 1923, and the other two by T. D. A. Cockerell along the Kudia River, in the Province of Amagu, during July, 1923.

The color markings are quite variable in this species; some have the elytra immaculate, while in others the yellow markings are quite distinct. The yellow spot at apical angle of pronotum is also variable in size, and is entirely absent in one specimen.

The males have a large broad hook at the tip of the anterior tibiae, and the last abdominal segment is feebly arcuately emarginate at the apex, and usually only the last segment ornated with yellow spots at the sides, but in one specimen these spots are entirely absent.

In the females the anterior tibiae are not armed with a hook, and usually all of the abdominal segments are marked with yellow spots at the sides, and the last segment is broadly truncate at apex.

BUPRESTIS HAEMORRHOIDALIS Herbst

Buprestis haemorrhoidalis HERBST, Schriften Berl. Gesellsch. Nat. Freunde, vol. 1, 1779, p. 97.

Herbst described this species under the above name from Europe, and later it was described by a number of other writers under various names, all of which have been placed as synonyms of *haemorrhoidalis* by Kerremans.³ Motschulsky,⁴ under the name of *Buprestis punctata* Fabricius (placed as a synonym of *haemorrhoidalis* by Kerremans), records it as being very common in the forests of fir near the northern part of the Amur River in eastern Siberia. The color markings on this species are also variable, and if the synonym given by Kerremans is correct, the species has a wide distribution, living in the conifers throughout Europe and Siberia.

² Schrenk's Reisen und Forschungen im Amur-Lande, vol. 2, 1860, p. 108.

³ Wytzman Genera Insectorum, fasc. 12, pt. 3, 1903, p. 141.

⁴ Schrenk's Reisen und Forschungen im Amur-Lande, vol. 2, 1860, p. 107.

A single female of this species was collected by T. D. A. Cockerell at Okeanskaja, during August, 1923. This specimen is of a uniform dark brown color above, with a distinct cupreous, greenish, or purplish reflection when viewed in different lights, and the upper surface is immaculate, except for a very small yellow spot at the apical angles of the pronotum; beneath the color is more purplish, the last abdominal segment is broadly truncate and feebly sinuate at apex, and on each side ornated with a large yellow spot.

This species is larger and more elongate than *Buprestis strigosa* Gebler, more convex above, sides of pronotum more regularly obliquely expanded from the apical angles to the base, and the elytra not as strongly longitudinally costate.

DICERCA ACUMINATA (Pallas)

Buprestis acuminata PALLAS, Icones Insectorum, 1871, p. 69, no. 10, pl. D, fig. 10.

This is another Palaearctic species which is distributed throughout Europe and Siberia. Motschulsky⁵ records it from along the banks of the Amur River as far as Kidsi.

Two examples of this species were collected by T. D. A. Cockerell at Okeanskaja during August, 1923.

MELANOPHILA ACUMINATA (De Geer)

Buprestis acuminata DE GEER, Mém. Ins., vol. 4, 1774, p. 133.

This circumpolar species is distributed over the greater part of Europe, Siberia, and North America and on account of its wide distribution has been described under a great many different names by various writers.

This species is represented in the material examined by four examples, three collected by T. D. A. Cockerell along the Kudia River, in the Province of Amagu, during July, 1923, and one taken along the Amagu River by A. I. Lavrushin during July of the same year.

ANTHAXIA PSITTACINA Heyden

Anthaxia psittacina HEYDEN, Deutsche Entomol. Zeitschr., vol. 31, 1887, p. 303.

This species was described from two examples collected at Suyfun, near the mouth of the Amur River in Siberia. It is represented among the material collected by T. D. A. Cockerell in Siberia during August, 1923, by five specimens, two of which were taken at Okeanskaja and the other three at Kongaus.

⁵ Schrenk's Reisen und Forschungen im Amur-Lande, vol. 2, 1850, p. 107.

AGRILUS IMPRESSIFRONS Kiesenwetter

Agrilus impressifrons KIESENWETTER, Deutsche Entomol. Zeitschr., vol. 23, 1879, pp. 254-255.

This species was described from the Amur River region of Siberia, and among the material received from T. D. A. Cockerell is one specimen collected by V. Prinada at Vladivostok during 1923.

AGRILUS SMARAGDINUS Solsky

Agrilus smaragdinus SOLSKY, Horae Soc. Entomol. Rossicae, vol. 11, 1876, pp. 279-280.

This beautiful green species was described from a single example collected by Mr. Pouzilo along the banks of the Souyfoun River near Vladivostok.

Among the material submitted by T. D. A. Cockerell was a single example of this species collected at Vladivostok, during 1923, by V. Prinada.

AGRILUS COCKERELLI, new species

Female.—Form rather large, robust, and moderately shining; above glabrous, uniformly dark blue with a slight greenish tinge; beneath blackish-blue, slightly more shining than above, and with the tarsi feebly aeneous.

Head with the front rather wide, feebly convex, and the sides obliquely expanding toward the top, broadly but obsoletely concave on the front, with a rather broad, distinct longitudinal groove on the vertex and occiput; surface coarsely, irregularly, and rather densely punctate, and with moderately fine irregularly placed rugae, which are transverse on the front, and more or less concentrical on the occiput; epistoma slightly wider between the antennae than the diameter of the antennal cavities, transverse in front, with a small angular emargination at the middle; antennae moderately long, and serrate from the fourth joint.

Pronotum nearly one and one-third times as wide as long, slightly narrower at base than apex, and widest at apical fourth; sides feebly expanded from apical angles to apical fourth, then obliquely narrowed to the posterior angles, which are nearly rectangular; when viewed from the side the upper margin is sharply defined and feebly sinuate, and the lower margin distinct, widely separated anteriorly, and connected to the upper margin behind the middle; anterior margin obsoletely arcuately rounded; base rather strongly angularly emarginate at elytral lobes, and feebly arcuately emarginate in front of scutellum; surface moderately convex, with two shallow depressions on disk at apical third, a similar depression on each side along base near poste-

rior angle, and a broader and much deeper depression along the lateral margins near middle, the lateral carina not distinct, and represented by an obsolete arcuate elevation, coarsely, densely, and irregularly rugose, and finely and rather densely punctate between the rugae. Scutellum transversely carinate, the carina broadly rounded on top; sides parallel anteriorly, and strongly arcuately attenuate posteriorly to the apex, which is acute; surface finely and densely granulose.

Elytra slightly wider than pronotum at base, and four times as long as it; sides parallel for a short distance behind the base, broadly arcuately constricted in front of middle, broadly arcuately rounded behind the middle, then arcuately attenuate to the tips, which are separately narrowly rounded and obsoletely dentate; disk moderately convex, and each elytron with a broad basal depression, which is deep at the basal margin, but becoming more shallow posteriorly and extending behind the tip of the scutellum, and with a broad obsolete longitudinal depression behind the middle along the suture, which is rather strongly elevated posteriorly; surface coarsely and densely imbricate-punctate.

Abdomen with the sides broadly exposed above, and beneath sparsely but not deeply punctate, the punctures very coarse and more or less confluent at base of first segment, but becoming finer and more widely separated toward apex, sparsely clothed with short inconspicuous hairs, and the intervals finely, densely granulose; first segment convex at middle, and without any median depression; last segment narrowly rounded at apex, with a small angular emargination at the middle; pygidium with a distinct median carina, which does not extend to apex. Prosternum coarsely scabrous, with the intervals finely granulose and glabrous; prosternal lobe large, broadly rounded in front, deeply and broadly arcuately emarginate at the middle, and strongly declivous; prosternal process longitudinally concave, the sides parallel to behind the coxal cavities, then strongly attenuate to the tip, which is rather acute. Femora flattened and not armed with teeth on the inner margin. Tibiae slender, straight and not mucronate at apex. Posterior tarsi much shorter than the tibiae, and the first joint about as long as the following two joints united. Tarsal claws cleft at middle, the inner tooth about one-half as long as the outer tooth, and not turned inward (claws on middle tarsi missing).

Length, 7 mm.; width, 2.5 mm.

Type locality.—Vladivostok, Siberia.

Type.—Cat. No. 27562, U.S.N.M.

Described from a single female collected at the type locality during 1923 by V. Prinada.

This species is closely allied to *elongatus* Herbst, but that species is more elongate and slender, the head is narrower in front, with the sides arcuately expanded at vertex, and not depressed on the front, prothorax with the sides more strongly narrowed, and the disk more deeply depressed, pygidium not longitudinally carinate, prosternal lobe not as deeply emarginate in front, and not as strongly declivous, and the posterior tarsi nearly as long as the tibiae.

AGRILUS PRINADAI, new species

Female.—Form moderately large, more slender than *cockerelli* Fisher, and subopaque; above dark aeneous, with a more or less brownish and bluish tinge, the head slightly more aureous in front, and the pronotum obsoletely cupreous on disk; beneath aeneous, with a distinct bluish and blackish-brown reflection, and more shining than above.

Head rather narrow and nearly flat in front, with the sides nearly parallel (only feebly arcuately expanded at vertex), feebly longitudinally grooved from vertex to near the epistoma, the groove more deeply impressed on the vertex, and terminating in a broad shallow depression on the front; surface coarsely, irregularly punctate, and coarsely rugose, the rugae irregular, and more or less transverse on the front, but becoming longitudinal on the occiput, and sparsely clothed with short semierect whitish hairs; epistoma about as wide between the antennae as the diameter of the antennal cavities, and broadly, but not deeply, arcuately emarginate in front; antennae extending to about middle of pronotum, and serrate from the fourth joint.

Pronotum about one and three-fourths times as wide as long, slightly narrower at base than apex, and widest near apical angles; sides feebly obliquely narrowed from anterior margin to posterior angles, which are rectangular; when viewed from the side the upper margin is sharply defined and strongly sinuate, and the lower margin distinct, arcuately expanded from the apical angles to the basal third where it is connected to the upper margin; anterior margin arcuately emarginate, and with a broadly rounded median lobe; base deeply angularly emarginate at the elytral lobes, and nearly transversely truncate in front of scutellum; surface moderately convex, with a broad obsolete longitudinal depression on middle of disk, and with a broad, deep depression on each side along lateral margins, the lateral carina distinct, strongly elevated, straight, and extending from base near posterior angles to basal third, and widely separated from lateral margin, coarsely and densely rugose, the rugae more or less transverse on the disk, coarsely, densely punctate between the rugae, and sparsely clothed with short inconspicuous

pubescence toward the sides. Scutellum strongly transversely carinate, the carina acute on the top; sides parallel anteriorly, and strongly arcuately attenuate posteriorly to the apex, which is acute; surface finely, densely granulose.

Elytra about as wide as anterior part of pronotum at base, and five times as long as it; sides parallel for a short distance behind base, broadly arcuately constricted in front of middle, broadly arcuately rounded behind middle, then obliquely attenuate to the tips, which are separately feebly broadly rounded or subtruncate, and finely, irregularly dentate; disk slightly flattened, and each elytron with a broad, deep basal depression, and with a broad, obsolete longitudinal depression along the suture, which is scarcely elevated posteriorly; surface coarsely and densely imbricate punctate.

Abdomen with the sides broadly exposed above, and beneath finely, sparsely punctate, and more or less transversely striolate, sparsely clothed with short recumbent cinereous hairs, and with the intervals smooth; first segment convex at middle, and with a broad shallow depression on each side; last segment rather narrowly rounded at apex, with a shallow arcuate emargination at the middle; pygidium not longitudinally carinate. Prosternum coarsely, densely scabrous, sparsely clothed with short semierect cinereous pubescence, and the intervals obsoletely granulose; prosternal lobe large, broadly rounded in front, broadly arcuately emarginate at middle, and strongly declivous; prosternal process flat, the sides parallel to behind the coxal cavities, then strongly attenuate to the tip, which is rather acute. Femora slightly flattened and not armed with teeth on the inner margin. Tibiae slender, straight, and not mucronate at apex. Posterior tarsi much shorter than the tibiae, and the first joint about as long as the following three joints united. Tarsal claws cleft at middle, the inner tooth broad, about one-half as long as the outer tooth, and not turned inward (claws on middle and posterior tarsi missing).

Male.—Differs from the female in being smaller, more slender, head without a depression on the front, and the epistoma not as distinctly and broadly emarginate in front, elytra more convex and scarcely depressed along the suture, and the last abdominal segment more deeply emarginate at apex.

Length, 4.75–6 mm.; width, 1.5–2 mm.

Type locality.—Vladivostok, Siberia.

Type and allotype.—Cat. No. 27563, U.S.N.M.

Described from two specimens, male and female, both collected at the type locality during 1923 by V. Prinada.

TRACHYS MINUTA (Linnaeus)

Buprestis minuta LINNAEUS, Systema Naturae, ed. 10, vol. 1, 1758, p. 410.

This species is also widely distributed throughout Europe and Siberia, but is rather rare in some sections. Solsky⁶ has recorded it as having been collected by Mr. Pouzilo in the vicinity of Vladivostok, Siberia.

One example, which is identical with specimens of this species from Europe, was collected by T. D. A. Cockerell at Olga, during July, 1923.

⁶Horae Soc. Entomol. Rossicae, vol. 11, 1876, p. 281.

