

OF SOME NEW AND INTERESTING SPECIES OF WATER
BEETLES OF THE FAMILY GYRINIDAE IN THE
UNITED STATES NATIONAL MUSEUM

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I have to thank the authorities in charge of the entomological collection of the United States National Museum for permission to work upon the foreign species of Gyrinidae in that Museum.

The material sent me contained several new forms, descriptions of which are given below. There were also represented many other species, already known, which are likewise treated so far as they gave reason for special remarks.

AULONOGYRUS CONSPICUUS, new species

Length: $7\frac{3}{4}$ to $8\frac{1}{4}$ mm. Oval, hardly elongate, moderately convex. Upper surface dark green, head and prothorax bluish with coppery and purplish reflections, side margin rufous; under surface dark, mesosternum, anal segment and legs rufous, epipleura yellow. Labrum transverse, coppery-green, shining, finely alutaceous, anterior margin with long whitish hairs; clypeus coppery, strongly alutaceous and punctate; head bluish, indistinctly alutaceous, vermiformly wrinkled and punctate, laterally coppery-aeneous, purplish and more distinctly alutaceous and punctate near the eyes; prothorax with bluish reflections, indistinctly alutaceous and strongly punctate, in the middle transversely impressed and longitudinally channeled, laterally with a purplish and strongly alutaceous spot, the rufous side margin anteriorly larger than posteriorly; scutellum purplish, shining; suture of elytra coppery, truncature convex with obtuse and scarcely rounded angles, each elytron with ten coppery sulci, which are strongly alutaceous, serially punctured and apically united two and two, the outer ones being more strongly impressed, intervals not distinctly alutaceous, but strongly punctate, the eighth and tenth narrower than the others; anterior tibiae curved inwards, the outer margin apically dilated after the middle of length, apex obliquely truncate, external apical angle obtuse, scarcely produced.

Type.—(Cat. No. 41241, U.S.N.M.) from British East Africa: Mount Kenia to Fort Hall (E. A. Mearns coll.) in the United States National Museum; *paratype* in collection of the author.

In size and shape of the body very similar to *A. formosus* Modeer (*-capensis* Authors) and likewise dark colored beneath. Above *A. conspicuus* is more greenish (bluish in *formosus*) and easily to be recognized by the uniform sculpture of the intervals on elytra, none of which is more strongly alutaceous than the others, a character which is unique in the genus.

GYRINUS ORIENTALIS forma POLITUS, new female form

While in the typical form the disk of elytra in the female specimens is finely alutaceous, there is no trace of such sculpture in Szechuan specimens. All other characters are like in the typical form, and the males are not different at all.

Type and seven *paratypes*.—(Cat. No. 41242, U.S.N.M.) from China, Szechuan near Kiating, Shin-Kai-Si, Mount Omei, 4400 feet (D. C. Graham 1921) in the United States National Museum; three *paratypes* in collection of the author.

The typical form is represented in the same collection from China, Kiangsi Prov., Kuling near Kiu-Kiang, near Yellow Dragon Temple, October 16, 1919 (H. F. Loomis). I have seen other specimens from: Soochow, March 25, 1923 (Suenson coll., Coll. Ochs); Shanghai (Mus. Stettin); Foochow (Cons. Siemens coll. 1907, Mus. Bremen); Hongkong, 1876 (Coll. Ochs); Pingshiang (Dr. Kreyenberg coll., Coll. Ochs); Northern Kuangtung, Tsha-jiu-san 1400 m. May-June, 1912 (Mell coll., Coll. Ochs); Yünnan-fu, San-Non-Kai (Coll. Ochs); S. E. Yunnan, Kuang-Si-Hien 2100 m. (Coll. Ochs).

GYRINUS JAPONICUS forma FRANCKI, new female form

As with the preceding species there exists also a female form of *G. japonicus* of probably local distribution with polished elytra, as in the males. In the typical female the disk of the elytra is very strongly alutaceous.

The *type*, a single specimen, was presented to me by Dr. P. Franck of Hamburg, in whose honor the new form is named, and is labeled: East Asia, Vladivostok (Hermann Frieb coll.) In all other characters it agrees with specimens of *G. japonicus* from different Japanese localities which are in my collection.

GYRINUS NATATOR subspecies SZECHUANENSIS, new subspecies

Shape of the body and the color of under surface as in *G. natator substriatus*: rather broadly oval, mesosternum dull rufous, anal segment and epipleura bright red. The serial punctures in elytra sim-

ilar to those in *G. natator natator*, evident to the suture and not very strongly impressed outwards. The convexity of body is very strong, the pronotum is relatively long and with only slight impressions.

Type.—Female (Cat. No. 41243, U.S.N.M.) from China, Szechuan, Kuanshien August 19, 1924, 13,000 feet altitude (D. C. Graham), in the United States National Museum. There is another female from Szechuan between Chengtu and Kuanshien, July 2-5, 1924 (D. C. Graham), which exhibits the same characters.

GYRINUS RUGIFER, Régimbart

Gyrinus rugifer RÉGIMBART, 1883, Ann. Soc. Ent. France, ser. 6, vol. 3, p. 179.—FLEUTIAUX and SALLÉ, 1889, Ann. Soc. Ent. France, ser. 6, vol. 9, p. 374.—RÉGIMBART, 1907, Ann. Soc. Ent. France, vol. 76, p. 180.—OCHS, 1924, Amer. Mus. Nov., No. 125, p. 3.

Specimens in the United States National Museum from Haiti, Le Trou, September, 1925 (Hoffman). Hitherto only known from Guadeloupe, Dominica, and Porto Rico.

GYRINUS COLOMBICUS Régimbart

Gyrinus colombicus RÉGIMBART, 1883, Ann. Soc. Ent. France, ser. 6, vol. 3, p. 180; 1907, Ann. Soc. Ent. France vol. 76, p. 178.

Specimens from Bolivia, Limon, September, 1923 (Harrington), in the United States National Museum agree very well with Régimbart's description. The species was mentioned by the describer from Colombia and Venezuela. I have seen, besides the above mentioned, only a few specimens from Colombia (Coll. Sharp, in the British Museum) and from Bogota (Coll. Klages, in the Carnegie Museum), which can probably be referred to that species.

GYRETES BOUCARDI Sharp

Gyretes boucardi SHARP, 1882, Biol. Centr. Amer., Col., vol. 1, pt. 2, p. 51.—RÉGIMBART, 1883, Ann. Soc. Ent. France, ser. 6, vol. 3, p. 407; 1907, Ann. Soc. Ent. France, vol. 76, p. 188.

In the females the hairless part of elytra is generally strongly alutaceous, although polished specimens were mentioned by Régimbart in 1907,¹ as variety *dimorphogynus*.

Of the latter I had only seen a single specimen from Guatemala (from Coll. Donckier, Peschet leg., now in my collection). The United States National Museum possesses another specimen of this kind from Mexico, Tapachula, May, 1923 (W. M. Mann).

These are very similar to *Gyretes mexicanus* Régimbart, but may easily be distinguished by the exterior apical angle of elytra, which is obtuse in *mexicanus*, angular in *dimorphogynus*; moreover the

¹ Ann. Soc. Ent. France, vol. 76, p. 188.

tomentous border of elytra is dilated suddenly shortly before the apex in *dimorphogynus*, while it is gradually broadened in *mexicanus*.

GYRETES MINOR Régimbart

Gyretes lionotus SHARP (ex. p.) 1882, Biol. Centr. Amer., Col., vol. 1, pt. 2, p. 50.

Gyretes minor RÉGIMBART 1883, Ann. Soc. Ent. France, ser. 6, vol. 3, p. 407, pl. 11, figs. 114, 114a.—SHARP 1887 (?), Biol. Centr. Amer., Col., vol. 1, pt. 2, Suppl., p. 761.

Described from Guatemala, Torola (Champion). I have seen a good series in the Hamburg Museum for Guatemala, Hacienda Trapiche Grande near Cuyotenango (Riedel collector, Dr. G. v. Sydow leg.). The United States National Museum possesses numerous specimens from Mexico, Cordoba, Vera Cruz, April 17, 1908 (Fr. Knab coll.) comprising 34 males and only three females, which exhibit the strongly alutaceous surface of elytra, which was indicated by the describer of the species.

GYRETES MINOR forma **LAEVIPENNIS**, new female form

Other females of the same series have the hairless parts of elytra polished like the males, from which they are easily distinguished by the narrow anterior tarsi; moreover the tomentous border of elytra is apically more enlarged in these females.

Type and six *paratypes* (Cat. No. 41244, U.S.N.M.) in the United States National Museum, three *paratypes* in collection of the author.

GYRETES GUATEMALENSIS Régimbart

Gyretes levis SHARP 1882, Biol. Centr. Amer., Col., vol. I, pt. 2, p. 51 (err. det.)

Gyretes guatemalensis RÉGIMBART 1883, Ann. Soc. Ent. France, ser. 6, vol. 3, p. 399.—SHARP 1887 (?), Biol. Centr. Amer., Col., vol. 1, pt. 2 Suppl., p. 761.—ZIMMERMAN 1917, Ent. Mitt., vol. 6, p. 164.

Panama: Ancon, C. Z., May 17, 1911, electric light (A. H. Jennings), one specimen female in the United States National Museum.

ORECTOCHILUS OBSCURICEPS Régimbart

Orectochilus obscureiceps RÉGIMBART 1907, Ann. Soc. Ent. France, vol. 76, p. 215.

Described from Central China, Szechuan, Siao-Lou (Coll. Oberthür and Régimbart). The United States National Museum possesses three specimens from Manchuria and Korea: Yalu River 150-200 miles from mouth, May, 1914 (A. D. C. Sowerby), which agree very well with Régimbart's description and may probably be referred to that species. As, however, I do not possess authentic specimens of the latter, I can not decide the question with certainty.

ORECTOGYRUS ALLUAUDI Régimbart

Orectogyrus alluaudi RÉGIMBART 1899, Ann. Soc. Ent. France, ser. 6, vol. 9, p. 250; 1891, Ann. Soc. Ent. France, vol. 60, p. 733, pl. 19, fig. 27; 1895, Mem. Soc. Ent. de Belgique, vol. 4, p. 236; 1902, Ent. Tidskr., vol. 23, p. 299.—OCHS 1926, Ann. Mus. Civ. Genova, vol. 52, p. 168.

Described from the Ivory Coast, collected moreover in Liberia, Upper Senegal, Cameroon, Upper Congo, Eritrea, and N. E. Rhodesia in several varietal forms. The United States National Museum has a series from Liberia: Mount Coffee February, 1897 (R. P. Currie), where the insect was collected together with *Orectogyrus sexualis* and *specularis*.

I have recently seen a single male specimen in the Hamburg Museum from Mecutine, about 70 kilometers west of coast of Mozambique, November 10, 1926, which is exceptionally dark colored, with whitish pubescence, and exhibits no trace of the triangular yellow spot which is generally present at the side margin of pronotum.

ORECTOGYRUS DISTINCTUS Régimbart

Orectogyrus schistaceus RÉGIMBART 1883, Ann. Soc. Ent. France, ser. 6, vol. 3, p. 457, pl. 14, fig. 163 (err. det.).

Orectogyrus distinctus RÉGIMBART 1886, Ann. Soc. Ent. France, ser. 6, vol. 3, p. 267; 1895, Mem. Soc. Ent. de Belgique, vol. 4, p. 234; 1907, Ann. Soc. Ent. France, vol. 76, p. 242; 1908, Wiss. Erg. Schwed. Deutsch Ost Afrik. Exp., vol. 7, pt. 1, p. 8.—PESCHET, 1921, Voy. Babault, p. 22, pl. 2, fig. 6.—OCHS 1924, Ent. Blatter, vol. 20, p. 240.

(?) *Orectogyrus suturalis* ZIMMERMAN, 1917, Ent. Mitt., vol. 6, p. 170.

Type locality.—Usambara. Known from many localities in British East Africa and Tanganyika-Territory, and moreover collected in Nyassaland. Since my last publication in 1924 I have seen specimens from British East Africa: Kibvezi (Scheffler, in coll. Ochs); Kathini, Limuru, March 5, 1918 (T. J. Andersson, British Museum). Tanganyika-Territory: Kumburu (Museum Hamburg); East Usambara, January, 1909 and December, 1915, Sakaru, September, 1902, Moa, April 1904 (Methner coll.).

The United States National Museum has numerous specimens from British East Africa: Mount Kenia to Fort Hall, 8,300 feet, and Wambugu (E. A. Mearns coll.), most of which exhibit very nice bluish reflections on the smooth parts of the upper surface.

ORECTOGYRUS CUPRIFER Régimbart

Orectogyrus cuprifer RÉGIMBART 1883, Ann. Soc. Ent. France, ser. 6, vol. 3, p. 462; 1895, Ann. Mus. Civ. Genova, ser. 2, vol. 15, p. 194; 1895, Mem. Soc. Ent. de Belgique, vol. 4, p. 234.—OCHS, 1924, Ent. Blatter, vol. 20, p. 240; 1925, vol. 21, p. 184; 1926, Ann. Mus. Civ. Genova, vol. 52, p. 171.

The United States National Museum has several from Lourenço Marquez: Mahota, June 6, 1909 (from C. W. Howard), which is the

most southern locality hitherto recorded for that species, which is widely dispersed in Africa and ranges from the Gold Coast to Angola in the west and from Somaliland southwards in the east.

The Hamburg Museum possesses two male specimens from Mecutine, about 70 kilometers west of the coast of Mozambique November 10, 1926, which are nearly uniformly black colored above and have exceptionally short discal ridges.

