Bird-infesting Mallophaga of Japan (II).* (Genera Goniodes and Goniocotes)

By

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With 4 figures in text.

Genus Goniodes Nitzsch.

Giebel, Insecta Epizoa, 1874, p. 193; Piaget, Les Pediculines, 1880, p. 241; Kellogg, Mallophaga, Genera Insectorum, 1908, Fasc. 66, p. 47; Mjöberg, Arkiv för Zoologi, 1910, Bd. 6, p. 102.

I. Goniodes lasiventris sp. nov.

Five females, two males and two young individuals were cellected from a skin of Chinese turtle dove, *Turtur chinensis* (Formosa. Sept. 4, 1908).

Measurements.

			8	8	우	우	우
Length of body		 •••	nım. 1.27	mm. 1.37	mm. 1.50	mm. 1.53	mm. 1.53
Width of body		 	0.64	0.65	0.64	0.65	0.64
Length of Head	•••	 	0.35	0.36	0.38	0.38	0.38
Width of head		 	0.39	0 40	0.45	0.45	0.45
Length of prothorax		 	0.12	0.12	0.12	0.12	0.12
Width of prothorax	•••	 	0.25	0.26	0.26	0.27	0.26

^{*} The first part of the contribution, dealing with the genus *Physostomum*, appeared in this volume of the "Annotationes", pp. 67-72.

S2 S. UCHIDA:

This new species is characterized by the broad abdomen, which closely resembles that of *Goniocotes menadensis* Piaget from the cuckoo-dove, *Macropygia menadensis*. Ground colour of body clear fulvous, with palebrownish markings.

Male:—Head somewhat quadrilateral, with laterally projecting temples and very prominent, evenly rounded front; width across temples ex-

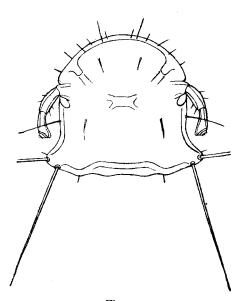


Fig. 1.

Goniodes lativentris n. sp.,
Head of female. ×100.

ceeding length of head. Front with one longish and five short hairs on each side; marginal band very narrow, terminating in long yellowishbrown antennal blotches. Antennæ like those of Goniodes minor Piaget,. set in very deep emarginations; the first segment short, thick, extending only a little beyond antennal sinus; the second segment long and cylindrical, about as long as the third segment which is inwardly curved and somewhat broadened at end; both fourth and fifth segments rudimentary and appearing like small appendages of the third segment. Eyes clear and very prominent;

behind them the sides of head are nearly subparallel and bear each a long hair; temporal angles laterally protruding and forming on each side a protuberance, which bears a small prickle and a strong hair; a little behind the latter another long hair present, followed by a weak prickle on the posterior border of temple; occipital margin concave; occipital band distinct, with two brownish blotches.

Prothorax small, quadrilateral; anterior margin slightly concave, posterior margin convex; sides nearly straight, diverging posteriorly, each forming an obtusely angular protuberance which bears a pustulated.

hair. Metathorax transverse, with rounded angles and with posterior margin pressed well into abdomen; two long pustulated hairs on each lateral side; two more hairs, one long and another short, on each side of the posterior margin. Legs short and stout, with a number of heavy spines.

Abdomen very broad, oval, widest at the second segment which is well developed; lateral margin of segments convex; lateral angle of second, third and fourth segments with two long hairs; that of fifth with two long and one short hairs, that of sixth with three long hairs, and that

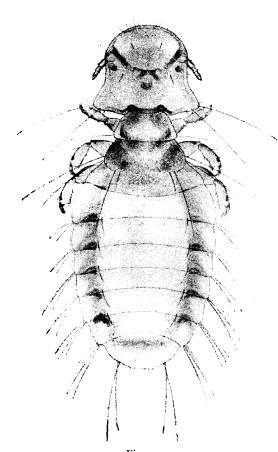


Fig. 2.

Goniodes lativentris n. sp., female. ×60.

of seventh with two long and two short hairs; eighth segment small, semicircular, with two long hairs on each side. Dorsal posterior margin of segments second to seventh with a hair on each side, situated just inside the very broad and pale yellowish lateral band. Genitalia well chitinized, narrow and forked, reaching to first abdominal segment.

Female:—Larger than male; antennæ ordinary; the first segment short, slightly longer than the adjacent trabecular angle; second segment longest, about as long as the two following segments taken together; the third and the fifth nearly equal; the fourth a little-

shorter; temple projecting laterally to a less degree than in male; hairs on side of head very short; abdomen somewhat more slender and the last segment broader than in male.

2. Goniodes lativentris var. major var. nov.

This new variety is founded on a single female specimen which was obtained from a skin of wood pigeon, Columba pulchricollis (Formosa,

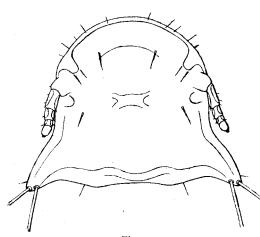


Fig. 3.

Goniodes lativentris var. major n. var.

Head of male. ×100.

Jan. 1, 1913). While it closely agrees in main characters with typical *Goniodes lativentris*, there seem to exist sufficient differences to entitle it to a varietal rank within that species. In comparison with typical specimens, the form in question is larger with considerably wider abdomen. Measurements: Length 1.65 mm., width 0.81 mm. Head 0.44 mm. long, 0.54 mm. wide. Prothorax 0.16 mm. long, 0.29

mm. wide. Angle of temple more protruding than in male of typical form and postero-laterally directed, instead of laterally.

3. Goniodes stylifer Nitzsch.

Denny, Monogr. Anopl. Brit., 1842, p. 156, pl. XII, fig. 2; Giebel, Insecta Epizoa, 1874, p. 200, Taf. XIII, Fig. 1; Piaget, Les Pediculines, 1880, p. 264, pl. XXII, fig. 1; Osborn, Bull. 5 (n. s.), Div. of Ent. U. S. Dep. Agr. Wash., 1896, p. 196, fig. 119.

Two females of this species were collected from a turkey in Tokyo.

4. Goniodes dissimilis Nitzsch.

Denny, Monogr. Anopl. Brit., 1842, p. 162, pl. XII, fig. 6; Giebel,

Insecta Epizoa, 1874, p. 201; Piaget, Les Pediculines, 1880, p. 268, pl. XXII, fig. 3; Osborn, Bull. 5 (n. s.), Div. of Ent. U. S. Dep. Agr. Wash., 1896, p. 195, fig. 117; Kellogg and Paine, Rec. Ind. Mus., X, 1914, p. 229.

Numerous males and females were collected from skins of Hondo copper-pheasant (*Phasianus scintillans*) from Prov. Musashi and Prov. Shinano, of copper-pheasant (*Phasianus soemmeringi*) from Prov. Higo, and of Chinese ring-necked pheasant (*Phasianus torquatus*) from Corea.

5. Goniodes dispar Nitzsch.

Denny, Monogr. Anopl. Brit., 1842, p. 159, pl. XII, fig. 5; Giebel, Insecta Epizoa, 1874, p. 193, Taf. XII, Fig. 12, 13; Piaget, Les Pediculines, 1880, p. 246, pl. XX, fig. 1.

Three males, five females and five youngs of the species were collected from two skins of the common ptarmigan (*Lagopus mutus*) from Prov. Shinano, April 20, 1914, and from Mt. Norikura, July 27, 1894.

6. Goniodes minor Piaget.

Piaget, Les Pediculines, 1880, p. 256, pl. XXI, fig. 3.

Two specimens, both males, obtained from a skin of Chinese turtle-dove (*Turtur chinensis*) from Formosa, Sept. 4, 1908.

They are of somewhat larger dimensions than those given by Piaget.

Measurements:

					Width
Body	• • •		 	 1.80 mm.	0.81 mm.
Head	•••	•••	 	 0.59 mm.	0.65 mm.
Prothorax			 	 0.24 mm.	0.42 mm.

Genus Goniocotes Burmeister.

Burmeister, Handb. Ent., 1835, Vol. 2, p. 431; Giebel, Insecta Epizoa, 1874, p. 182; Piaget, Les Pediculines, 1880, p. 223; Kellogg, Mallophaga, Genera Insectorum, 1908, Fasc. 66, p. 31; Mjöberg, Arkiv för Zoologi, 1910, Bd. 6, p. 106.

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I. Goniocotes macrocephalus sp. nov.

One female specimen from a skin of hazel-grouse, *Tetrastes bonasia*, collected in Saghalin, April 3, 1909.

Measurements:

				Length	V V ICICII
Body	 	• • •	 	1.28 mm.	0.57 mm.
Head	 		 	0.41 mm.	0.47 mm.
Prothorax	 		 	0.075 mm.	0.25 mm.

Length

Width

Female:—Ground colour of body pale yellowish, showing chestnutbrown blotches on head and curved yellowish brown marginal bands on abdomen.

Fig. 4.
Goniocotes macrocephalus n. sp., female. ×70.

Head large; front very broad, convex, with five fine hairs on each side; marginal band brownish, broadest in the centre, the lateral ends bent inward in front of each antenna to form short but distinct chestnut-brown antennal blotches. Antennæ ordinary; the first segment short and broad, the second longest, the third and fourth shortest, subequal; the fifth about as long as the two preceeding segments taken together. Eyes very large, colourless, each with a short spine; another short spine behind eye on lateral margin; temples somewhat expanded, broadly rounded, each with two long hairs and a very fine prickle. Posterior parts of head slightly expanded, angulated; marginal band of a faint colour, broadened posteriorly; occiput sinuous, occipital margin straight, with marginal band darker on sides where it forms chestnut-brown occipital blotch.

Prothorax narrow, short, trapezoidal with lateral margins converging anteriorly, the posterior margin flatly convex; lateral posterior angles slightly produced, each bearing a long hair. Metathorax with rounded lateral angles, each with two long hairs; posterior margin convexly abutting on abdomen, with a long and a shorter hair nearer to lateral angle than to the middle on each side. Legs paler than body, with pale yellowish marginal marking and some scattered strong spines.

Abdomen broadly elliptical, posterior angles of I.—III. segments bearing one hair each; segments IV.—VII. laterally with two or three long hairs; the last segment broad, rounded, entire, bearing two long hairs on each side. Dorsal hairs present on IV.—VI. segments. Lateral band of a pale yellowish brown colour; in each segment, it gradually broadens anteriorly and is bent inwards in a comma-like manner in the border of every two segments.

2. Goniocotes abdominalis Piaget.

Giebel, Insecta Epizoa, 1874, p. 238, Taf. XX, Fig. 9; Piaget, Les Pediculines, 1880, p. 238, pl. XX, fig. 9; Osborn, Bull. 5 (n. s.), Div. of Ent. U. S. Dep. Agr. Wash., 1896, p. 193; Goniocotes hologaster, Denny, Monogr. Anopl. Brit., 1842, p. 153, pl. XIII, fig. 4; Goniocotes gigas, Neumann, Traité des maladies parasitaires; 1892, p. 73, fig. 45.

Two female specimen obtained from a domestic fowl in Tokyo.

3. Goniocoles hologaster Nitzsch.

Giebel, Insecta Epizoa, 1874, p. 184; Piaget, Les Pediculines, 1880, p. 231, pl. XIX, fig. 6; Neumann, Traité des maladies parasitaires, 1892, p. 72, fig. 44; Osborn, Bull. 5 (n. s.), Div. of Ent. U. S. Dep. Agr. Wash., 1896, p. 192.

Numerous specimens of both sexes were collected from a domestic fowl in Tokyo.

4. Goniocotes aegypticus Kellogg & Paine.

Bull. of Entomol. Research, II, 1911, p. 148, pl. V, fig. 2.

Three female and one young specimens taken from a Japanese green pigeon, *Sphenocercus sieboldi*, captured in Prov. Shinano, May 31, 1915.

5. Goniocotes compar Nitzsch.

Denny, Monogr. Anopl. Brit., 1842, p. 152, pl. XIII, fig. 2; Giebel, Insecta Epizoa, 1874, p. 183, Taf. XII, fig. 10, 11; Piaget, Les Pediculines, 1880, p. 234, pl. XIX, fig. 10; Kellogg, New Mallophaga, II, 1896, p. 512, pl. LXIX, fig. 4; Osborn, Bull. 5 (n. s.) Div. of Ent. U. S. Dep. Agr. Wash. 1896, p. 193.

One male and one female specimens taken from a domestic pigeon in Prov. Shinano, June 14, 1914.

6. Goniocotes chrysocephalus Giebel.

Giebel, Insecta Epizoa, 1874, p. 189; Piaget, Les Pediculines, 1880, p. 232, pl. XIX, fig. 7; Kellogg and Paine, Rec. Ind. Mus., X, 1914, p. 220.

Four females and one male collected from a skin of copper pheasant, *Phasianus socmmeringi*, obtained in Prov. Higo.

7. Goniocotes asterocephalus Nitzsch.

Giebel, Insecta Epizoa, 1874, p. 182, Taf. XII, fig. 3, 4; Piaget, Les Pediculines, 1880, p. 226, pl. XIX, fig, 1 (juv.?)

One female and two youngs were taken from an eastern common quail, *Coturnix japonica*, killed in Prov. Shinano Jan. 25, 1915, and a male specimen from a sparrow hawk, *Ascipiter virgatus*, killed in Prov. Shinano Feb. 25, 1915. The latter was probably a case of straggler from a quail captured by the hawk.

Tokyo, Aug. 11, 1915.

ERRATA

to

Mr. S. Uchida's paper: Bird-infesting Mallophaga of Japan (II).

P. 86, instead of Goniocotes macrocephalus, Up. Nov. read Goniocotes megalocephalus. pp. Nov.

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Reprinted from the Annotationes Zoologicæ Japonenses, Vol. 1X., 1916.

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