ON SOME MALLOPHAGA FROM THE CHINESE DOMESTIC FOWLS

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Materials of this paper consist of specimens of Mallophaga, which were taken from Chinese domestic fowls, Dec. 20, 1929.

The parasites were as follows:

- (1) Degeeriella sinensis sp. nov.;
- (2) Goniocotes hologaster Nitzsch, 1833;
- (3) Goniodes dissimilis NITZSCH, 1843;
- (4) Lipeurus variabilis Nitzsch, 1835;
- (5) Neumannia pallidum (NEUNCH) UCHIDA, 1926.

(NEUMANN, /4/2)

Family I. Philopteridae BURMEISTER.

Genus Degeeriella NEUMANN.

(1) Degeeriella sinensis sp. nov.

Numerous specimens of both sexes were collected from domestic fowls which were imported from Wenchow (Southern China) to this island, Dec. 20, 1929.

The present species closely allied to Degeeriella ovata (UCHI-DA) SUGIMOTO taken from Mikado-Kiji (Calophasis mikado), but differs from the latter by having larger size and broader abdomen.

Measurements of the present specimens are as follows:

	Female mm.	Male mm.
Length of body	2.04-2.125	1.666—1.734
Width of body	.85	.68—.734
Length of head	.51—.56	.51—.544
Width of head	.493—.51	.47651
Length of prothorax	.153	.136

Width of prothorax	.306	.289306
Length of metathorax	.187	.17
Width of metathorax	.459	.391
Length of abdomen	1.36—1.377	.918—·935
Width of abdomen	.88	.68—.734
Trabeculae	.05	.051
Antennae	$.289 \left\{ $	$.306$ ${1st. seg068 \atop 2nd. seg085 \atop 3rd. seg051}$
Hind femur	.238255	.204—.238
Hind tibia	.255—.272	.238—.255

Description of the female. Body elliptical, short and broad, and allied to *Degeeriella ovata* Sugimoto in form; whitish throughout including head and thorax tinged with a brownish color, and abdomen provided with large, lateral, quadrangular blotches.

Head, front pallabolic, with five very small, inconspicuous hairs on each side; trabeculae small, distinct, acute, light yellowish brown in color, falls short of first segment of the antennae; antennae rather short, segment 1 thicker than other, segment 2 longest, segment 5 longer than 3 or 4, segments 4 and 5 colored, others weakly colored; eye large, with a hair; temples widest just behind the eyes; temporal margins converging posteriorly, nearly straight, with two long hairs and three prickles; dorsal aspect of the occiput slightly convex, with a occipital border, a triangular occipital signature, and occipital bands distinct, run parallel with each other, rather opening anteriorly, diverge in front of united region of eye, antennae and mandible root; occipital border, and antennal bands with rim around the front, dark brown; a pale, almost uncolored transversal linear space in front of the mouth, and a similarly pale U-shaped space bounding the median region of the hind-head; oral fossa broad, with three short hairs on the anterior margin, and with a small triangular brown blotch on the lateral sides.

Prothorax small, short, sub-quadrangular, posterior margin nearly straight; with a single long hair in each rounded posterior angle; segment wholly brown except an uncolored posterior border. Metathorax small, not as long as broad, posterior margin obtusely angled on abdomen; two long pustulated hairs in a clear space on posterior margin near the lateral angles and a long hair on the

lateral angle, and two long pustulated hairs in a clear space on posterior margin midway between lateral angles and posterior angle; whole segment brown except a small, angular, median, whitish or uncolored space on anterior margin and unevenly blackish brown on lateral border. Legs stout, short, pale brown, with narrow dark brown marginal markings; coxa inserted on sternal margin; femur short; tibia as nearly long as femur; claws long in comparison. Sternal markings consisting of intercoxal lines and a top-shaped median blotch on metasternum.

Abdomen elliptical, broad, with equal length of segments; posterior angles of segments projecting slightly and with one to three longish weak hairs; on median line with two longitudinal rows consisting of hairs; ground color whitish with large quadrangular lateral brown blotches on segments 1-7, these blotches nearly meeting inwardly and forming a whitish streak longitudinally on the median region, and separated intersegmentally by a whitish space about one-half as large as a blotch; the outer margins of the blotches are blackish, forming narrow lateral band; circumference of each blotch are dark brownish, with a stigmatic spot, and a few (two to four) pustulations at inner end, in which are seated longish hairs; a long hair arises from a demi-pustulation on the posterior margin of each blotch just behind the stigmatic spot; segment 8 wholly colored, and on the midway of anterior margin of colored region minutely emarginated; segment 9 wholly colored, small, posteriorly slightly emarginate and with a very fine hair on each side. On the ventral surface of the abdomen along with median line with two longitudinal rows consisting of hairs; in front of valvulae and extends over segents 6 and 7 with a light brown median blotch, circumference of the blotch indistinctly and the centre light colored; near lateral sides of each segment with a row consisting of small round blotches which lie parallel with lateral bands; valvulae slightly convex, emarginate with fine hairs; segment 7 with a brown longitudinal externally curved blotch.

Male. Ovaliform, relatively short. Head and thorax were much the same as female in general shape; antennae similar to female.

Abdomen. Lateral blotches of segments 1 to 7 rather broader

than female; longitudinal median whitish region is narrow, and lateral margins of the whitish region parallelling; segment 8 wholly colored as arch-form; segment 9 rounded, slightly convex, except the narrow blackish marginal band light brown colored, on the both sides with four long hairs; genitalia broad, strongly colored, extend over segment 5 to segment 9, outer process incurved to a right angle. On the ventral surface the rows of hairs were the same as female's, but rather short; the small round blotches were right round in shape compared with female's; segment 6 with a median blotch whose circumference indistinct, and lateral margin of the blotch spreads to the lateral small round blotch on the segment.

Genus Goniocotes NITZSCH.

(2) Goniocotes hologaster Nitzsch, 1874.

GIEBEN, Ins. Epiz. 184; Ricinus gallinae De GEER, 1778, Vol. VII, tab. IV, f. 13; GURLT, 1842, Vol. VIII, p. 118, tab. IV, f. 1; PIAGET, 1880, Les Pédic., p. 231, pl. 19, f. 6; OSBORN, Bull. 7, Div. Ent., Dept Agr., p. 32; Uchida, 1917, p. 45, pl. 1, f. 11; Sugimoto, 1929, Report, 43, Dept, Agr. Govt. Res. Inst. Formosa, p. 27.

Twenty males and twenty five females were collected from the fowls, Dec. 20, 1929.

Genus Goniodes NITZSCH.

(3) Goniodes dissimilis Nitzsch, 1842.

GIEBEL, **1**.ns. Epiz. p. 201, pl. XX. f. 9; DENNY, 1842, p. 162, tab. XII, f. 6; PIAGET, Pédic., 1880, p. 268, pl. 1, f. 3; UCHIDA, 1917, p. 42, pl. 1, f. 1; SUGIMOTO, 1929, p. 30, pl. IV, figs. 1 and 2.

Numerous specimens of both sexes were collected from the fowls, Dec. 20, 1929.

Genus Lipeurus Nitzsch.

(3) Lipeurus variabilis NITZŞII, 1874.

Pediculus caponis, Linné, Syst. Nat., Vol. II, p. 1020, fig. 33; Fann. Suec., 1960.

Lipeurus variabilis Nitzsch, Germar's Mag., Vol. III, р. 292;

Denny, p. 164, pl. XV, fig. 6; Giebel, Epiz. p. 219, pl. XVI, fig. 3; Gurlt, Vol. VIII, p. 422, pl. VIII, fig. 10; Piaget, Les Pédic., p. 364, pl. XXIX, fig. 4; Osborn, Bull. 7, Div. Ent., Dept. Agr., p. 41, fig. 29; Sugimoto, 1929, p. 48, pl. III, figs. 4—6.

Seven male and fifteen female specimens obtained from the hosts.

Family II. Menoponidae MJÖBERG.

Genus Neumannia UCHIDA.

(5) Neumannia pallidym (NŶEMANN) UCHIDA, 1926.

Menacanthus pallidum Neumann, 1912, p. 361, figs. 7, 9; Uchida, 1926, p, 30; Sugimoto, 1929, p. 12, pl. II, figs. 3, 4.

Numerous specimens of both sexes and young individuals of every stage were collected from the host.

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- (13) 1920. Ann. Zool. Jap., Vol. IX, part V, p. 637.
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EXPLANATION OF PLATES 圖版說明

A and B: Degeeriela sinensis sp. nov.

- A. Dorsal aspect of male. 雄虫 (背面)
- B. Dorsal aspect of female. 雌虫 (背面)

Fig. 1—3: Degeeriella sinensis sp. nov.

- 1 Dorsal aspect of male 雄虫(背面)
- 2 Ventral aspect, abdomen of male. 雄虫腹部(腹面)
- 3 Male genitalia. 雄虫生殖器
- 4 Dorsal aspect of female. 雌虫(背面)
- 5 Ventral aspect, abdomen of male 雌虫腹部 (腹面)
- 6 Dorsal aspect, head of male. 雄虫頭部 (背面)
- 7 Ventral aspect, head of male. 雄虫腹部(腹面)
- 8 ★entral aspect, hind-head of male (neighborhood of oesophageal sclerite) 雄 虫後頭部腹面ニ於ケル食道節片、後頭帶、後頭 中斑及口窩側斑チ示ス
- 9 Ventral aspect, of hind-leg of male 雄虫後肢(腹面)

ABBREVIATIONS 略號解示

ant., antenna. 觸角; occ. sig., occipital signature. 後頭正中斑; clyp. h., clypeus hair. 額板毛; oes. scl., oesophageal sclerite. 食道節片; e., eye. 眼, of, oral fossa. 口窩; gen., genitalia. 雄虫生殖器; olb., oral lateral blotch. 口窩側斑, md, mandibles. 大鵬; tr, trabecula. 柱狀突起; occ b., occipital band. 後頭帶

支那溫州鷄ニ寄生スル羽虱 Mallophaga ニ就テ

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(暗州の中で方では文 19)。

對岸支那浙江省甌海市温州地方ヨリ産卵鶏トシテ臺灣ニ年々多數ノ溫州鷄ノ輸入ヲ見ツ、アリ而シテ溫州鷄ノ寄生虫調査ニ從事シツ、アルガ其中調査ヲアシタル Mallophaga ニ就テ次ニ記載セントス

溫州鶏23羽ヨリ採集セル種類ハ次ノ種ヲ算ス

- (1) Degeeriella sinensis sp. nov.; しなあたまはじらみ(新稱)
- (2) Goniocotes hologaster NITZSCH, 1838; にめにはとりはじらみ

- (3) Goniodes dissimilis NITZSCH, 1842; かくあごはじらみ74
- (4) Lipeurus variabilis NITZSCH, 1838; にはとりながはじらみ
- (5) Neumannia pallidum (NITZSCH) UCHIDA, 1926; にはとり はじらみ (NEUMANN, /9/<)

以上ノ内 2-5 ノ4種ハ鷄=寄生スル Mallophaga 中最モ普通ノモノニシテ温州鷄=就テハ4種中 Neumannia pallidum (羽軸=多ク寄生ス)及 Goniodes dissimilis (綿毛=寄生ス) ガ最モ多ク寄生ヲ見次テ Lipeurus variabilis (翼羽=寄生ス)及 Goniocotes hologaster (綿毛=寄生ス)ナリ Lipeurus variabilis ハ鷄ニハ普通比較的多ク寄生シ居ルベキモノナルニ不思議ニモ余ノ調査セル 23 羽中ニハ極メテ少許ノ寄生ヲ見タルバカリニテ且本來翼羽ニ寄生スルヲ普通トスルニ不拘翼羽ニハ却テ少ク頸羽及體羽ニ比較的多ク寄生シ居タリ

而シテ1ノ Degeeriella sinensis ハ頭及頸部ノ羽毛ニノミ寄生シテ他ノ部分 = 寄生ヲ見ズ

Degeeriella 屬中ョリ余ノ種=近キモノヲ求ムレバ内田清之助氏ノみかどきじョリ得タル Degeeriella ovata (UCHIDA) SUGIMOTO, comb. nov. = (Nirmus ovatus UCHIDA, 1917) アレドモ余ノ種ハ内田氏ノ種ヨリハ大形ニシテ腹部ノ幅廣シ

















