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原 報

Three new species of the sarcophagid flies from Japan
(Diptera, Sarcophagidae, Sarcophaginae)

By

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The sarcophagid fauna of Japan was published by Kano et al. (1967) including that of the Ryukyus. They reported 2 subfamilies, 18 genera and 70 species, but besides their report, 2 species, *Blaesoxipha filipjevi* and *Pierretia olsouffjevi*, have reported by Kurahashi (1964) and Buéi (1965) respectively. In the present paper, the authors described and illustrated 3 new species of sarcophagid flies, *Heteronychia nipponensis*, *Blaesoxipha ampli-forceps* and *Blaesoxipha amamiensis*, from the main island of Japan and Amami-oshima Island.

DESCRIPTIONS

Heteronychia nipponensis Shinonaga and Matsudaira, new species

MALE: Body length 8.0 mm. *Head*: Frons 0.23 of head width; frontal vitta black; frontal bristles 9, lower 3 pairs divergent; parafrontals and parafacials silvery pruinescence; antennae dark brown; arista plumose on basal 1/2; palpi black and slender; gena and metacephalon with grayish pollen and numerous black hairs; gena about

1/5 of eye height. *Thorax*: Scutum entirely dark gray with 3 black longitudinal stripes; *ac* 1+1; *dc* 3+3; *ia* 0+2; *h* 3; *ph* 2; *nt* 4; *sa* 3 (1 fine); *pa* 2; *as* 1; *ds* 1; *ls* 2; *st* 2+1; upper part of propleuron bare; meso- and metathoracic spiracles dark brown. *Wings*: Hyaline; *r*₁ bare; *r*₄₊₅ with about 10 short setae between *r-m* and basal node; section III of costa about same length as section V; costal spines extending on basal 1/2 of section V; basicostal scale brown and subcostal sclerite light brown; upper and lower squamae creamy white; halter brown. *Legs*: Black; fore tibia with 2 short *ad* and 1 *pd*; mid tibia with 3 strong *al*, 2 *pd*, 1 *pv* and 1 *av*; hind tibia with 1 *av* and 1 *pd*, long hairs on *av* and *pv*. *Abdomen*: Black and dark gray checkered pattern; 2nd tergite black; median marginal bristles on 3rd tergite present; 4th and 5th tergites with several pairs of marginal bristles; 1st and 2nd genital tergites shiny black; 1st genital tergite with 2 pairs of marginal bristles; 2nd genital tergite without marginal bristles; genitalia as shown in figure 1.

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FEMALE: Unknown.

Holotype: ♂, Goshiki-numa, Fukushima-ken, 4 July 1968, S. Shinonaga leg. and preserved in Department of Medical Zoology,

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Remarks: This species is closer to *Pieretia*-species than *Heteronychia*, because of having the simple apical and lateral plates. The authors, however, included this species in the genus *Heteronychia* by having no ventralia, which is the most typical character of this genus.

Blaesoxipha ampliforceps Shinonaga and Matsudaira, new species

MALE: Body length 9.0mm. **Head:** Eyes bare; frons about 0.20 of head width at narrowest part, 0.23 at vertex; fronal bristles 11, upper 2 reclinate and lower 3 divergent; parafrontals and parafacials black, silvery pruinose and with fine hairs on the parafrontals; antennae black, apical part of 2nd segment reddish brown, 3rd segment about $1.5\times$ of length of 2nd; arista feathered on basal half; palpi black; genae and metacephalon black with grayish pollen, gena with black and metacephalon with white hairs. **Thorax:** Scutum black with 3 dark longitudinal stripes and covered with grayish pollen; *ac* 3+4 (only prescutellar one strong); *dc* 3+3; *ia* 1+3; *prs* 1; *h* 3; *ph* 3; *nt* 4; *sa* 5; *pa* 2; *as* 1; *ds* 1; *ls* 2; *st* 1+1+1; prosternum hairy posteriorly; propleuron with several hairs on middle; meso- and metathoracic spiracles dark brown. **Wings:** Hyaline; *r*₁ bare; *r*₄₊₅ setose; *m*₁₊₂ sharply angulating anteriorly; *R*₅ open; basicosta yellow; epaulet dark brown; subcostal sclerite yellow; squamae yellowish white; halter dark brown. **Legs:** Black; fore tibia with 3 short *ad* and 1 *pv*; mid tibia with 1 *ad*, 1 *av*, 1 *pv*, and 2 *pl*; hind tibia with short row of *ad* and 2 long *ad*, 2 *av*, without long hairs. **Abdomen:** Black with silvery checkered pattern; 3rd tergite with strong median marginal bristles; 4th and 5th tergites with well developed marginal bristles; sternites with numerous long hairs; 2nd genital tergite brownish; cerci broad near apices and with short and strong spines as shown in figure 2, middle portion of cerci bare; genitalia as shown in figure 2.

Holotype: ♂, Mt. Sanbe, Shimane-ken, 12 Aug. 1964, S. Shinonaga leg. and preserved in Department of Medical Zoology, Tokyo Medical and Dental University, Tokyo.

Remarks: This species is closely related to *B. formosa* Rohdendorf (Fig. 4 and 5)

from Tashkent, but differs from it by absence of short spines on the middle part of cerci and the shape of basal part of paraphallus and ventralia as shown in figures 2 to 5. The propleuron of this species have several hairs on the middle part. That is not fit for the definition of the genus *Blaesoxipha* Loew, but the authors included this species in *Blaesoxipha*, for the genital characters agree with those of the genus.

Blaesoxipha amamiensis Shinonaga and Matsudaira, new species

MALE: Body length 6.0–7.0 mm. **Head:** Frons 0.12 of head width; frontal vitta dark brown; frontal bristles 11, lower 3 pairs divergent; parafrontals and parafacials golden pruinose; antennae dark brown, with length of 3rd segment about $1.5\times$ that of 2nd segment; arista plumose on basal 1/3; palpi black; gena and metacephalon with yellowish white hairs; genae about 1/4 of eye height. **Thorax:** Scutum golden pruinose with 3 black longitudinal stripes; *ac* 2+2; *dc* 3+3; *ia* 1+3; *h* 3; *ph* 2; *nt* 4 (2 fine); *sa* 3; *pa* 1; *prs* 1; *as* 1; *ds* 1; *ls* 1; *st* 2+1; upper part of propleuron bare; meso- and metathoracic spiracles dark brown. **Wings:** Hyaline; *r*₁ bare; *r*₄₊₅ with short setae; section III of costa about same length as section V; costal spines extending on basal 1/3 of section V; epaulet light brown; basicostal scale and subcostal sclerite light brown; upper and lower squamae light brown; halter light brown. **Legs:** Black; fore tibia with 2 short *ad*, and 1 *pv*; mid tibia with 2 *ad*, 1 *pd*, 1 *pl*, and 2 *pv*; hind tibia with 2 *ad*, 2 *pd* and 2 *av*, without long hairs. **Abdomen:** Dark brown with silvery or golden checkered pattern; 2nd tergite brown; median marginal bristles on 3rd tergite weak; 4th and 5th tergites with several pairs of marginal bristles; 1st and 2nd genital tergites brown; cerci with short and dull spines on apical half; apical part of paraphallus with short spines (Fig. 6).

FEMALE: Unknown.

Holotype: ♂, Mt. Yuwan, Amami-oshima Island, Kagoshima-ken, 16 July 1963, R. Kano leg. and preserved in Department of Entomology, National Science Museum, Tokyo.

Paratopotype: Same data as holotype, S. Ito leg.

Fig. 1. *Heteronychia nipponensis* n. sp. ♂ : phallosome, parameres and cerci (lateral view).

Fig. 2-3. *Blaesoxipha ampliforceps* n. sp. ♂ : (2) phallosome, parameres and cerci, (lateral view) (3) posterior view of cerci.

Fig. 4-5. *Blaesoxipha formosa* Rohdendorf, ♂ : (4) cerci, (5) phallosome and parameres (lateral view) (After Rohdendorf, 1928).

Fig. 6. *Blaesoxipha amamiensis* n. sp. ♂ : Phallosome, parameres and cerci (lateral view).

Remarks: This species is collected in the expedition on the Amami-oshima Islands supported by Japan-U.S. co-operation science programme. The shape of the forceps of this species is closely related to that of *B. formosana* Baranoff, but this species is not in agreement with *formosana* in numbers of sternopleural bristles and the shape of apical plate of paraphallus

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摘 要

日本産ニクバエ科 3 新種について

日本産ニクバエ科については、加納ら(1967)が琉球産のものを含めて 18 属 70 種を記載した。この他に、倉橋(1964)が *Blaesoxipha filipjevi* Rohdendorf を、武衛(1964)が *Pierretia olsoufjevi* (Rohdendorf) を記録している。筆者らは、これらの他に 3 新種を見出したので報告する。

Seasonal prevalence and natural infection of the vector mosquitoes of Japanese encephalitis virus in the Fukuoka area, 1966

By

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In the second paper of this series (Yamamoto and Manako, 1968a) the authors manifested the general mode of mosquito infection with Japanese encephalitis virus (JEV) in the Fukuoka area, drawing their particular attention to the fact that the mosquito infection was observed later in a year of severe epidemic than in the other years. In the

summer of 1966, an especially severe epidemic of Japanese encephalitis occurred among the residents of the area. Consequently, the authors' investigations in that year were focussed on reaffirming the fact expressed above, and were performed at several localities in order to obtain more comprehensive information. Of the results obtained in 1966, the results from Kanatake, Fukuoka City were already presented in a separate paper (Yamamoto et al., 1968b).

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