

TWO NEW SPECIES OF SARCOPHAGID FLIES FROM THAILAND (DIPTERA: SARCOPHAGIDAE)

By Rokuro Kano¹ and Varunee Sooksri²

Abstract: Two new species of sarcophagid flies, *Sarcosolomonina harinasutai* and *S. shinonagai*, from Kanchanaburi, Thailand are described and figured.

***Sarcosolomonina (Parkerimyia) harinasutai* Kano & Sooksri, n. sp.**

FIG. 1

♂. Body length: 8-9 mm. *Head:* Frons about 1/2 of 1 eye. Frontal vitta black. Parafrontals and parafacials with silvery pruinescence. Facial ridge reddish brown. Face light brown with silvery pollen. Antennae brown, length of 3rd segment about 2.5 × that of 2nd segment; arista plumose, along basal 3/5. Gena black and silvery pollinose with black hairs anteriorly and white hairs posteriorly; gena about 1/4 height of an eye. Frontal bristles 8-9 pairs and lower 2 pairs divergent. Outer vertical bristles undeveloped. 3 rows of black postocular setae present. Palpi dark brown and slender. Metacephalon with numerous white hairs and a few black hairs. *Thorax:* Scutum with silvery pruinescence with 3 black longitudinal stripes. Scutal and scutellar chaetotaxy as follows: 4+1 acrostichals, 4+4 dorsocentrals, 1+3 (foremost one very fine) intra-alars, 1 presutural, 3 humerals and 2 posthumeral, 4 (2 strong and 2 weak) notopleurals, 3 supra-alars, 2 postalars, 1+1+1 sternopleurals, 1 apicoscutellars, 1 discoscutellars, and 2 lateroscutellars. Upper part of propleuron bare. Prosternum hairy posteriorly. *Wings:* Hyaline, R₁ setose, R₄₊₅ with a row of about 10 short setae located dorsally extending more than 1/2 way from basal node to r-m, costal spines not so strong, length of section III of costa a little longer than that of section V, section V of costa with short spines along basal 2/3 of anterior margin, basicostal scale yellowish white, epaulet black, squamae creamy white, halter brown. *Legs:* Femora black, tibiae dark brown, tarsi dark brown to black. Fore femur with a pair of rows of long bristles on posterodorsal surface, a row of long bristles along posterior margin of ventral surface. Fore tibia with 2 or 3 short bristles on basal 1/3 of anterodorsal surface, 1 bristle on posteroventral surface at 1/3 the distance from distal end. Mid femur with a row of several short bristles on anterolateral surface, 2 short bristles on distal part of posterolateral surface, a row of short bristles along anterior margin of ventral surface, a row of short bristles along distal 1/2 of posterior margin of ventral surface, a row of long hairs along basal 1/2 of posterior margin of ventral surface. Mid tibia with 1 strong bristle on middle portion of anterolateral surface, 2 bristles at basal 1/3 on posterolateral surface, 1 bristle each on distal 1/3 of posteroventral and posterodorsal surfaces, 1 strong bristle at distal 2/5 on ventral surface. Hind femur with 2 rows of bristles on anterodorsal surface, a row of bristles on anterior margin of ventral surface, a row of long hairs and bristles on posterior margin of ventral surface, long hairs on basal 1/2 of ventral surface. Hind tibia with a row of 2 long and several short bristles on anterodorsal surface, 2 bristles on posterodorsal surface, 2 bristles on anteroventral surface, without tuft of long hairs. *Abdomen:* Black and silvery gray checkered pattern. Median marginal bristles on 3rd tergite absent. Several pairs of marginal bristles on 4th and 5th tergites well developed. Second to 4th sternites with numerous short hairs and several additional long hairs at posterior margin. Fifth sternite V-shaped and with 4 or 5 long bristles on posterior margins of both arms. First genital tergite dark brown with grayish pollen and without strong bristles. Second genital tergite shiny blackish brown and with numerous long hairs. Genitalia as shown in FIG. 1.

Holotype ♂, Kanchanaburi, Thailand, 18.VII.1964, R. Kano. Paratype ♂, same data as holotype. Holotype is deposited in the collection of the National Science Museum, Tokyo.

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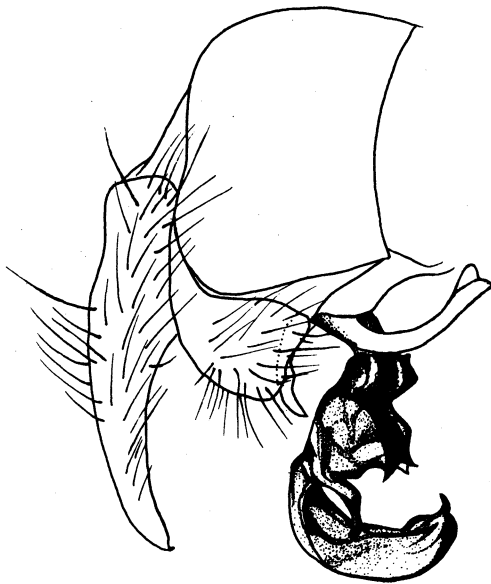


FIG. 1. Lateral view of δ genitalia of *Sarcosolomonina harinasutai*, n. sp.

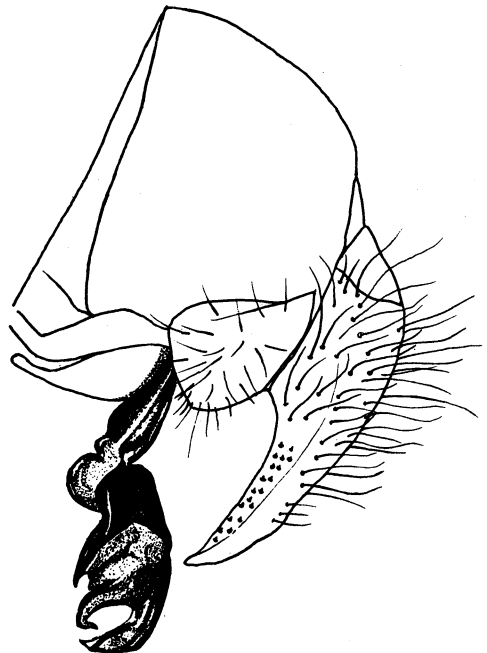


FIG. 2. Lateral view of δ genitalia of *Sarcosolomonina shinonagai*, n. sp.

Remarks: These specimens were collected on bushes near the bank of the River Kwae. It seems that this species is not attracted to animal carcasses and feces. As this species does not have median marginal bristles on 3rd abdominal tergite and small spines on inner forceps, it belongs to the subgenus *Parkerimya*. It is closely related to *S. (P.) crinita* Parker, but it differs from the latter by the shape of the phallosome. The species is named for Professor Chamlong Harinasuta, Dean of the Faculty of Tropical Medicine, Mahidol University, Thailand.

***Sarcosolomonina (Sarcosolomonina) shinonagai* Kano & Sooksri, n. sp.**

FIG. 2

δ . Body length 9–11 mm. **Head:** Frons about 1/2 of 1 eye. Frontal vitta black. Parafrontals and parafacials with silvery pruinescence. Face silvery pollinose. Antennae dark brown, 3rd segment covered with silvery minute hairs, length of 3rd segment 2 \times that of 2nd segment. Gena black, covered with silvery pollen and with numerous black hairs anteriorly and white hairs posteriorly; gena about 2/7 height of an eye. Frontal bristles 9–10 pairs with lower 2 or 3 pairs divergent. Palpi black and slender. Three rows of black postocular setae present. Outer vertical bristles undeveloped. Metacephalon with numerous white hairs and a few black hairs. **Thorax:** Scutum with silvery pruinescence, with 3 black longitudinal stripes. Scutal and scutellar chaetotaxy as follows: 4+1 acrostichals, 4+4 dorsocentrals, 0+3 (foremost 1 weak) intra-alars, 3 humerals, 3 posthumeral, 1 presutural, 4 notopleurals, 3 supra-alars, 2 postalar, 1+1+1 sternopleurals, 1 apicoscutellars, 1 discoscuteallars, 2 lateroscutellars. Upper part of propleuron bare. Prosternum hairy posteriorly. **Wings:** Hyaline, R_1 bare, R_{4+5} with 5–9 short setae located dorsally and extending more than 1/2 way from basal node to r-m, several setae on ventral surface of basal node of R_{4+5} , length of section III of costa a little longer than that of section V, section V of costa with short spines along about basal 2/3 of anterior margin, basicostal scale yellowish white, epaulet black, squamae creamy white, halter brown. **Legs:** Femora black, tibiae dark brown, tarsi blackish brown. Fore femur with a pair of rows of long bristles on posterodorsal surface, a row of long bristles on posterior margin of ventral surface. Fore tibia with 2 short bristles on basal part of anterodorsal surface, 1 bristle on distal 1/3 of posterolateral surface. Mid femur with several short bristles on middle portion of anterolateral surface, a row of short bristles extending 1/2 way from distal end on each of anterior and posterior margins of ventral surface, 3 short bristles on basal 1/2 of anteroventral surface, a row of long hairs on basal 1/2 of ventral surface, 2 bristles on distal part of posterolateral surface. Mid tibia with

1 strong bristle on middle portion of anterolateral surface, 2 or 3 bristles on 1/3 of posterolateral surface, 1 bristle each on distal 1/3 posterodorsal and posteroventral surfaces. Hind femur with 2 rows of bristles on anterodorsal surface, several long bristles both on anterior and posterior margins of ventral surface, 1 bristle each on distal part of posterodorsal and posterolateral surfaces. Hind tibia with 2 long bristles and a row of short bristles on anterolateral surface, 2 bristles on posterodorsal surface, 2 bristles on anteroventral surface, without tuft of long hairs. *Abdomen*: Black and silvery pattern. A pair of median marginal bristles on 3rd tergite strong. Several pairs of marginal bristles on 4th and 5th tergites well developed. Second to 4th sternites with numerous hairs and additional strong hairs on posterior margins. First genital tergite black with grayish pollen and with fine black hairs. Second genital tergite shiny blackish brown with numerous black hairs. First and 2nd genital tergites without marginal bristles. Fifth sternite V-shaped and with a few long hairs on hind margins of both arms. Genitalia as shown in FIG. 2.

♀. Body length 9 mm. Frons about 2/3 of 1 eye. Two proclinate and 1 reclinate fronto-orbital bristles present. Outer vertical bristles well developed. Apicoscutellar bristles absent. Mid and hind femora without long hairs. First to 4th sternites with 2 pairs of long bristles on posterior margins respectively. Posterior margin of 6th tergite with bristles.

Holotype ♂, Kanchanaburi, Thailand, 18.VII. 1964, R. Kano. Allotype ♀, same data as holotype. Paratype ♂, same data as holotype. Holotype and allotype are deposited in the collection of the National Science Museum, Tokyo.

Remarks: These specimens were collected on bushes near the bank of the River Kwae. As this species has well developed median marginal bristles on 3rd abdominal tergite and small spines on inner forceps, it belongs to the subgenus *Sarcosolomonina*. It is easily differentiated from other related species by the shape of the phallosome. The species is named for Dr Satoshi Shinonaga, Tokyo Medical and Dental University.

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