

The Oriental *Scylaticus* (Diptera, Asilidae)¹

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Abstract

Only two species of *Scylaticus*, *degener* and *indicus*, have hitherto been known from the Oriental region. This paper adds one new species, namely, *sayano* from the Yaeyama Islands and raises *degener lutescens* to a distinct species. Thus four species of this genus are now known from the region. The geographical distribution of this genus is also discussed from the world standpoint.

INTRODUCTION

A review of the genus *Scylaticus* from the Oriental region is presented here, with the description of one new species, i. e. *sayano* from the Yaeyama Islands. The determination of each species may not necessarily be correct, because neither type specimen nor material from the type-locality is examined. The aim of this paper is to describe or redescribe each species in order to help the future exact identification. The geographical distribution of *Scylaticus* is also discussed from the world standpoint.

For explanation of the technical terms in male genitalia see NAGATOMI (in press). The abbreviations in Figs. 7-35 are as follows: *aa*: anterior bar of aedeagus (=aedeagal apodeme); *b*: basistyle (=gonocoxite); *bdp*: basistylar dorso-inner anterior process (=gonocoxal apodeme); *c*: cercus; *d*: dististyle (=gonostylus); *dp*: dorsal plate (=paramere); *g*: genital fork (=furca); *m*: mid plate; *mp*: median process (in basistyle); *s9*: sternum 9; *s10*: sternum 10; *t9*: tergum 9; *t10*: tergum 10; *vp*: ventral plate (=aedeagal guide).

GEOGRAPHICAL DISTRIBUTION OF *SCYLATICUS*

The members of *Scylaticus* are distributed as follows: Palaearctic region (after ENGEL, 1930; HULL, 1962): 2 species from northern Africa; Oriental: 4 spp. from India, China, Formosa, the Yaeyama Islands, and Okinawa Island; Ethiopian (after OLDROYD, 1980): a total of 17 spp., of which 8 are recorded from South Africa and none from Madagascar; Neotropical (after MARTIN and PAPAVERO, 1970; ARTIGAS, 1970, 1971, 1974): 9 spp. from Brazil (1 sp.), Peru (1), Paraguay (1), Argentina (1), and Chile (5).

Their distribution may be characterized as follows: no or few species live in the

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1. This study was done partly during my stay at the Bishop Museum, Honolulu (from November, 1978 to March, 1979) supported by a grant from the Ministry of Education, Japanese Government.
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polar and temperate zones; no species is recorded in the Australasian and Nearctic regions.

Scylaticus seems to be very primitive among the Asilidae. It is possible that this genus did not arise after the split to the six main continents but originated on Gondwanaland.

DESCRIPTIVE NOTES

Genus *Scylaticus* LOEW

Scylaticus LOEW, 1858, Öfvers. K. svenska Vet.-Akad. Förh., 14: 346. Type-species: *Scylaticus zonatus* LOEW, 1858, from South Africa, by designation of ENGEL (1930: 369).

The following diagnosis is based on 3 species on hand and the literature (ENGEL, 1930; HULL, 1962; OLDROYD, 1974).

Head: much wider than high and elliptical (from anterior view) and higher than long (from lateral view); front and vertex rather shallowly concave; front wider at median ocellus than at antennae; face (except area above proboscis which is sunken) flat but lower lesser half swollen and with mystax; face much narrower than one eye; antenna not shorter than length (=height) of eye, segment 1 longer than wide and longer than segment 2, segment 3 much longer than segments 1 + 2, flattened laterally, willow-leaf like in shape and with a small style having a short apical sensory seta; palpus slender, comparatively short and nearly extending to mystax area; proboscis straight and more or less attenuate apically; in 3 species on hand, face except mystax area, front except sides, cerebrale except upper portion, and antennal segment 3 bare.

Thorax: metapleura with a tuft of bristly hairs at anterior part; metanotal callosity without pile or bristle; in 3 species on hand, hypo-, posterior part of metapleura, and postscutellum (=metanotum) bare and meso-, sterno- and pteropleura largely so; notopleural, supra-alars, postalars, dorsocentrals (near scutellum), and scutellars are present and these bristles are rather weak.

Wing: five posterior cells present and open (fourth posterior cell sometimes closed); anal cell narrowly open or sometimes closed at wing margin.

Legs: pulvilli well developed; tarsal segment 1 longer than each of segments 2-5; mid and hind femora with a few or some bristles and mid and hind tibiae with several bristles.

Male genitalia: hypopygium (excluding sternum 9, tergum 9, and cerci) wider than long and with mid-posterior part deeply concave; in basistyle, dorsal sclerotized part narrower than the ventral; apical part of basistyle with two processes, outer (longer and narrower) and inner (shorter and wider) ones; ventro-inner part of basistyle with a projection having a tuft of bristles; dorsal part of basistyle has a process directed posteriorly and having 2 or more distinct dentations and this is here called as median process; dististyle arising at dorsal part of basistyle and situated between median process and ventro-inner projection; dorsal margin of dististyle concave; a pair of basistylar dorso-inner anterior processes distinct. Structures between basistyles (i. e. aedeagus and

its associates) are as follows: dorsal plate tapering posteriorly, pointed at apex, and with a mid line forming furrow; mid plate situated beneath dorsal plate, tapering posteriorly, transparent except margins; ventral plate divided into a pair of sclerites whose apical parts are fused with the dorsal plate; anterior bar of aedeagus flattened laterally and fan-like; posterior part of aedeagus appears to be very short or absent; there is a pair of transverse sclerites near base of anterior bar of aedeagus. Sternum 9 longer than wide, coarctate at the base of bipartite apical part. Tergum 9 divided into a pair of sclerites which are longer than wide, tapering posteriorly, roughly triangular in shape, and have apical portion abruptly narrower; a pair of cerci are entirely or largely fused with each other; each cercus longer than wide and roughly rectangular, but its apical part rounded or bluntly pointed; sternum 10 longer than cerci, wider anteriorly, with a median longitudinal line desclerotized, and with anterior sclerotized part bipartite; tergum 10 small and inconspicuous, tapering posteriorly and its outer margin fused with sternum 10.

Female genitalia: cercus, which is desclerotized except posterior part, running postero-outwardly and wider posteriorly; tergum 10, except mid-anterior part, divided into a pair of sclerites; each sclerite of tergum 10 rounded except anterior margin, wider than long and has 7 stout setae near posterior margin; sternum 10 triangular, with 2 pairs of sclerotized areas, i.e. large antero-lateral triangular part and small elongate part whose apex is rounded; tergum 9 small, transversely elongate and has a mid-anterior, short, acute process; sternum 9 divided into a pair of sclerites, each of which is longer than wide and has a long, straight process running laterally; tergum 8 wider than long, with posterior part desclerotized except lateral borders (in desclerotized area, median part is shorter than the lateral parts); sternum 8 wider than long, shorter than tergum 8, and with a large mid-posterior area which is wider than long, elliptical, desclerotized at lateral and posterior borders, and is divided by a median desclerotized line tapering anteriorly (mid-posterior margin also deeply concave). The genital fork is bipartite at posterior part and trapezoid or rectangular at anterior part. It should be noted that the genital fork is connected with sternum 9. In some Tabanidae, Athericidae, Therevidae and Bombyliidae studied by IRWIN (1976), the sternum 9 is absent and the genital fork is connected with the tergum 9.

OLDROYD (1974: 71) wrote, "*Scylaticus costalis* WIEDEMANN (fig. 65) represents one extreme of the genus, with elongate abdomen, and face strongly swollen in its lower half, bare between the dense mystax and the antennae; the opposite extreme is represented by *Scylaticus leoninus* ENGEL, a black species with compact abdomen, covered with dense yellow hairs, the long mystax on the almost plane face extending up to the antennae."

Key (a) to species of *Scylaticus* known from the Oriental region

1. Abdomen largely dark brown to black..... 2
 "Abdomen yellowish, tergites one to six with broad black vittae making the abdomen appear banded with black, 7th tergite with a very small black dorsal spot" (Female unknown) (India)..... *indicus*
- 2(1). Legs partly yellowish (or reddish) brown; hairs on front, occiput, and antennal

- segments 1-2 pale or yellowish brown (or golden yellow)..... 3
 Legs wholly black; hairs on front, occiput, and antennal segments 1-2 black
 (southern China [Hong Kong], Formosa and Okinawa-hontô)..... *degener*
 3(2). Wing membrane tinged with brown but distinctly paler than in *sayano*; hind
 tibia black (often with a yellowish brown tinge); in ♂ fore femur largely yellowish
 brown; in ♀ abdominal segments 7-8 shining black; in abdomen, pollen on terga
 2-3 distinct at antero-lateral parts, pollinose bands on terga 4-7 (in ♀, 4-6)
 broader than in *sayano*, and hairs on segments 1-3 (in ♂) or 1-8 (in ♀) pale
 (southern China [Fukien] and Formosa)..... *lutescens*
 Wing membrane strongly tinged with dark reddish brown; hind tibia largely
 yellowish (or reddish) brown; in ♂ fore femur black; in ♀ abdominal segments
 6-8 (sometimes 7-8 or 5-8) yellowish (or reddish) brown; in abdomen, pollen
 on terga 2-3 absent or indistinct at antero-lateral parts, pollinose bands on terga
 4-7 (in ♀, 4, 4-5, or 4-6) narrower than in *lutescens*, and hairs on abdomen
 wholly yellowish brown (Yaeyama Islands)..... *sayano*

**Key (b) to 3 species of *Scylaticus* known from southern
 China and South-West Islands (based on male genitalia)**

1. Dististyle strongly dilated ventrally at middle (Figs. 10-11); median process (in
 basistyle) with two large dentations (Figs. 7-8); in apical bipartite part of sternum
 9, each sclerite is much wider posteriorly (Fig. 13); in each sclerite of tergum 9,
 apical narrow part is longer than in *lutescens* (Fig. 14); apical part of cercus pointed
 (Figs. 15-16)..... 2
 Dististyle roughly parallel-sided (Fig. 21); median process (in basistyle) with three
 distinct dentations (Fig. 19); in apical bipartite part of sternum 9, each sclerite is
 longer than wide and nearly parallel-sided (Fig. 23); in each sclerite of tergum 9,
 apical narrow part is shorter than in *degener* and *sayano* (Fig. 24); apical part of
 cercus rounded (Figs. 25-26); sternum 10 gently concave at apical margin and its
 posterior part not divided by a mid desclerotized line (Fig. 26)..... *lutescens*
2. Sternum 10 deeply concave at apical margin and its entire length divided by a
 mid-longitudinal desclerotized line (Fig. 16)..... *degener*
 Sternum 10 shallowly concave at apical margin and its posterior part not divided
 (Fig. 30)..... *sayano*

Scylaticus degener SCHINER

(Figs. 1-2, 7-18)

(Japanese name : koshiboso-mushihiki)

Scylaticus degener SCHINER, 1868, in *Reise der österreichischen Fregatte Novara*, Dipt. :
 163. Type-locality : Hong Kong, China.

I have not seen the type-specimen or any material from the type-locality. The

specimens from Okinawa Island (=Okinawa-hontô) agree well with the description of *degener* by HERMANN (1914) and by ENGEL (1930) based on the material from Formosa. HERMANN (1914) had seen the type (♀) of *degener* from Hong Kong.

SHIRAKI (1932) and AZUMA (1975) illustrated this species.

Head: head and its appendages black and with whitish gray pollen which is absent on palpus, proboscis and lower sunken place of face and which becomes tomentum on face; there is a broad darkened band across ocellar triangle (this may be so in *lutescens*), where whitish pollen is indistinct; front, ocellar triangle, occiput, segments 1-2 of antenna, and segment 2 of palpus with black hairs, but mystax (entirely or largely) and sometimes pile on swollen part below palpus and proboscis, segment 1 of palpus, and proboscis pale or yellowish brown; structural characters almost fit the description of *sayano*; relative length of antennal segments 1, 2, 3 (except style), and style (except seta) as 100: 49 (43-57): 365 (329-414): 29 (19-36) and their relative width 51 (43-57): 49 (43-54): 63 (53-71): 14 (12-15) (N=10).

Thorax: black and whitish gray pollinose; mesonotum with 3 broad darker stripes as in *lutescens*; hairs on thorax pale or yellowish brown or partly so but pile on antepronotum and lateral cervicale (in propleura) and bristles (or bristly hairs) on mesonotum and scutellum black; halter yellowish brown (stem more or less darkened).

Wing: membrane strongly tinged with dark brown.

Legs: black; coxa whitish gray pollinose; vestiture pale or yellowish brown but that on tibia and tarsus chiefly (or partly) black; in hind tibia and basitarsus, hairs on posterior surface usually reddish brown.

Abdomen: black; lateral borders of terga 1-3, posterior parts of terga 2-7, and sterna 2-3 (except anterior and posterior parts) whitish gray pollinose; pollinose bands on dorsum thin at middle and wider laterally (especially terga 2-3); hairs on segments 1-3 whitish but those on segments 4-8 and genitalia chiefly black (partly brown).

Genitalia (Figs. 7-16): for important distinguishing characteristics of this species, see couplets 1 and 2 of the key (b); outer part (except apical portion) of basistyle with long and stout hairs; outer process (in basistyle) with bristle-like hairs at apical portion; ventral surface of inner process (in basistyle) with hairs of which some are long and stout; dorsal and inner parts of dististyle with shorter hairs; ventral surface of sternum 9 and dorsal surface of tergum 9 long haired; posterior about half of cerci and posterior part of sternum 10 with shorter hairs; basistylar dorso-inner anterior process tapering apically and pointed at apex; anterior bar of aedeagus (from a lateral view) not wider than long.

Length: body 14.5-18 mm; wing 9.5-12; fore tibia 3.3-3.9.

Female. Similar to male except as follows: Head: in 10 specimens measured, width of front at median ocellus 3.2-3.9 (in ♂ 3.0-3.5) times width of ocellar triangle, relative length of antennal segments 1, 2, 3, and style 100: 50 (40-57): 371 (343-400): 29 (27-33) and their relative width 56 (50-64): 52 (47-58): 66 (53-75): 15 (13-20).

Abdomen: segments 6-8 shining black and without pollinose bands; on terga 4-5, lateral part of pollinose band more extensive than in ♂.

Genitalia (Figs. 17-18): in sternum 9, lateral process more or less parallel-sided; in genital fork, bipartite part is broader than in *lutescens*; it is uncertain whether or not the significant difference is present in genital fork between *degener* and *sayano*.

Length: body 15.5-20 mm; wing 10-13; fore tibia 3.1-3.9.

Distribution. Southern China (Hong Kong), Formosa and Okinawa-hontô.

Specimens examined: *Okinawa-hontô*: 4 ♂, 12 ♀, Hyakuna, 14. vi-12. vii. 1972. T. TERUYA; 2 ♂, Yona, 9. vii. 1972, TERUYA; 3 ♂, 7 ♀, Hyakuna, 1. vii. 1981, A. NAGATOMI; 69 ♂, 24 ♀, Hentona, 2-4. vii. 1981, NAGATOMI.

This species was collected at the vegetation along or near seashore and seems to live in sandy places.

Scylaticus indicus BROMLEY

Scylaticus indicus BROMLEY, 1939, Indian J. agric. Sci., 8: 864. Type-locality: India.

I have not seen any specimen of this species. The following is a copy of the original description: "Total length, 11 mm. A slender species with abdomen banded black and yellow, the femora yellow, the tarsi and tips of tibiae (the posterior tibiae mostly) dark brown. The head is shown in Fig. 2.

"Male. —Antennae and proboscis dark brown. Vestiture of head pale yellow, pollinose areas yellow to yellowish gray, occiput decidedly grayish. Mesonotum grayish pollinose becoming more yellowish on the sides, pleura grayish yellow pollinose; hairs and bristles of mesonotum pale yellow. Scutellum gray pollinose with six to eight yellow marginal bristles. Tuft of bristles in front of halteres sordid whitish. Halteres pale yellow. Wings hyaline. Legs yellowish with fine whitish hairs; extreme apices of femora dark brown, posterior tibiae dark brown except extreme bases which are yellow. First two pairs of tibiae more or less brownish. Tarsi piceous. Abdomen yellowish, tergites one to six with broad black vittae making the abdomen appear banded with black, 7th tergite with a very small black dorsal spot. Genitalia yellowish with concolorous hairs.

"Holotype, male, South India, Tinnevely Hills, July 3-12, 1921, (At Mundantorai). (RAMAKRISHNA Coll.) 67/35."

Scylaticus lutescens HERMANN, new status

(Figs. 3-4, 19-28)

Scylaticus degener var. *lutescens* HERMANN, 1914, Entomol. Mitteilungen, 3: 38.

Type-locality: "Chipun (Pujamadistrikt) und Pilam (Flugzeit Juli)", Formosa.

ENGEL (1930) redescribed the type-specimens of "*degener lutescens*" as follows: "Bei dieser Varietät sind sämtliche Haare und Borsten des ganzen Körpers goldgelb; die Flügel sehr gleichmässig gebräunt; die t basal goldgelb, apikal und ventral ± geschwärzt. Die graue Bestäubung der letzten Abdominalsegmente ist etwas gelblich. ♂ Paroe ndl. Paiwan, Distrikt Formosa (SAUTER) und ♀ Pilam, Formosa (SAUTER), Coll. HERMANN, Zool. Staatssammlung München. 14-16 mm."

The specimens from southern China (Fukien) described below seem to belong to *degener lutescens*. If this identification is correct, *lutescens* has to be separated from

degener as a distinct species. The male genitalia are very different in these two species (see the couplet 1 of the key (b)).

Male. Head: head and its appendages are dark brown to black but palpus, proboscis and antennal segment 2 may have brown to reddish brown tinge; front, ocellar triangle, vertex, occiput and antenna pale gray pollinose and face (except sunken place above proboscis) whitish gray tomentose; hairs on head yellowish brown; width of one eye on a mid line 0.6 times length of eye and 2.1-2.5 times width of face just below antenna, which is 0.6-0.8 times that at lowest part of mystax area and 0.4 times length of face (except lower sunken part); width of front at median ocellus 1.2-1.4 times that just above antenna, 1.5-1.7 times distance from antenna to median ocellus, 0.6-0.7 times width of one eye on a mid line (from a facial view), and 2.8-3.1 times width of ocellar triangle which is 0.8-0.9 times its length; proboscis measured along ventral surface 0.6 times length of eye; total length of antenna 1.1 times length of eye and 4.1-5.1 times distance from antenna to median ocellus; relative length of antennal segments 1, 2, 3 (except style), and style (except seta) (measured along outer surface) as 100:50 (43-58):326 (300-364):35 (29-42) and their relative width 49 (43-55):49 (43-55):68 (57-75):17 (14-18); structural characters are based on 10 specimens.

Thorax: dark brown to black and pale gray pollinose; in better preserved specimens mesonotum with 3 broad stripes (where pollen is indistinct), of which the lateral ones runs from behind humeral callus to before posterior callus (interrupted at suture) and the median one is divided by thin mid line and wider anteriorly (occupies the whole surface except humeri); hairs and bristles on thorax yellowish brown; halter yellowish brown.

Wing: membrane tinged with brown; veins dark brown to reddish brown.

Legs: dark brown to black with yellowish brown to reddish brown parts; coxa same as pleura; trochanter shining black and often with a reddish brown tinge; fore femur yellowish brown with following black parts: apical portion and in anterior surface one streak which occupies apical over half and tapers toward base; mid femur except base black; hind femur black except for basal portion (basal nearly half in posterior surface) and postero-ventral part at apical portion; tibia and tarsus black but often with a yellowish brown tinge especially at the latter; hairs and bristles yellowish brown but in tarsus some hairs and ventral setae black.

Abdomen: dark brown to black; in terga 4-6 (or 3-7) of some individuals posterior margin (wider laterally) and sometimes lateral borders yellowish brown; sterna 4-6 often and genitalia partly yellowish brown; abdomen with pale gray pollen which is absent or indistinct on dorsum (especially terga 2-5) except for posterior and wide lateral borders; abdomen with yellowish brown hairs which become pale on segments 1-3.

Genitalia (Figs. 19-26): easily distinguished from *degener* and *sayano* by the characters shown in the key (b) (couplet 1); hairs are similar in arrangement to *degener* and *sayano*; basistylar dorso-inner anterior process slightly wider apically and rounded at apex; anterior bar of aedeagus (from a lateral view) wider than long.

Length: body 12-14 mm; wing 8-9; fore tibia 2.8-3.0.

Female. Similar to male except as follows: Head: hairs paler than in ♂ and mystax white; total length of antenna 1.0-1.1 times length of eye and 3.8-4.3 times distance from antenna to median ocellus (N=5); relative length of antennal segments 1, 2, 3 and style 100:51 (46-58):325 (308-367):33 (31-33) and their relative width 54 (50-58):

49 (46-50): 69 (67-75): 17 (15-17) (N=5); the values above appear to be not significantly different from those in ♂.

Thorax: pile paler than in ♂.

Legs: fore femur black except base, extreme apex and often ventral surface; in hind femur yellowish brown parts smaller than in ♂.

Abdomen: segments 7-8 shining black; hairs on segments 4-8 paler than in ♂ and almost concolorous with those on segments 1-3.

Genitalia (Figs. 27-28): in sternum 9, lateral process tapering apically, more slender than in *sayano*, and shorter than in *degener*; in genital fork, bipartite part is narrower than in *degener* and *sayano*.

Length: body 13-15 mm; wing 9-10; fore tibia 2.8-3.0.

Distribution. Southern China (Fukien) and Formosa.

Specimens examined: *Southern China (Fukien)* (new record): 8 ♂, 4 ♀, Shaowui, 29. vi-16. ix. 1940-45, T. C. MAA; 3 ♂, 5 ♀, Chung An, Bohea Hills, 15. vii-1. x. 1939, MAA.

Scylaticus sayano NAGATOMI, new species

(Figs. 5-6, 29-35)

(Japanese name: sayano-mushihiki)

Concerning *degener* (based on the material from Formosa), ENGEL (1930: 369-370) mentioned as follows: "Mesonotum auf grauem Grunde mit vorn dreieckig verbreiterem schwarzem Mittelstreifen, der am Hinterrande mit dem 2. grossen schwarzen Seitenflecken zusammenfliesst" [in the key to species] and "beim ♀..... die beiden letzten Segmente sind glänzend schwarz." These two characters are absent in *sayano* but seem to hold good in "*degener lutescens*."

Sayano is distinguished from *lutescens* as shown in the key (a) (couplet 3). It is more closely related to *degener* phylogenetically than to *lutescens*, judging from the structure of the male genitalia.

Male. Similar to *lutescens* except as follows: Head: antennal segment 2 without reddish brown tinge (this is so in some specimens of *lutescens*); width of front at median ocellus 3.2-3.8 times width of ocellar triangle and 0.7-0.9 times width of one eye on a mid line (from a facial view) (N=10); in 10 specimens measured, width of one eye on a mid line 1.9-2.1 times width of face just below antenna which is 0.4-0.5 times length of face (except lower sunken part), width of front at median ocellus 1.6-1.9 times distance from antenna to median ocellus, relative length of antennal segments 1, 2, 3, and style 100: 50 (43-57): 349 (333-367): 31 (27-36) and their relative width 48 (40-54): 51 (47-58): 70 (60-83): 15 (13-17).

Thorax: broad median and lateral stripes disappear because pale gray pollinose border between median stripe and antero-inner part of lateral stripe is indistinct or absent.

Wing: membrane strongly tinged with dark reddish brown.

Legs: fore, mid and hind femora black but apices and in hind leg bases often yellowish (or reddish) brown; tibiae are yellowish (or reddish) brown but in anterior two legs apical part and ventral surface (except base) and in hind leg antero-ventral

part at apical portion are usually blackened; tarsi either blackened except bases or yellowish brown except apices; ventro-apical setae of tibiae usually black.

Abdomen: entirely dark brown to black but posterior border of tergum 7 often and genitalia partly yellowish (or reddish) brown; terga 2-7 with pale gray pollinose posterior bands which become thin at middle and which become much wider laterally on terga 2-3; pollen absent or indistinct at antero-lateral parts of terga 2-3 (in *lutescens* it is distinct); pollinose bands on terga 4-7 narrower than in *lutescens*; hairs on abdomen wholly yellowish brown.

Genitalia (Figs. 29-30): very similar to *degener* but may be distinguished from the latter by having the character shown in the couplet 2 of the key (b); basistylar dorso-inner anterior process is not tapering apically and is rounded at apex.

Length: body 13-18 mm; wing 9-12; fore tibia 2.9-3.8.

Female. Similar to male except as follows: Head: relative length of antennal segments 1, 2, 3, and style is 100: 50 (46-58): 352 (320-383): 30 (25-33) and their relative width is 54 (50-58): 52 (46-58): 71 (63-77): 15 (13-17) (N=10), although the values appear to be not significantly different from those in ♂.

Legs: femora (usually except extreme apices) yellowish (or reddish) brown but sometimes fore and mid femora almost entirely black as in ♂ or with black basal parts which are variable in extent; tibiae yellowish (or reddish) brown except for antero-ventral part at apical portion of fore tibia and extreme bases.

Abdomen: segments 6-8 (sometimes 7-8 or 5-8) and very often posterior border (or portion) of segment 5 (or 6) yellowish (or reddish) brown.

Genitalia (Figs. 31-35): in sternum 9, lateral process tapering apically, more stout than in *lutescens*; in genital fork, bipartite part wider than in *lutescens*; it is uncertain whether or not there is a significant difference in the genital fork between *sayano* and *degener*.

Length: body 13-20 mm; wing 10-14; fore tibia 2.8-3.9.

Distribution. South-West Islands (Iriomote-jima and Ishigaki-jima).

Holotype: ♂, Ôhara, Iriomote Is., 7. vi. 1977, A. NAGATOMI.

Paratypes: 42 ♂, 42 ♀, Ôhara, 5-9. vi. 1977, NAGATOMI; 1 ♀, Ôtomi, Iriomote Is., 6. vi. 1977, NAGATOMI; 1 ♀, Ôhara, 4. viii. 1978, NAGATOMI; 1 ♀, Yoshino, Ishigaki Is., 10. viii. 1978, NAGATOMI.

Holotype in Kagoshima University, Kagoshima temporarily, paratypes in Kagoshima University, U.S. National Museum, Washington, D. C. and British Museum (Natural History), London.

This species is dedicated to Miss Sayano TAKEMORI, the beloved daughter of Mr. Mitsuhiro TAKEMORI (Ôtomi, Taketomi-cho). The Takemoris helped me in many ways during my stays on Iriomote Island. "Sayano" means a clear and bright field where this species lives.

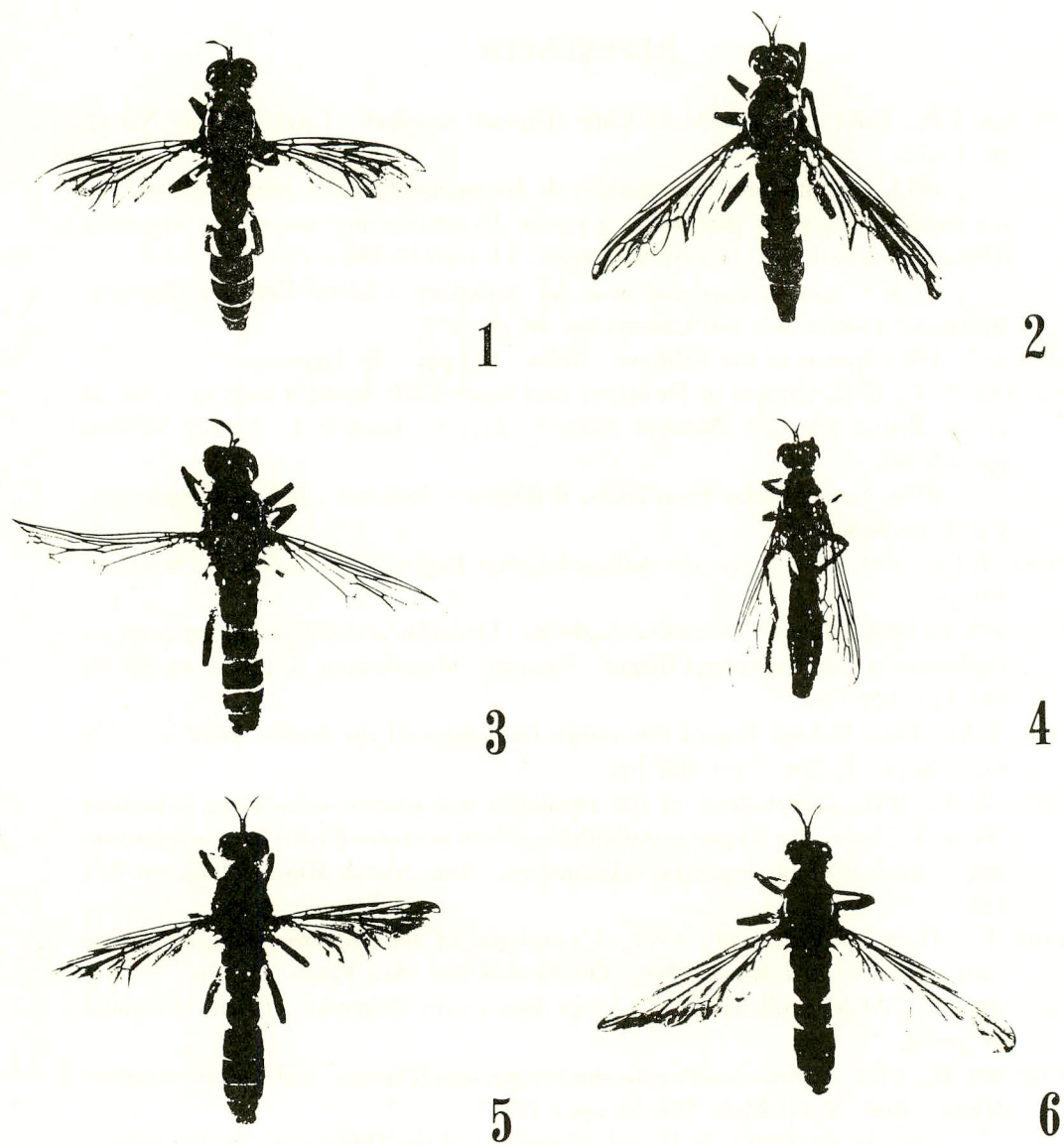
ACKNOWLEDGMENTS

I wish to express my sincere thanks to Dr. Wallace A. STEFFAN and Mr. Neal L. EVENHUIS (Bishop Museum, Honolulu) and Professor Seizi AZUMA (University of the Ryukyus, Naha) for their generous gift or loan of material.

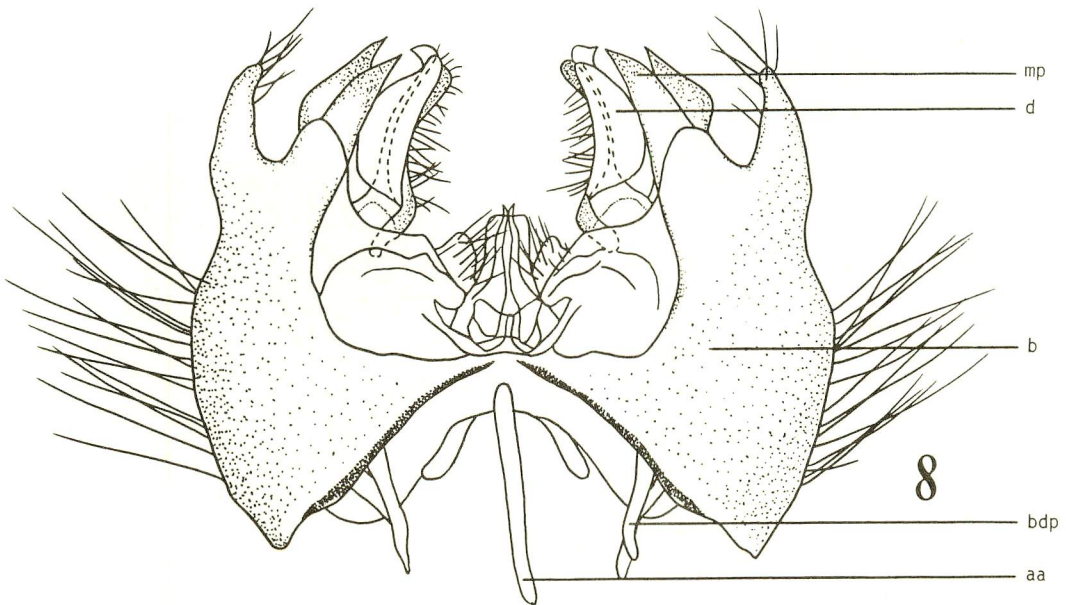
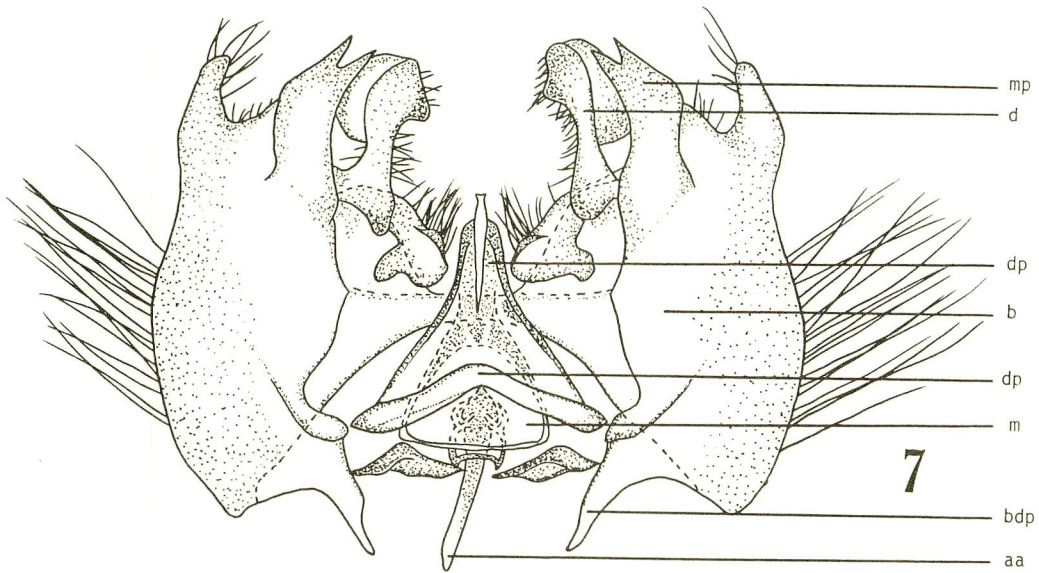
The drawings were made by Miss Yoshiko IKESHIMA (Kagoshima University) and the photographs were prepared by Dr. Kenkichi KANMIYA (Kurume University, Kurume). Their help is greatly appreciated.

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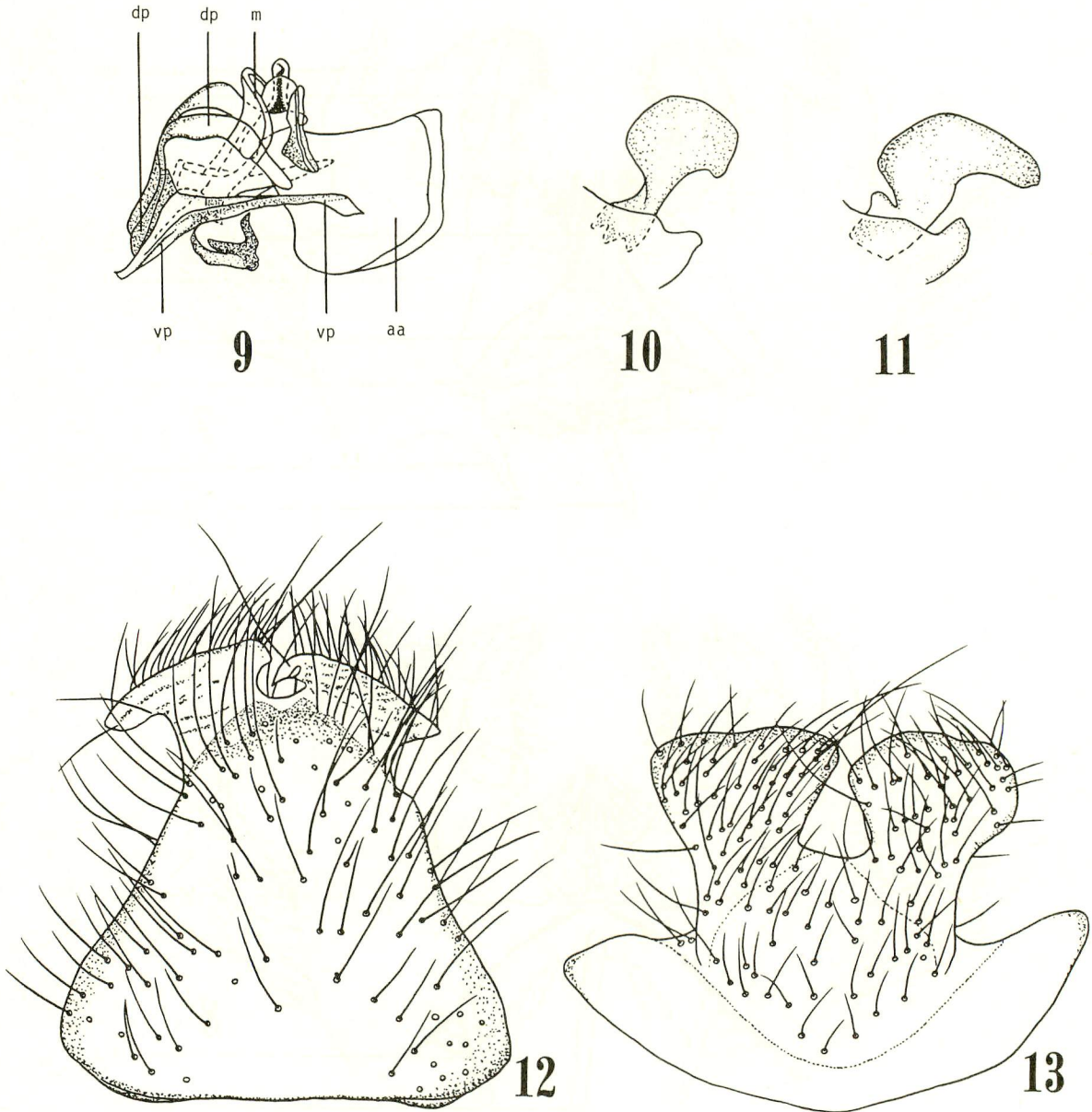
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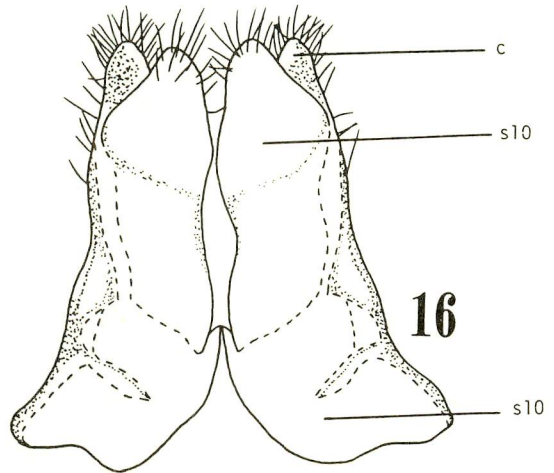
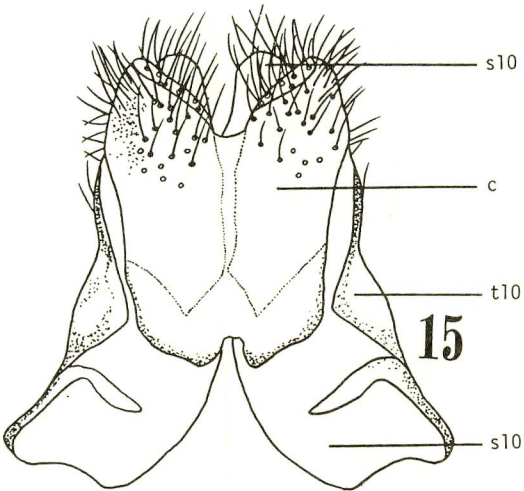
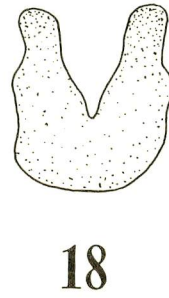
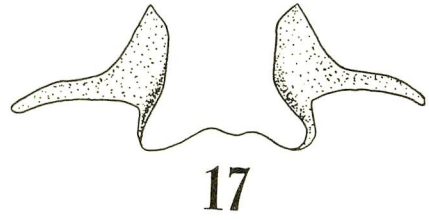
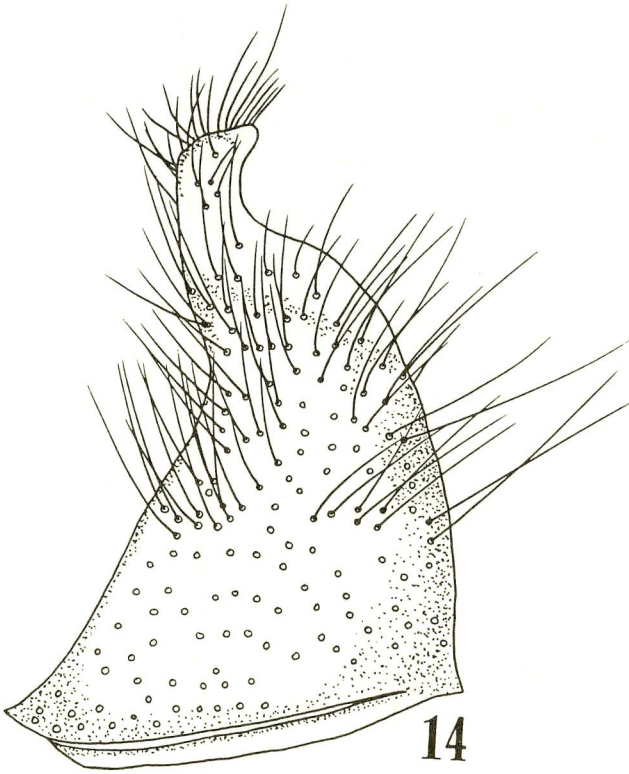
Figs. 1-6. *Scylaticus* spp., dorsal view. 1-2: *degener* (from Okinawa-hontô); 3-4: *lutescens* (from Fukien, southern China); 5-6: *sayano* (from Iriomote-jima); 1, 3, 5: male; 2, 4, 6: female.



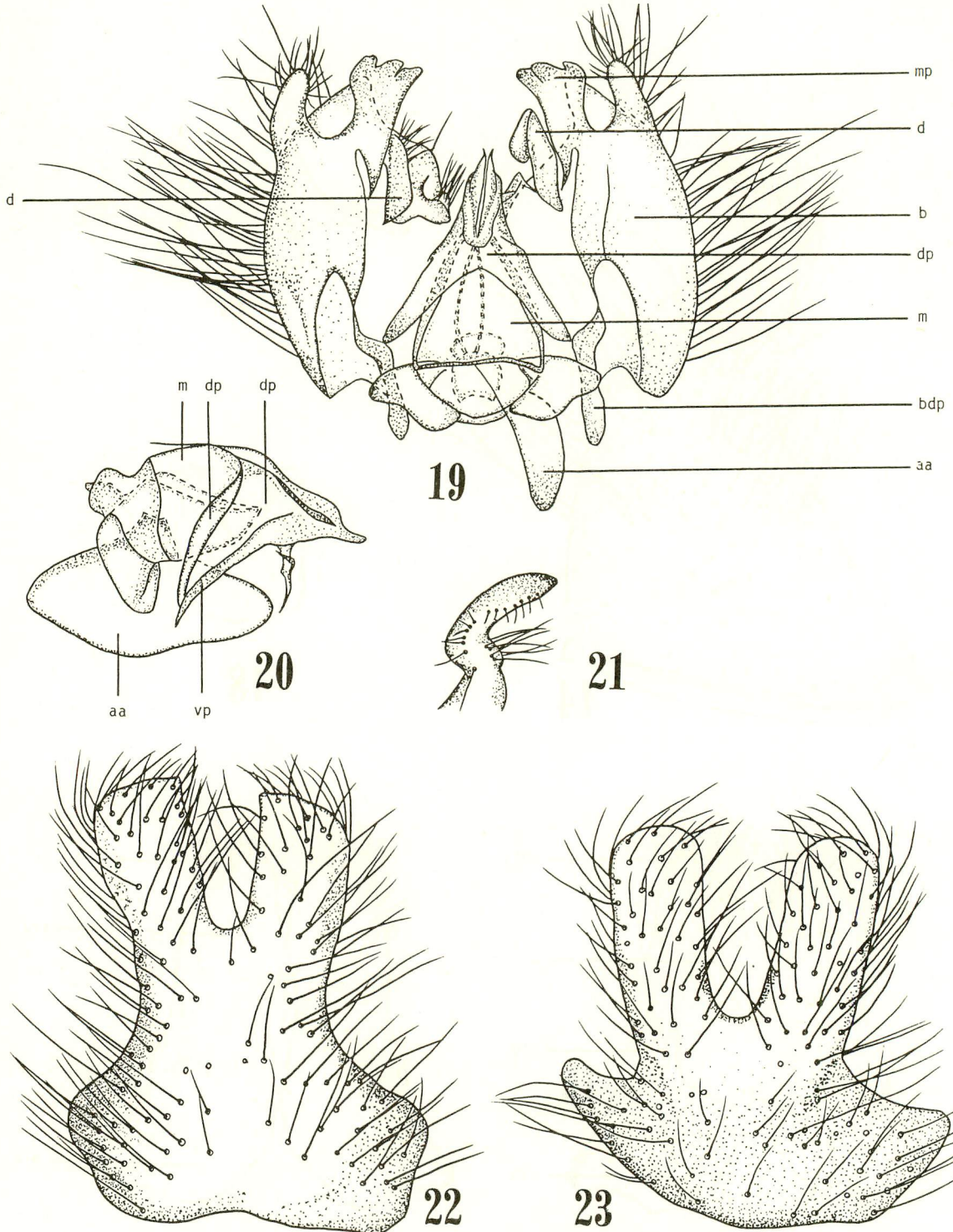
Figs. 7-8. Male genitalia (excluding cerci, tergum 10 and sterna 9-10) of *S. degener* (from Okinawa-hontô). 7: dorsal view; 8: ventral view.



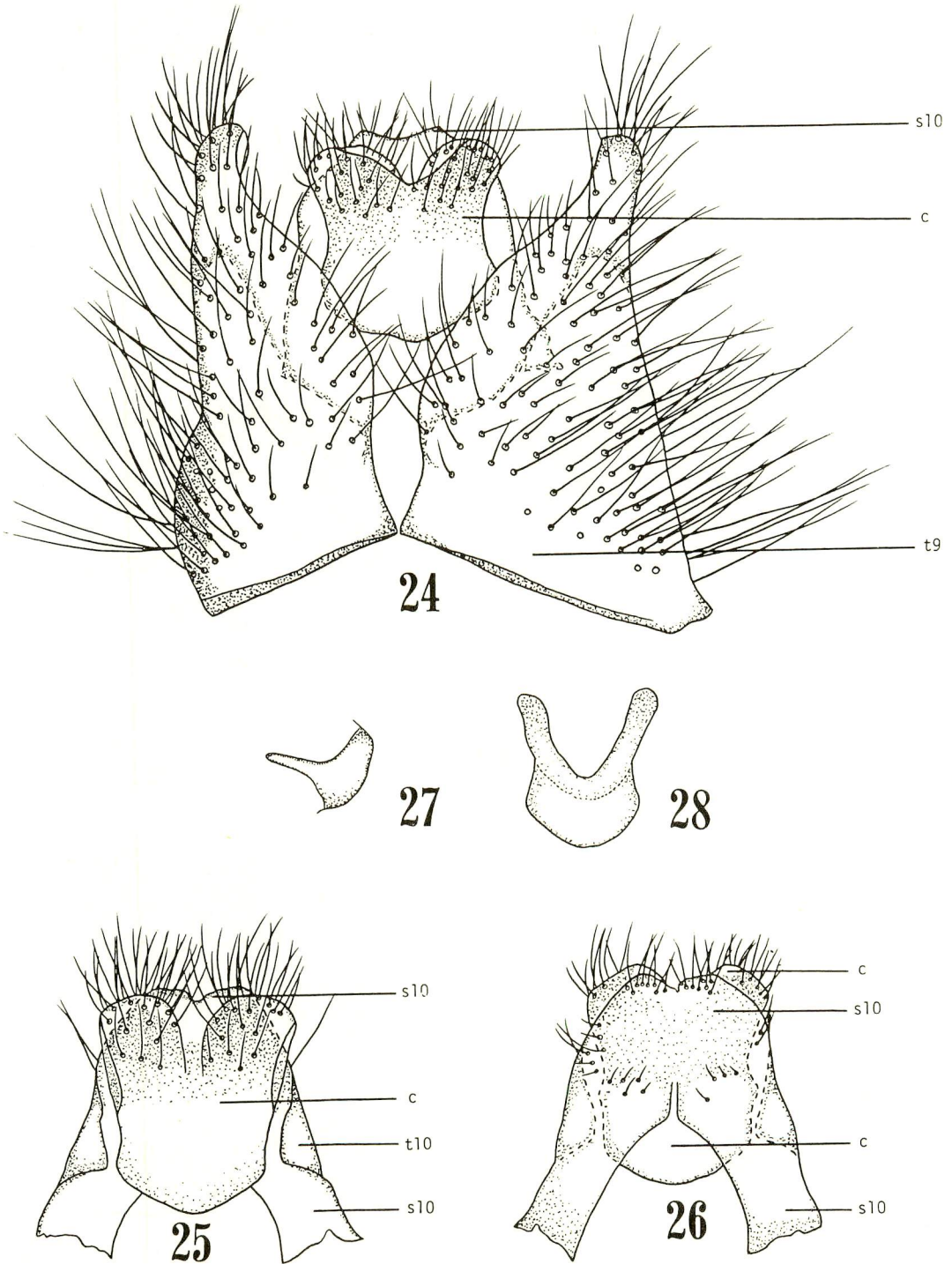
Figs. 9-13. *S. degener* (from Okinawa-hontō), male. 9: lateral view; 10: dististyle, proximo-inner view; 11: dististyle, inner view; 12: sternum 9, ventral view; 13: sternum 9 (with apical part kept horizontally), ventral view; 9-11: based on 2nd specimen.



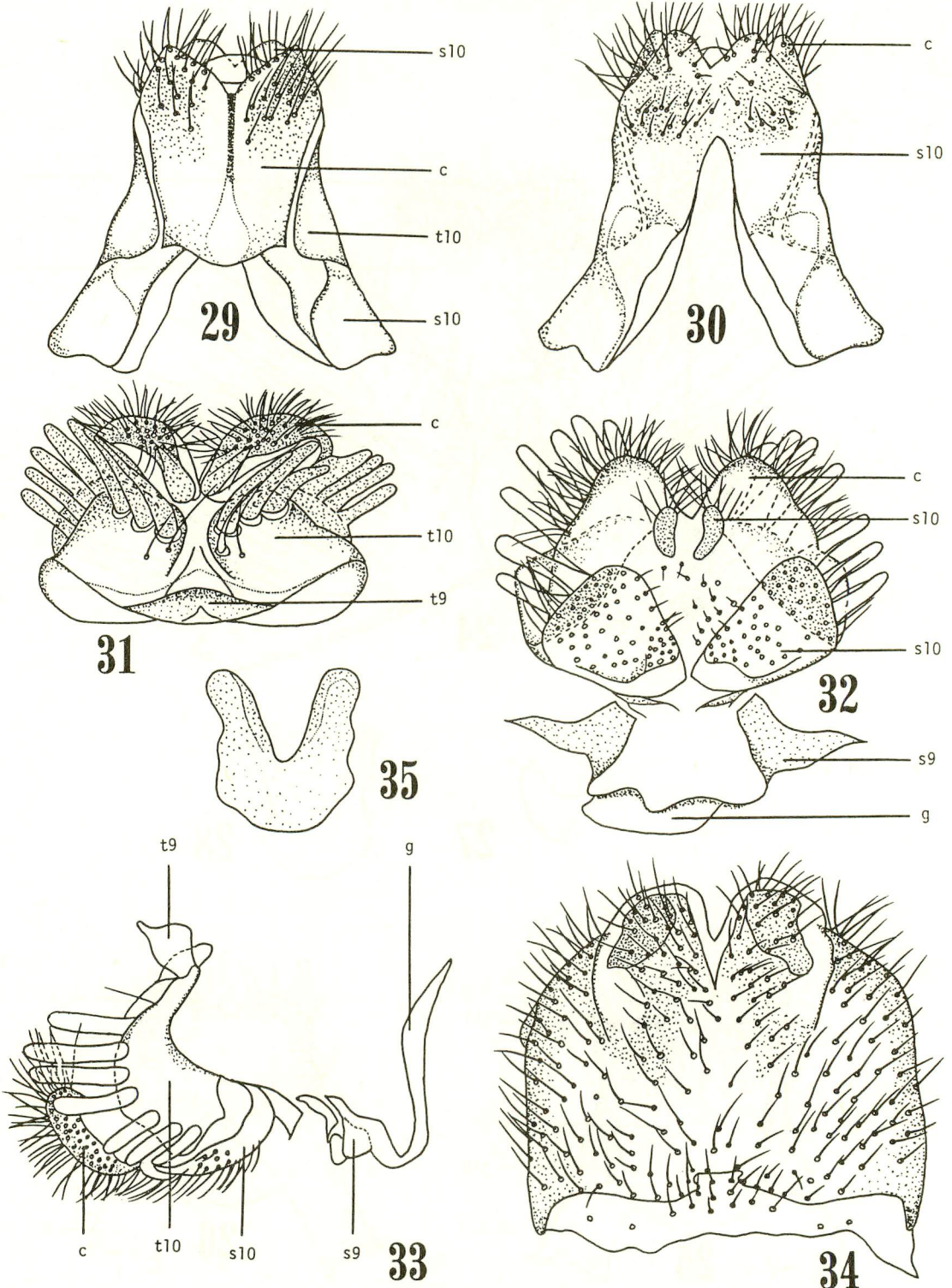
Figs. 14-18. *S. degener* (from Okinawa-hontô). 14-16: male; 17-18: female; 14: tergum 9 (one side only), dorsal view; 15: dorsal view; 16: ventral view; 17: sternum 9, dorsal view; 18: genital fork, dorsal view.



Figs. 19-23. *S. lutescens* (from Fukien, southern China), male. 19: genitalia (excluding cerci, tergum 9 and sterna 9-10), dorsal view; 20: lateral view; 21: dististyle, inner view; 22: sternum 9, ventral view; 23: sternum 9 (with apical part kept horizontally), ventral view; 20-21: based on 2nd specimen.



Figs. 24-28. *S. lutescens* (from Fukien, southern China). 24-26: male; 27-28: female; 24: dorsal view; 25: dorsal view; 26: ventral view; 27: sternum 9 (one side only), dorsal view; 28: genital fork, dorsal view; 25-26: based on 2nd specimen.



Figs. 29-35. *S. sayano* (from Iriomote-jima). 29-30: male ; 31-35: female ; 29: dorsal view ; 30: ventral view ; 31: dorsar view ; 32: ventral view ; 33: lateral view ; 34: sternum 8, ventral view ; 35: genital fork, dorsal view.