

## NEW SPECIES OF THE GENUS CHAETEXORISTA BRAUER & BERGENSTAMM FROM JAPAN (Diptera : Tachinidae)

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NEW SPECIES OF THE GENUS *CHAETEXORISTA* BRAUER  
& BERGENSTAMM FROM JAPAN  
(Diptera : Tachinidae)

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The genus *Chaetexorista* Brauer & Bergenstamm is characterized by the combination of the following characters in the tribe Exoristini: Eye densely haired; facial ridge with strong bristles at least on its lower 1/2; bulged occiput with a row (or rows) of short black setae mixed with whitish piles behind postocular row; 2nd segment of arista not much elongated; ocellar bristle strong and sitting on middle portion between fore and hind ocelli.

This small genus, to which only 4 species belong, is distributed in the Oriental and Eastern Palaearctic Regions, and only 1 species has been recorded from Japan. In this paper I describe 2 additional species from Kyushu, Japan. Both species described below have distinct abdominal discal bristles, and one of them has black palpi. These characters have not been known in the other species of this genus.

I wish to express my hearty thanks to Prof. T. Shirōzu and Assoc. Prof. T. Saigusa of Kyushu University, for their constant guidance and encouragement. My deep thanks are also due to Miss M. Honda of Nagaoka Women's College, Mr. R. Oishi of Tokyo Pref., Mr. A. Tanaka of Kagoshima Agricultural Experimental Station and Mr. K. Kanmiya of Kyushu University, who kindly offered me the interesting materials.

Type specimens are deposited in the collection of the Biological Laboratory, College of General Education, Kyushu University, Japan.

***Chaetexorista ateripalpis* Shima, new species**

♂. Head almost black in ground color, gena below eye and lower anterior portion of parafacial reddish, epistoma pale yellow; parafacial with pale yellow-white pollinosity, which is becoming blackish posteriorly; parafacial, face and gena with dense silvery white pollinosity; occiput with blackish gray pollinosity; interfrontal area brown-black; antenna,

arista and palpus black. Facial length subequal to frontal one; vertex nearly  $3/4 \times$  as wide as single eye-width; interfrontal area widened anteriorly, nearly  $2 \times$  as wide as parafrontal at middle; parafacial narrowed below, nearly  $2/3 \times$  as wide as width of 3rd antennal segment at middle; epistoma slightly projected forward, not over vibrissal angle; gena nearly  $1/4 \times$  as long as eye-height; occiput slightly bulged. Parafrontal with rather dense and long hairs, of which only 1-2 are descending below the undermost frontal bristle; parafacial bare; inner vertical bristle strong; outer vertical bristle indistinct; 2 proclinate ocellar bristles, which are subequal in length to anterior inner orbital bristle; 2-3 reclinate inner orbital bristles, anterior one stronger; 6-7 frontal bristles, undermost one nearly on level of base of arista; 4 distinct postocellar setae; 2 fine postvertical setae on each side. Antenna with 3rd segment broad, nearly  $4.5 \times$  as long as 2nd. Arista with 2nd segment nearly  $2 \times$  as long as wide; 3rd segment thickened on its basal  $1/3$ . Palpus nearly cylindrical, slightly widened apically. Eye densely clothed with very fine hairs.

Thorax shining black in ground color, postalar callus somewhat reddish, with thin gray-white pollinosity; 5 black longitudinal vittae present on prescutum and scutum, of which middle one is indistinct on prescutum; scutellum almost black, posterior  $1/2$  reddish. Hairs erect and dense, on pleura longer; scutellum with erect and long hairs, which become more or less sparse posteriorly; prosternum with several fine hairs on its sides; chaetotaxy normal; 3+3 *ac*; 3+4 *dc*; 2+1 *stpl*, undermost one weak; subapical scutellar bristle nearly  $2 \times$  as long as scutellum; apical scutellar bristles horizontal and crossing each other; preapical scutellar bristle fine. Distance between 2 subapical scutellar bristles nearly  $1.5 \times$  as long as that between basal and subapical ones of same side.

Wing hyaline, very slightly tinged with brown anteriorly; epaulette and basicosta black; veins brown; calypter pale yellow-white. Basal node of vein  $R_{4+5}$  with 3-4 setae dorsally; 2nd costal sector bare ventrally and nearly  $1/2 \times$  as long as 3rd; length of vein  $M_1$  from discal crossvein to bending portion nearly  $2/3$  (or more)  $\times$  as long as that from bending portion to end of vein  $M_1$ . Calypter rather small.

Legs black; tibiae black; pulvilli yellowish brown. Hind coxa bare posterodorsally; fore tibia with 2 posterior setae; mid-tibia with 2 anterodorsal, 3 posterodorsal and 1 ventral setae; hind tibia with a row of anterodorsal setae, which are not closely set and in which 2-3 stronger setae are present; 3-4 posterodorsal and 2-3 ventral setae present on hind tibia. Fore claw and pulvillus elongated, longer than 5th tarsomere.

Abdomen long ovate; shining black in ground color, sides of 3rd and 4th terga narrowly reddish; anterior  $1/2$  of 3rd and 4th terga and anterior  $1/3$  of 5th tergum with gray-white pollinosity; black median longitudinal vitta present on 3rd to 5th terga. Hairs suberect and dense, on dorsomedial portions of 3rd and 4th terga and on entire 5th tergum more erect and

sparse; 2nd tergum with 2 median marginal bristles; 3rd tergum with 2 median marginal and 2 irregular discal bristles; 4th tergum with a row of marginal and 2 rather irregularly set discal bristles; 5th tergum with rows of distinct marginal and discal bristles.

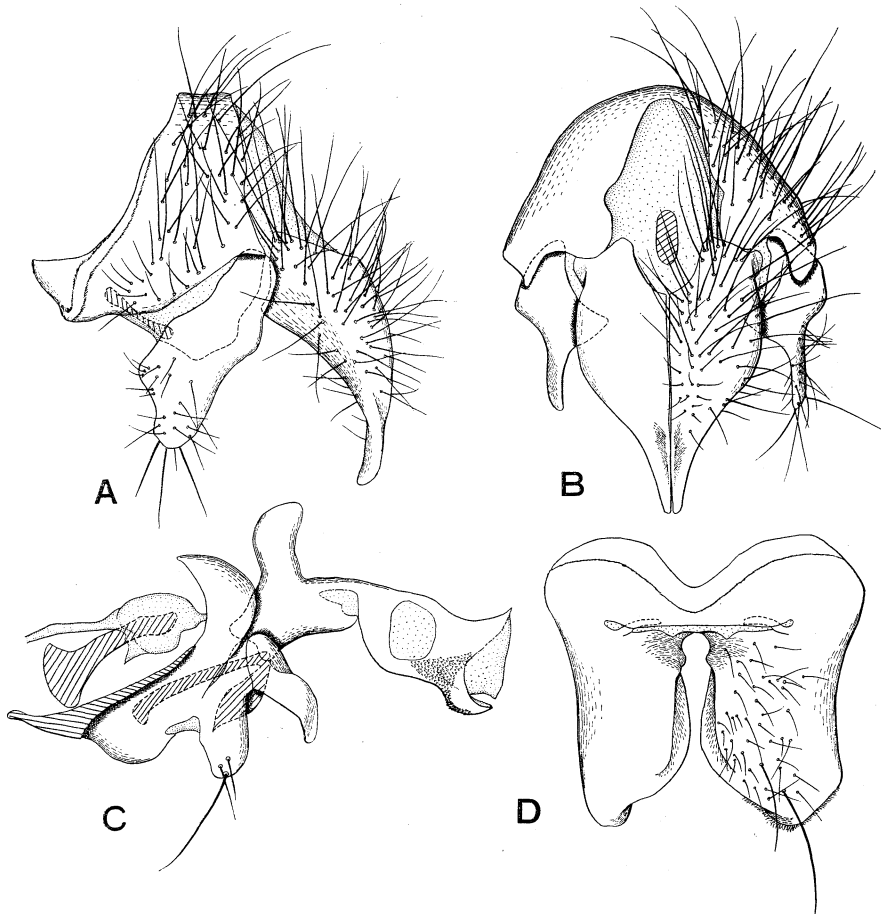


Fig. 1. *Chaetexorista ateripalpis* sp. nov., ♂ genitalia A: epandrium, cercus and surstylus in lateral view, B: same in dorsal view (hairs on left side are not drawn), C: hypandrium and aedeagus in lateral view, D: 5th abdominal sternum (hairs on left side are not drawn).

♂ genitalia: Cercus very heavy, widened on basal 1/2 and strongly tapering to slender apical portion in dorsal view, with very strong and rather sparse hairs; surstylus rather small, with strong and sparse hairs apically; pregonite with 3-4 strong hairs apically; basiphallus with a strong dorsal process; distiphallus with distinct spines on its ventromedian portion.

♀. Very closely resembling male, but differing as follows: Vertex slightly narrower than single eye-width when seen from above; interfrontal area slightly wider than parafrontal at middle; hairs on parafrontal sparse; distinct outer vertical bristle present, nearly  $2/3 \times$  as long as inner one; 2 strong proclinate outer orbital bristles present; 3rd antennal segment nearly  $3 \times$  as long as 2nd; palpus more widened apically; hairs on basal portion of vein  $R_{4+5}$  sometimes extending to half-way to crossvein  $R-M$ ; mid-tibia with 3-4 anterodorsal bristles, the undermost one sometimes weak; discal bristles on intermediate abdominal terga stronger and regularly set; fore claw and pulvillus shorter than 5th tarsomere.

Body length: 6.2-6.8 mm.

Holotype ♂, Momiki, Gokanosho, Kumamoto Pref., Kyushu, 20. vii. 1966, K. Kanmiya.

Paratypes: 1 ♀, Mt. Hikosan, Fukuoka Pref., Kyushu, 5. viii. 1968, M. Honda; 3 ♀♀, Momiki—Kaimochi, Gokanosho, 21. vii. 1966, A. Tanaka & R. Oishi; 1 ♂, Momiki—Shiiba, Gokanosho, 22. vii. 1966, R. Oishi; 4 ♂♂, Mt. Takachiho, Kagoshima Pref., Kyushu, 11. viii. 1968, M. Honda.

Remarks: This new species is very characteristic in its black palpus, wide vertex and distinct discal bristles on intermediate abdominal terga.

### **Chaetexorista discalis** Shima, new species

♂. Head black in ground color; gena below eye and lower anterior part of parafacial reddish; epistoma yellowish; parafrontal and parafacial densely gray-yellow pollinose; face with whitish pollinosity; occiput gray pollinose; interfrontal area brown-black; antenna and arista black; palpus reddish, darkened basally. Vertex subequal in width to eye-width when seen from above; frontal length slightly more than facial one (8:7); interfrontal area parallel-sided, subequal in width to parafrontal at middle; parafacial wide, nearly parallel-sided, slightly wider than width of 3rd antennal segment; gena nearly  $1/4$  of eye-height; epistoma projected forward, not over vibrissal angle. Inner vertical bristle nearly  $2/3 \times$  as long as eye-height; outer vertical bristle indistinct; 2 subequally long inner orbital bristles; ocellar bristle subequal in length to inner orbital one; 8-9 frontal bristles, of which 3 are descending to parafacial and of which the undermost one is sitting slightly below base of arista; parafacial bare; parafrontal with dense and long hairs, which are not descending below the undermost frontal bristle; facial ridge with a row of setae on its lower  $1/2$ ; 4 postocellar setae; 1 postvertical seta on each side. Antenna rather stout, 3rd segment nearly  $4 \times$  as long as 2nd. Arista with 2nd segment slightly longer than wide; 3rd segment thickened on its basal  $1/3$ . Palpus club-form, with rather strong hairs.

Thorax mostly black in ground color, with rather dense gray-white pollinosity; dorsum with 5 longitudinal vittae, of which middle one dis-

appears on prescutum; scutellum reddish brown, with thin whitish pollinosity. Hairs dense, fine and rather long, on pleura longer; prosternum with fine hairs on its sides; barette setulose; chaetotaxy normal; 3+3 *ac*; 3+4 *dc*; 2+1 *stpl*; preapical scutellar bristle fine and short, nearly  $\frac{3}{4}$ × as long as scutellum. Distance between 2 subapical scutellar bristles nearly 2× as long as that between basal and subapical ones of same side.

Wing hyaline, slightly tinged with brown on anterior margin; epaulette and basicosta black; veins brown; calypter whitish. Second costal sector bare ventrally; basal node of vein  $R_{4+5}$  setulose dorsally from base to crossvein *R-M*, with 1-2 setae ventrally. Proportion of costal sector 2nd, 3rd and 4th nearly as 4:7:4; length of vein  $M_1$  from discal crossvein

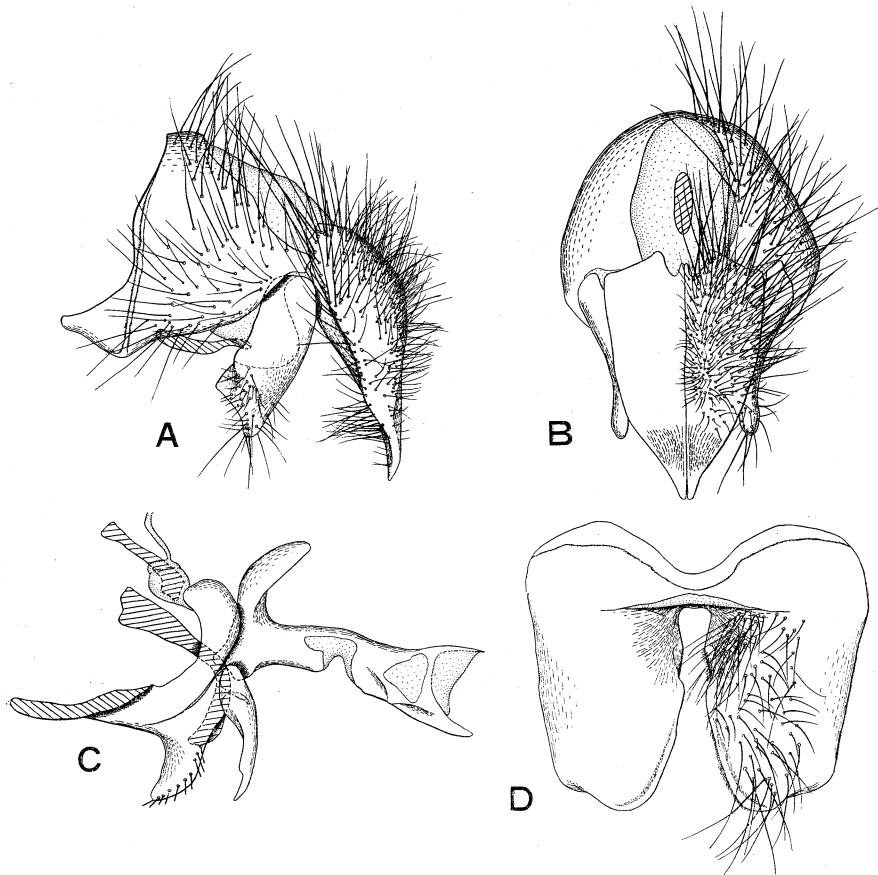


Fig. 2. *Chaetexorista discalis* sp. nov., ♂ genitalia A: epandrium, cercus and surstylus in lateral view, B: same in dorsal view (hairs on left side are not drawn), C: hypandrium and aedeagus in lateral view, D: 5th abdominal sternum (hairs on left side are not drawn).

to bending portion nearly  $1/2 \times$  as long as that from bending portion to end of vein  $M_1$ .

Legs black, tibiae reddish brown; pulvilli yellow. Hind coxa bare on posterodorsal margin; fore tibia with 2 posterior setae; mid-tibia with 3 anterodorsal, 2 posterodorsal and 1 ventral setae; hind tibia with a row of anterodorsal setae, which are not much closely set and of which middle one is stronger; 3-4 posterodorsal and ventral setae present on hind tibia; claw and pulvillus very long, longer than combined length of 4th and 5th tarsomeres.

Abdomen black in ground color, sides of 2nd and 3rd terga and anterolateral portions of 4th tergum reddish brown; dorsum of anterior  $1/2$  of 3rd tergum with whitish pollinosity, which is broadly weakened on central triangular portion; 4th tergum whitish pollinose dorsally on its anterior  $3/5$ ; 5th tergum with whitish pollinosity on its anterior  $1/2$ ; dorsomedial longitudinal vitta present on 3rd to 5th terga; venter with rather thin yellow-white pollinosity. Hairs on dorsum very dense and fine, becoming sparse posteriorly, venter with longer hairs; 2nd tergum with 2 rather weak median marginal bristles; 3rd tergum with 2 irregularly set discal and 2 rather strong median marginal bristles; 4th tergum with 2 rather weak regularly set discal and a row of strong marginal bristles; 5th tergum with a row of rather strong discal and very weak marginal bristles, the latter rather indistinct, mixed with long normal hairs.

♂ genitalia: Cercus very heavy, shield-form in dorsal view, with very dense and strong hairs, strongly tapering toward tip on its apical  $1/3$ ; surstylus longer than in the preceding species, with rather strong hairs on its apical portion; pregonite with a row of apically cut hairs on its hind margin; basiphallus with a strong dorsal process; spines on distiphallus indistinct.

Body length: 10.4 mm.

♀. Unknown.

Holotype ♂, Inunakiyama, Fukuoka Pref., Kyushu, 25. iv. 1967, H. Shima.

Remarks: This species seems to be related to *C. klapperichi* Mesnil from Fukien, China, but is differentiated by the wider vertex, presence of discal bristles on intermediate abdominal terga and fine abdominal marginal bristles.