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NEW SPECIES OF *ACTIA* S. STR. FROM HONG KONG AND NEPAL (Diptera: Tachinidae)[1]

By Hiroshi Shima[2]

Abstract: *Actia yasumatsui* n. sp. from Hong Kong, and *A. pokharana* n. sp. from Nepal are described. Illustrations of ♂ head in profile and ♂ genitalia are presented.

The fissicorn species of the tribe Siphonini (=Actiini) from the Palearctic, Oriental and Australian Regions have been known only in the genera *Strobliomyia* and *Ceromyia*, but not in *Actia*. This paper records the first fissicorn *Actia* from the area. Among the Bishop Museum tachinid-collection, I found 2 new species of the genus *Actia* s. str., whose 1st (R_1), 3rd (R_{1+5}) and 5th (Cu_1) wing veins are setulose above. One of the species, *A. yasumatsui* from Hong Kong has a remarkably distinctive 3rd antennal segment in the male. The other species, *A. pokharana* from Nepal has normal 3rd antennal segment in both sexes.

I wish to express my cordial appreciation to Prof. K. Yasumatsu, Kyushu University, and Dr J. L. Gressitt, Bishop Museum, for their kind guidance and encouragement.

Actia yasumatsui Shima, new species Fig. 1A; 2A, C, E.

♂. *Head*: Almost reddish brown in ground color, parafrontals gray-yellow pollinose; parafacials, face and gena with dense yellow pollinosity; occiput brownish black, with grayish pollinosity; interfrontal area reddish brown; antenna reddish yellow, 3rd segment slightly darker; arista reddish brown, 3rd segment dark brown on its apical 1/2; palpus yellow. Vertex nearly as wide as eye-width; frontal length shorter than facial one (4 : 5); interfrontal area nearly parallel-sided, slightly wider than parafrontal (5 : 4); parafacials very narrow, nearly as wide as width of base of arista at middle; epistoma slightly projected forward, not over vibrissal angle; gena slightly over 1/5 of eye-height. Inner vertical bristle nearly 2 × as long as outer one, and nearly 3/4 × as long as eye-height; ocellar bristle subequal in length to outer vertical one, proclinate and divergent; 2 reclinate inner orbital bristles, anterior one stronger; 2 proclinate outer orbital bristles; 4 frontal bristles, of which the undermost one is nearly on level of base of 2nd antennal segment; parafrontals with only some fine hairs, which are not descending below the undermost frontal bristle; upper occiput with a row of fine black setae. Antenna with 2nd segment nearly 1/5 × as long as 3rd; 3rd segment branched at basal 1/4, upper lobe short, nearly 1/3 × as long as lower one, lower one slightly widened anteriorly and rounded at apex. Arista nearly as long as 3rd antennal segment, with very short and fine pubescence; 2nd segment 2-3 × as long as wide; 3rd segment thickened on its basal 1/2. Proboscis of nor-

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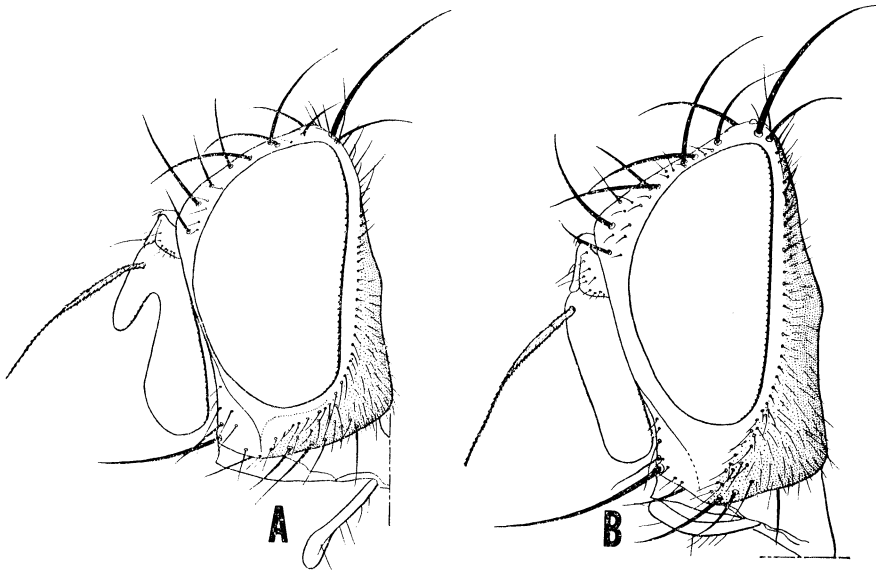

Fig. 1. Head in profile (♂); A, *Actia yasumatsui* n. sp.; B, *Actia pokharana* n. sp.

mal length; labella small; palpus slightly clavate, with some fine hairs ventrally. Eye bare.

Thorax: Black in ground color, scutellum reddish yellow on apical 1/3; mesonotum with dense gray-yellow pollinosity; on presutural region very narrow and inconspicuous 2 inner longitudinal vittae and 2 outer triangular spots present, on postsutural region only 2 outer vittae somewhat recognizable; pleura thinly grayish pollinose; scutellum with rather thin gray-yellow pollinosity. Propleura bare; prosternum with 1-2 fine setae on each side; sternopleura with a row of fine black hairs in front of mid-coxa; 2,3+4 *ac*; 3+4 *dc*; lower prostigmatical bristle undeveloped; 2+1 *stpl*, lower one nearly 2/3 × as long as upper anterior one; subapical scutellar bristles nearly 1.6 × as long as scutellum, and crossing each other apically; apical scutellar bristles very fine and hair-like, crossing each other. Distance between 2 subapical scutellar bristles subequal in length to that between basal and subapical ones of same side.

Wing: Hyaline; basicosta reddish brown; lower calypter dull yellowish. Vein R_1 setulose along its whole length dorsally, bare ventrally; upper surface of vein R_{4+5} setulose to level of crossvein *M-Cu*, lower surface with only 1 seta on its base; vein Cu_1 setulose at most to level of crossvein *R-M* dorsally, bare ventrally. Crossvein *M-Cu* nearly 2/3 × as long as ultimate section of vein Cu_1; ultimate section of vein Cu_1 slightly longer than penultimate section of vein M_1 (15:13), and nearly 3/5 × as long as its own penultimate section; vein *An* not reaching wing margin.

Leg: Brownish black, coxa and tibia somewhat reddish at least on fore leg; pulvillus dull yellowish. Fore tibia with a row of anterodorsal, 4 posterodorsal and 1 posterior setae; mid-tibia with 1 anterodorsal, 2 posterodorsal and 1 ventral setae; hind tibia with rows of anterodorsal and posterodorsal setae and 2-3 ventral setae. Claw and pulvillus very short.

Abdomen: Entirely shining black in ground color, dorsally with rather thin gray-white pollinosity on anterior 1/4 of 3rd and 4th terga and very narrow anterior margin of 5th tergum; venter very thinly grayish pollinose evenly; mid-dorsal longitudinal line distinct on 3rd and 4th terga. Second tergum with 1 weak lateral marginal bristle; 3rd tergum with 1

strong lateral and 2 rather weak median marginal bristles; 4th and 5th terga with rows of marginal bristles; discal bristle absent.

♂ *genitalia*: Cercus slightly shorter than surstylus; surstylus directed slightly upward apically; basiphallus without epiphallus; pregonite with some distinct spines on its apical part; ejaculatory apodeme very large, fan-shape.

♀. Unknown.

Body length: 3.0-3.4 mm.

HOST: Unknown.

Holotype ♂ (BISHOP 9134), Kowloon, N. T., Taipokau, Hong Kong, 31.VIII.1965, L. K. Ming & H. W. Ming, Malaise trap.

Paratype: 1 ♂, same locality as holotype, 6.VII.1965, same collectors as holotype, Malaise trap (holotype and paratype in the collection of B. P. Bishop Museum, Honolulu).

This species seems to be related to European species *A. pilipennis*, but is distinguished by the remarkably specialized ♂ 3rd antennal segment, color of antenna, wing vein R_{4+5} setulose only to level of crossvein *M-Cu*, ultimate section of wing vein Cu_1 3/5 × as long as penultimate section, etc.

Actia pokharana Shima, new species Fig. 1B; 2B, D, F.

♂. *Head*: Almost reddish yellow in ground color, occiput dark brown; parafrontals pale yellow-white pollinose; parafacials, face and gena with dense white pollinosity; pollinosity on occiput grayish; interfrontal area yellow; antenna orange-yellow, 3rd segment darker; arista reddish yellow, 3rd segment brown on its apical 1/2; palpus yellow. Vertex very slightly wider than eye-width; frontal length nearly 5/6 × as long as facial one; interfrontal area parallel-sided, subequal in width to parafrontals; parafacials narrowed below, slightly narrower than length of 2nd aristal segment at middle; epistoma slightly projected forward, not over vibrissal angle; gena slightly over 1/3 of eye-height. Inner vertical bristle nearly 1.5 × as long as outer one, and slightly over 1/2 of eye-height; ocellar bristle proclinate and divergent, nearly as long as outer vertical bristle; 2 reclinate inner orbital bristles, anterior one stronger; 2 proclinate subequally long outer orbital bristles; 4 frontal bristles, of which the 2nd upper one is sometimes very weak and hair-like; the undermost frontal bristle nearly on level of base of 2nd antennal segment; parafrontals with sparse fine hairs, of which only 1-2 are descending below undermost frontal bristle; upper occiput with a row of fine black setae. Antenna normal; 2nd segment nearly 1/4 × as long as 3rd; 3rd segment nearly 3.5 × as long as wide. Arista with very fine short pubescence, slightly longer than 3rd antennal segment; 2nd segment nearly 2 × as long as wide; 3rd segment thickened on its basal 1/2. Proboscis of normal length, labella normal; palpus very slightly clavate. Eye bare.

Thorax: Brown-black in ground color, pleura more or less reddish, scutellum reddish on apical 1/2; mesonotum with dense gray-yellow pollinosity; pleura thinly gray-white pollinose; pollinosity on scutellum rather thin and grayish yellow. Prosternum with 2-3 fine black setae on each side; propleura bare; sternopleura with a row of fine black hairs in front of mid-coxa; 3+3, 4 *ac*; 3+4 *dc*; lower prostigmatical bristle undeveloped; 2+1 *stpl*, lower one nearly 2/3 × as long as upper anterior one; subapical scutellar bristle nearly 2 × as long as scutellum; apical scutellar bristles very fine and hair-like, crossing each other. Distance between 2 subapical scutellar bristles subequal in length to that between basal and subapical ones of same side.

Wing: Hyaline; basicosta yellow; lower calypter pale yellowish white. Vein R_1 setulose

dorsally along its whole length, lower surface with only 3-4 fine setae on its apical 1/3; upper surface of vein R_{4+5} setulose slightly over level of crossvein *M-Cu*, lower surface with only 1 seta on its base; vein Cu_1 setulose dorsally to level of crossvein *R-M*, bare ventrally. Crossvein *M-Cu* nearly 2/5 × as long as ultimate section of vein Cu_1; ultimate section of vein Cu_1 nearly 3/5 × as long as penultimate section of vein M_1, and very slightly shorter than its own penultimate section (20:23); vein *An* not reaching wing margin.

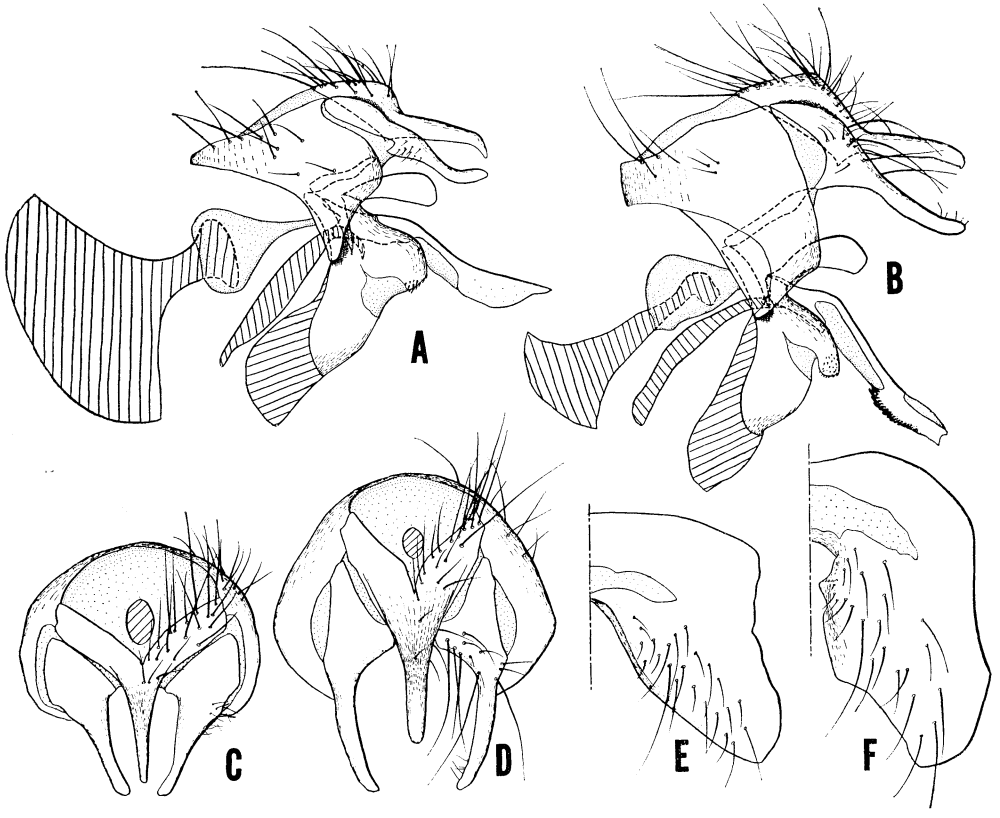

Fig. 2. A, C, E: *Actia yasumatsui* n. sp.; B, D, F: *Actia pokharana* n. sp. A, B: ♂ hypopygium lateral view; C, D: same dorsal view (hairs on left side are not drawn); E, F: ♂ 5th sternum ventral view (right side).

Leg: Reddish yellow, apex of hind femur somewhat darkened; tarsus brownish black; pulvillus yellowish. Fore tibia with a row of anterodorsal, 2-4 posterodorsal and 1 posterior setae; mid-tibia with 1 anterodorsal, 2 posterodorsal and 1 ventral setae; hind tibia with rows of anterodorsal and posterodorsal setae and 2-3 ventral setae. Claw and pulvillus very short.

Abdomen: Dorsally 2nd and 3rd (or anterior 3/4 of 3rd) terga and sometimes anterior 1/3 of 4th tergum reddish yellow; most of 5th and 4th (or sometimes posterior 2/3 of 4th) terga and mid-dorsal line of (and sometimes posterior 1/4 of) 3rd tergum brownish black; very thin gray-white pollinosity on most of whole dorsum, except mid-dorsal line of 3rd to 5th terga; venter reddish yellow on anterior 2/3, darkened posteriorly, with very thin pollinosity on anterior narrow margin of each tergum. Second tergum with 1 weak lateral marginal bristle;

3rd tergum with 1 strong lateral and 2 strong median marginal bristles; 4th and 5th terga with rows of strong marginal bristles; discal bristle absent.

♂ *genitalia*: Cercus in profile not strongly curved ventrally on its apical 1/2; surstylus very slightly curved dorsally in profile, with very strong ventrally directed hairs on middle; basiphallus without epiphallus; distiphallus with strong spines on ventral part; pregonite small, with fine spines on its apical part; ejaculatory apodeme rather long and narrow.

♀. Very closely resembling ♂, but vertex slightly wider, 3rd antennal segment narrower (nearly 3 × as long as wide), arista longer (subequal in length to total length of 2nd and 3rd antennal segments), palpus more clavate and posterior 1/3 of 3rd and most of 4th abdominal terga more darkened dorsally.

Body length: 3.4-4.3 mm.

HOST: Unknown.

Holotype ♂ (BISHOP 9135), Pokhara, 910 m, Nepal, 18-27.IX.1965, L. W. Quate, Malaise trap.

Paratypes: 15 ♂♂, 10 ♀♀, same data as holotype (holotype and paratypes in the collection of B. P. Bishop Museum, Honolulu).

This species is closely related to *A. painei* from New Britain and *A. darwini* from Australia. But it is easily distinguished from them by the ♂ 3rd antennal segment 4 × as long as 2nd, 3+4 *dc*, ultimate section of wing vein Cu_1 only slightly shorter than penultimate section and abdominal dorsum with thin grayish white pollinosity almost even.