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## On Systematic Position of the Genus *Apionodes* Marshall (Coleoptera, Curculionidae), with Description of a New Species from Taiwan<sup>1)</sup>

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Abstract. The genus *Apionodes* Marshall is transferred from Anthonominae to Eugnominae and a new species, *Apionodes constricticollis* is described from Taiwan.

The genus *Apionodes* was erected by Marshall(1948) for *longipes* from N. E. Burma in the subfamily Anthonominae. But the systematic position is problematical because the definitions given to Anthonominae and allies are markedly different among taxonomists. After careful examinations of the type specimen of *A. longipes* at the British Museum (Natural History) and second species from Taiwan, this genus are concluded to be better treated in Eugnominae than in Anthonominae in the systematic position according to the definition by Cawthra,1966.

### Genus *Apionodes* Marshall

*Apionodes* Marshall, 1948, Novit. Zool., 42(3): 422-423. Type species: *Apionodes longipes* Marshall.

Head parallel-sided behind eyes in dorsal aspect, forehead between eyes parallel-sided, a little narrower than the base of rostrum, eyes slightly more convex than temples. Rostrum long and slender, antennal scrobes oblique, passing beneath rostrum, antennae inserted in apical 1/4 in both sexes. Antennae with funicle seven-segmented. Legs long and slender, femora each with a denticle, denticle of fore femora smaller than those of the mid and hind pairs, tibiae almost straight, with a

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1) Contribution from the Entomological Laboratory, Faculty of Agriculture, Kyushu University, Fukuoka (Ser. 4, No. 49).

mucro in male but at least not on hind tibiae in female, tarsal claws free, appendiculate and each with a long seta. Fore coxae conical, prominent, contiguous. Prosternum not excavated, with a transverse furrow close to anterior margin, circumcoxal area slant at anterior and lateral sides. Mesosternal process much narrower than a coxa. Posterior margins of 2nd–4th ventrites straight.

**Discussion.** Marshall(1948) placed this genus near *Anthonomus* of the subfamily Anthonominae, but the latter genus has following features: the antennae attach to apical 1/3 in male, the antennal scrobes are entirely lateral in position, the claws are toothed and not setose, and the fore femora are armed with denticles larger than or of the same size with those of mid and hind pairs.

The genus *Apionodes* shares the following features with the subfamily Eugnominae after the redefinition by Cawthra(1966): the antennae attach to near the apex, the antennal scrobes are oblique, running downwards to the underside of rostrum, the scape reaches the lower edge of the eye, the mid and hind femora are armed with larger denticles than the fore pair, the tarsal claws are free, divaricate, appendiculate and each with a long seta.

Definition of the Anthonominae by Marshall might be in much wider sense in many cases than by Schenkling and Marshall (1934) and Morimoto (1962). It is absolutely necessary for the worldwide redefinitions of the subfamilies Tychiinae, Erihrininae, Anthonominae, Eugnominae, Acalyptinae and Rhynchaeninae, but the genus *Apionodes* is considered to be better placed in Eugnominae than in Anthonominae within the limit of our present knowledge. The subfamily Eugnominae is predominant in the Australasian region and a few genera occur in the Neotropical region. Thus, *Apionodes* is the northernmost genus in their distribution of this subfamily.



Fig. 1. *Apionodes longipes* Marshall, cotype

### *Apionodes longipes* Marshall

(Fig. 1)

*Apionodes longipes* Marshall, 1948, Novit. Zool., 42(3): 423.

**Note.** This species is characterized by the following features: the prothorax parallel-sided from the base to the apical 3/4, the disk has a median obtuse carina, the clytra are widest at the prominent shoulders, and the tibiae are not mucronate in the female.

**Specimens examined.** Type-series preserved in the British Museum (Natural History).

**Distribution.** N. E. Burma (Kambaiti).

### *Apionodes constricticollis* sp. nov.

(Figs. 2, A-D; Fig. 3, A-N; Figs. 4, 5)

**Male.** Derm brown to dark brown, antennae with scape and funicle, tarsi and claws light brown.

Head alutaceous, densely punctate, each puncture with a yellowish white recumbent seta, forehead between eyes slightly narrower than the base of rostrum, without median fovea, with two or three decumbent scales besides each eye, eyes oblong oval. Rostrum almost parallel-sided, gently curved, as long as head and pronotum combined, with a median and two pairs of weak carinae from the point of antennal insertion to base, with a row of setiferous shallow punctures between carinae. Antennae inserted in apical 1/4 of rostrum, scape reaching the lower edge of eye, abruptly clavate, funicle seven-segmented, 1st segment oblong and longest, 2nd segment 3/4 times as long as 1st, 3rd to 7th segments subequal in length, 2/3 times as long as 2nd, club oblong oval, as long as basal three segments of funicle combined.

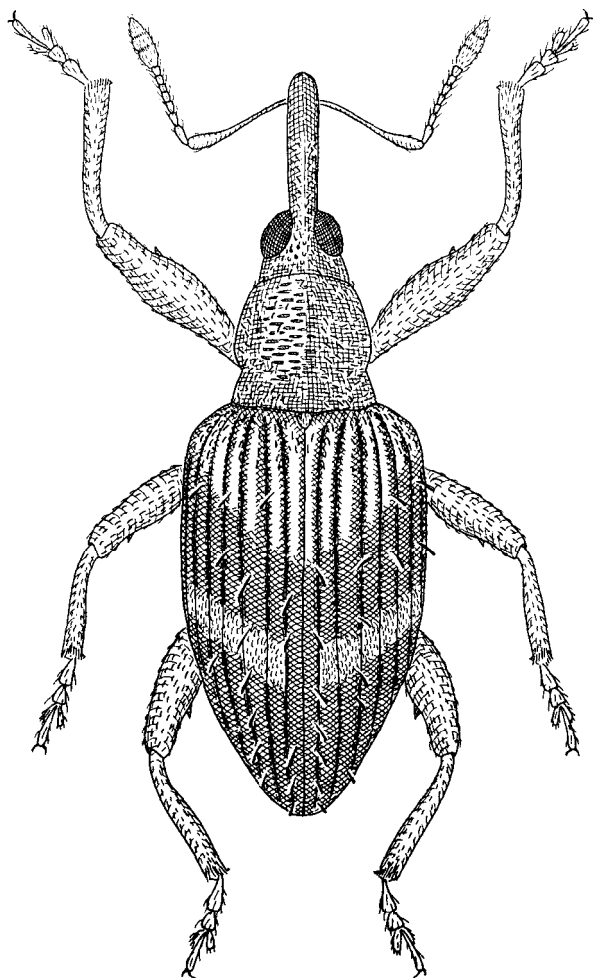


Fig. 2. *Apionodes constricticollis* sp. nov., male.

Prothorax as long as broad, broadest at the base, strongly constricted at basal 1/3, which is stronger on both sides and weaker on dorsum, with punctures transversely confluent to form many wrinkles, each puncture with a yellowish white seta on median line and with narrow scales on the remaining area, punctures sparser and weaker behind constriction. Scutellum oval, densely covered with yellowish white narrow scales.

Elytra slightly longer than broad, parallel-sided in basal half, then narrowed toward apex, with a yellowish white scaly band from the middle of 8th interval to posterior 1/3 of suture, sparsely with a row of erect slender scales mainly on the odd-numbered intervals, remaining area almost bare, only with sparse yellowish white setiform scales above humeri.

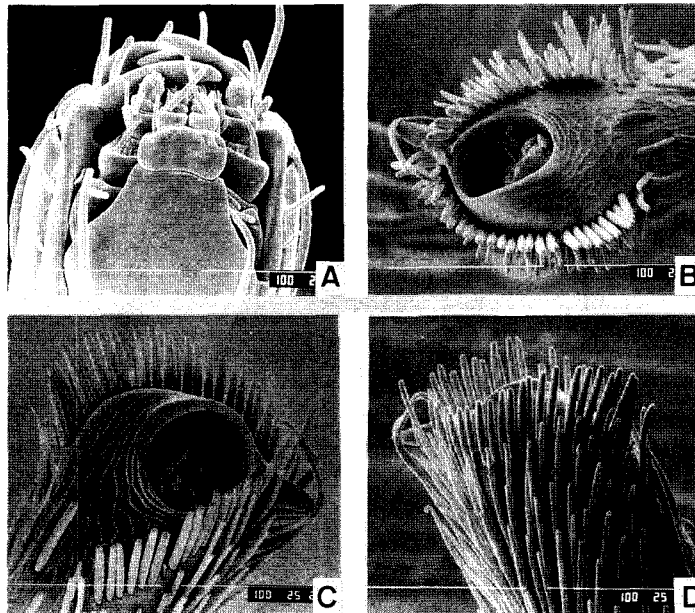
Legs slender, femora and tibiae clothed with yellowish white narrow scales, fore femora with a short denticle, mid and hind femora each with a little larger denticle, tibiae mucronate, densely covered with yellowish white setae at apical part.

Meso- and metasterna and venter sparsely with fine setae, which are a little broader and denser at sides, 5th ventrite with a pair of erect long setae close to posterior margin, median depression extended from base to beyond middle of 2nd ventrite.

Aedeagus as figured, tegmen with a pair of narrow parameres, internal sac with a pairs of setal rows.

**Female.** Fore tibiae and often mid ones with a minute mucro and hind ones without mucro. Venter with 1st and 2nd ventrites not depressed medianly but slightly convex.

Length. 2.72 mm (the holotype); range: 2.34-2.72.



**Fig. 3.** *Apionodes constricticollis* sp. nov., male; A. Mouth parts, ventral view; B. Apex of hind tibia, apical view; C, ditto, inner view; D, ditto, outer view.

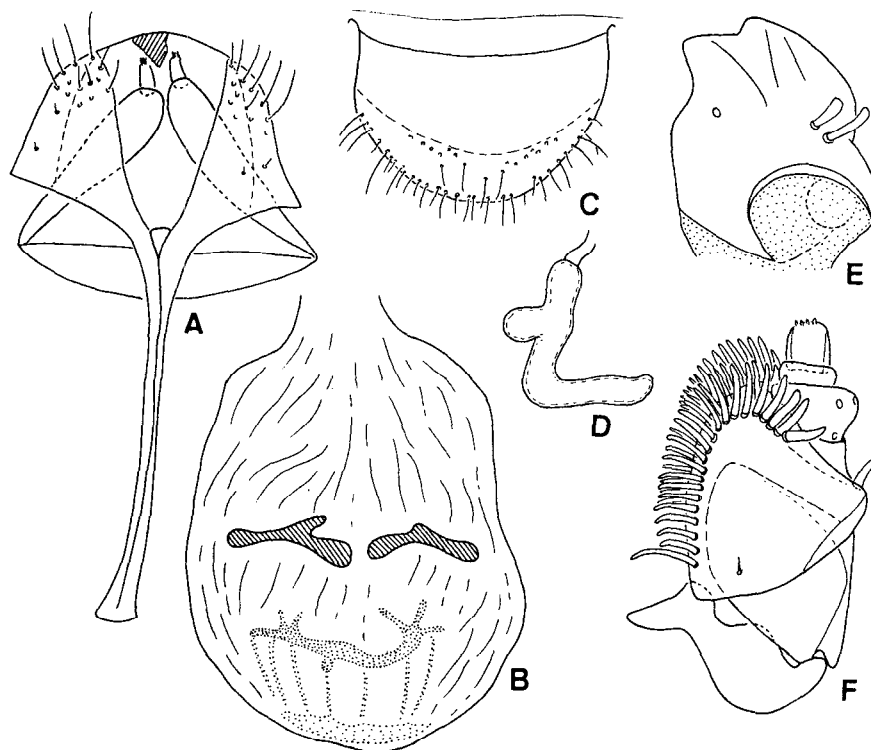


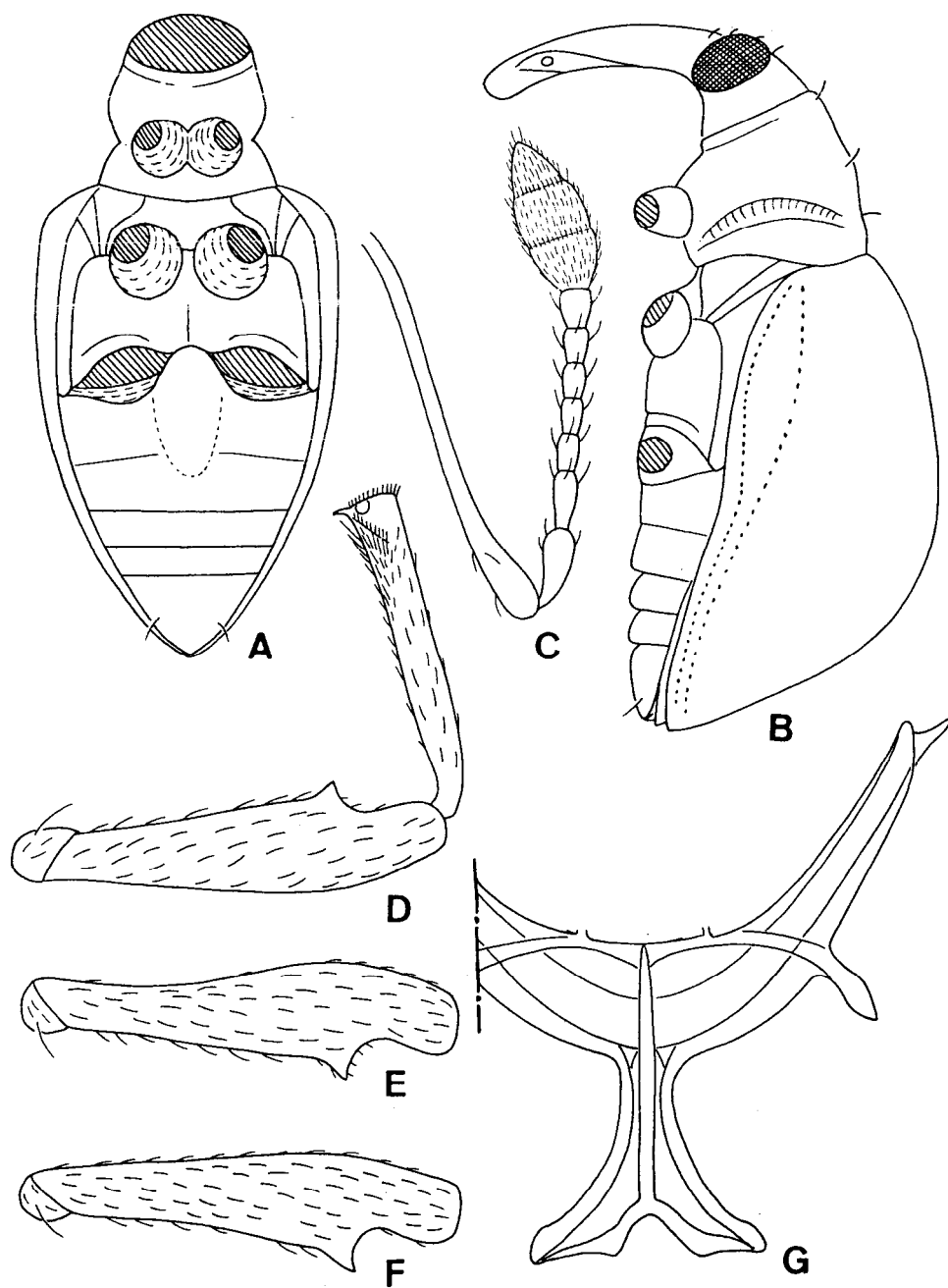
Fig. 4. *Apionodes constricticollis* sp. nov., female; A. Hemisternites and stalk of 8th sternite, B. Bursa copulatrix, C. 8th sternite, D. Spermatheca, E. Mandible, right, F. Maxilla, left.

Holotype, male (Type No. 2779, Kyushu Univ.), Fenchihu, Chia Yi Hsien, Taiwan, 7. vii. 1965, Y. Kurosawa leg.

Paratypes. 2 males and 2 females, same data as holotype & 7. vii. 1965, Y. Kurosawa, T. Nakane and H. Sasaji leg.; 3 males and 9 females, same locality as above, 12. iv. 1965, T. Saigusa and T. Shirozu leg.; 1 male, Allishan, Chia Yi Hsien, Taiwan, 5. vii. 1965, S. Kimoto leg.

**Distribution.** Taiwan (Central mountains).

**Note.** This species is easily separable from *longipes* by the constricted pronotum and scaly band on the elytra.



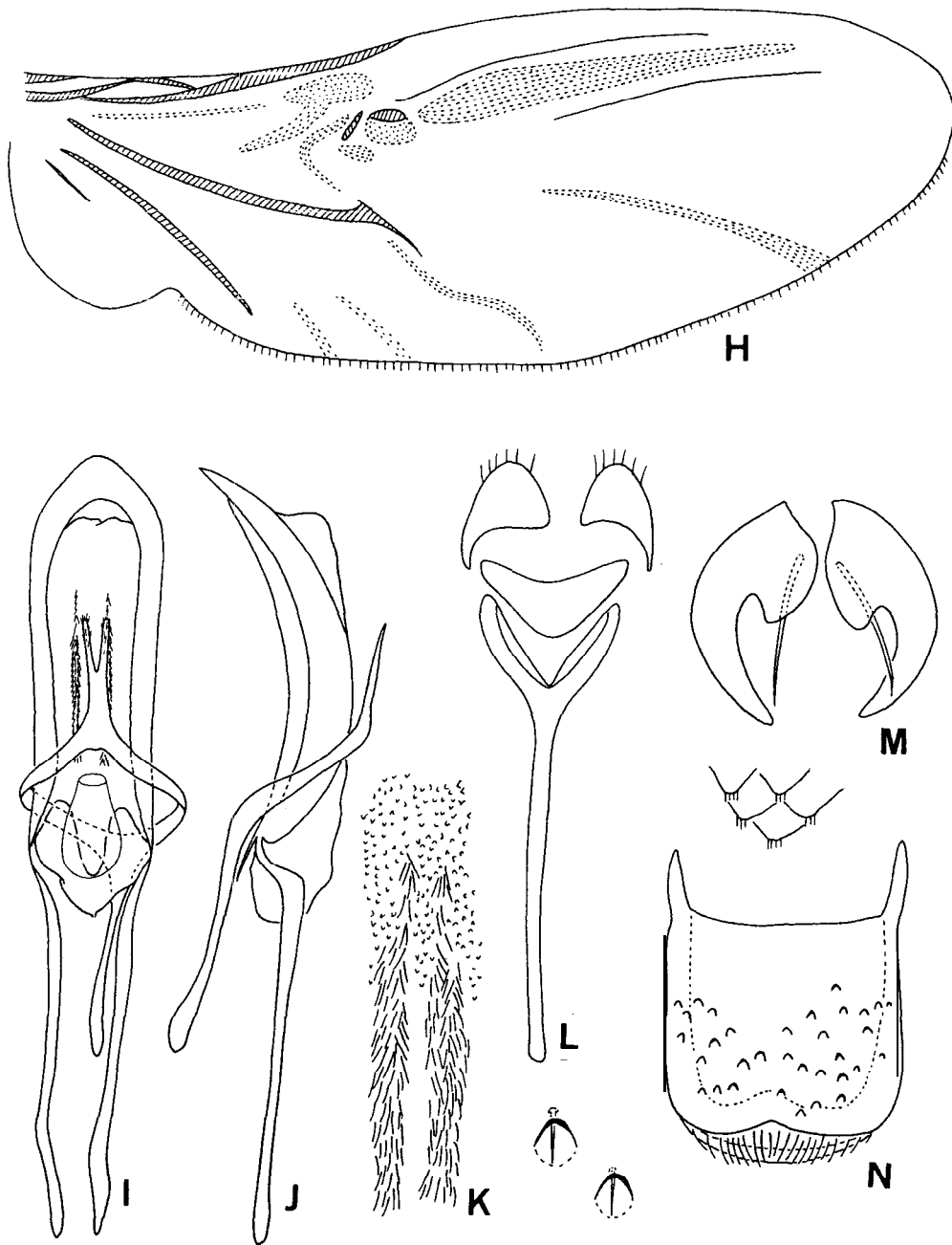


Fig. 5. *Apionodes constricticollis* sp. nov., male; A. Ventral side, B. Lateral side, C. Antenna, D. Fore leg, E. Mid trochanter and tibia, F. Hind trochanter and tibia, G. Metendosternite, H. Hind wing, I. Penis, dorsal view, I. ditto, lateral view, K. Bunches of setae of internal sac, enlarged, L. 8th sternite, M. Claws, N. Pygidium.



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