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Review of the genus *Blosyrus* Schoenherr (Coleoptera: Curculionidae: Entiminae) from India and adjacent countries

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ABSTRACT

Nine species of the genus *Blosyrus* (Schoenherr, 1826) (Curculionidae: Entiminae) occurring in India, Sri Lanka and Myanmar are revised. The earlier known seven species are redescribed, while two new species *B. marshalli* sp. nov. and *B. thompsoni* sp. nov., are described. The subspecies *spongifer* upgraded to species status upon phenotypic variations, is supported by its geographical distribution. The genus description is updated and a key to the species provided.

ARTICLE HISTORY

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KEYWORDS

Taxonomy; *Blosyrus marshalli* sp. nov.; *B. thompsoni* sp. nov.; genitalia; elytral vestiture; key

Introduction

The genus *Blosyrus* Schoenherr is one of the important genera within the tribe Blosyrini (Curculionidae: Entiminae). It was first described as a subgenus of *Thylacites* by Schoenherr (1826), and later, raised to generic status (Schoenherr 1833). Marshall (1916), included it under *Blosyrides* of Brachyderinae under Adelogathi. Emden (1944), and Gandhi and Pajni (1984), categorised it under Blosyrini of Brachyderinae. However, Thompson (1992) revised the same as an Entiminae, and Alonso-Zarazaga and Lyal (1999) categorised it under the tribe Blosyrini. Thus, *Blosyrus* is now under the tribe Blosyrini of the subfamily Entiminae of Curculionidae.

Jekel (1875), described *Blosyrinus* as a subgenus of *Blosyrus*: it was synonymised with *Blosyrus* by Marshall (1916). Similarly, subgenera *Blosyridius* Faimaire (1891) and *Maes* Fairmaire (1888), were synonymised with *Blosyrus* by Emden and Emden (1939). Streamlining the generic concept, Marshall (1916) defined it as having antennae with scape not reaching the hind margin of the eye, the funicle with the second segment not longer than the first and the hind tibial apex with

the external margin bent inwards as the important characters at the generic level. The genus *Blosyrus* is well distributed among Oriental, Palearctic and Ethiopian regions (Yunakov 2013). As on date, 101 species of *Blosyrus* are known. Out of 101 species, 92 occur in Sub-Saharan Africa. Congo is the single largest country representing by 23 species followed by Tanzania with 9 species and Angola with 8 species. From India, 10 species had been recorded. In India, the distribution is mainly West Bengal, Assam, Maharashtra, Andhra Pradesh, Karnataka and Tamil Nadu (Mahendiran and Ramanurthy 2013).

Ayyar (1922) observed *B. inaequalis* in small numbers on sesamum, cluster beans, brinjal and other crops, occasionally. *Blosyrus* spp., was reported as a pest of cluster beans (Butani 1980) and sweet potato (Daiber 1994; Rees et al. 2003); and *B. inaequalis* was recorded as a pest of cluster beans and sesamum (Marshall 1916), and *Adhatoda vasica* (Hanumantha Swamy and Rajagopal, 1995).

The present study includes its nine species making it a near complete study of the fauna from India, Sri Lanka and Myanmar. The *spongifer* is upgraded from a variety to species status upon phenotypic variations supported by geographic distribution.

Material and methods

All the taxonomic characters, except the genitalia and ultrastructure of elytral vestiture, were studied using intact specimens. For the study of genitalia, specimens were processed following Supare et al. (1990), with slight modifications. For studying the elytral vestiture, the method of Ramamurthy and Ghai (1988), was followed. The terminology after Supare et al. (1990), Thompson (1992), Poorani and Ramamurthy (1997) and Wanat (2007), were followed for the description of male and female genitalia.

Wild M8 stereozoom microscope, Leica MZ 16A stereozoom microscope, Leitz Ortholux II interference, phase contrast, compound microscope and Leica DFC-290 camera attached with Leica application suit ver. 2.8.2 were used in the taxonomic studies. Illustrations were made using a drawing tube fitted with a camera lucida. The scales of magnification are provided on the illustrations. Voucher materials, including types, are deposited with the National Pusa Collection (NPC), Division of Entomology, Indian Agricultural Research Institute, New Delhi, India.

Taxonomic studies

So far, only two genera, namely *Blosyrus* Schoenherr and *Blosyrodes* Jekal recorded in the tribe Blosyrini from India. The genus *Blosyrus* is very close to the genus *Blosyrodes*, but differs from it in the following characters: the antennal scape not exceeds the posterior margin of the eye when folded back. The second segment of the funicle is not longer than the first. The metasternum is with a distinct episternal suture. The head is deeply furrowed, the legs are stout and the external edge of the hind corbels bent inwards.

Blosyrus Schoenherr*Blosyrus* Schoenherr, 1823: 1139.*Blosyridius* Fairmaire, 1891: 298; Emden and Emden, 1939: 210.*Blosyrinus* Jekel, 1875: 149; Marshall, 1916: 31.*Maes* Fairmaire, 1888: 28; Emden and Emden, 1939: 210.**Type species:** *Curculio oniscus* Olivier, 180: 355 by original designation; Boheman in Schoenherr, 1833, 552; **Gender:** masculine.

General description: **Head** 1.59× as broad as long, separated from rostrum by deep transverse furrow, eyes lateral, 1.14× as long as broad, subglobular and very prominent. **Rostrum** 0.69–0.88× as broad as long, plane above, angulate laterally, triangularly impressed and emarginate at apex, scrobes quite lateral, deep, parallel sided and curving strongly down towards eyes, mandibles with a slightly projecting scar, mentum almost circular, filling its cavity but sunk below edges, submentum with no peduncle. **Antennae** inserted at or before middle, scape straight, strongly clavate and exceeding anterior margin of eye (Figure 1A), first funicle segment longest, 1.12–1.47× as long as second, third to seventh subequal but gradually widening outwardly, club four segmented, first segment longest, 2.57× as long as rest, segments oblique (Figure 1C). **Prothorax** 1.16–1.64× broader than long, truncate at anterior margin, posterior margin truncate or subangulate, sides rounded, anterior margin sometimes sinuate ventrally. **Scutellum** invisible or minute. **Elytra** variable, with or without humeral angles, with 10 striae, lateral margins only slightly sinuate above hind coxae. Vestiture two or three types, predominant ovate, less predominant ovate or elongate, yellow or pale brown or brown and pedunculate at base (Figures 4A–Z). **Sternum** with fore coxae nearer anterior margin of prosternum, mesosternum with epimera narrow and much smaller than median coxae, episterna distinct but narrow, hind coxal process subangulate or truncate, ventrites second to fourth subequal, second separated from first by a deep transverse incision. **Legs** with femora clavate, simple, tibiae almost straight externally, fore tibiae produced inwardly at apex (Figure 1B), hind legs with tibial apex open, but with external edge sloping inwards, tarsi with second segment short (1.85×) and a little narrower (1.07×) than first, third broadly lobate, onychium elongate and claws connate at base. **Male genitalia** with aedeagus truncate or subtruncate or rounded at apex, 1.69–1.92× as long as apophyses, 0.85–1.04× as long as spiculum gastrale, 1.70–2.64× as that of tegmen and spiculum gastrale 1.98–2.68× as long as tegmen (Figures 5P–U). **Female genitalia** having distal arm of spermatheca 1.14–2.00× as long as its proximal, spiculum ventrale with shaft 1.41–2.88× as long as basal plate, its base slightly dilated (Figures 5A–E).

Key to the species

1. Elytra without transverse row of conical tubercles across the top of declivity 2
- Elytra with a transverse row of four or six conical tubercles across the top of declivity.....6

2. Elytra subquadrate, shoulder produced into a prominent angle, vestiture broadly flattened and scale like.....***B. asellus***
 - Elytra ovate or globose, shoulder not produced, vestiture simple and not flattened.....3
3. Elytra ovate, with recumbent vestiture, intervals rugosely granulate. Head with three deep furrows. Prothorax slightly broader than long.....4
 - Elytra subglobose, with erect vestiture, intervals even or uneven. Head with a single or three shallow furrows. Prothorax broader than long.....5
4. Elytra with conspicuous white spots (occasionally reduced to two basal ones only – subsp. *olivieri*). Central costae on head not produced behind eye; eye brows low. Head 1.02× as long as rostrum and 0.62× as long as that of prothorax. Elytra ovate and its basal margin faintly sinuate; predominant vestiture obovate or somewhat triangular.....***B. oniscus***
 - Elytra without any conspicuous white spots. Central costae on head continued a little beyond eyes, eye brows higher. Head 0.9× as long as rostrum and 0.56× as long as that of prothorax. Elytra more narrowly ovate and its basal margin subtruncate; predominant vestiture ovate***B. herthus***
5. Head with only a single shallow furrow. Prothorax broader than long (1.29×), strongly narrowed behind. Elytra with intervals uneven. Elytra 3.6× as long as rostrum***B. unisulcatus***
 - Head with three furrows. Prothorax more than twice as broad as long, slightly narrowed behind. Elytral intervals even and set with tubercles and granulations..... ***B. ornatus***
6. Elytra with a transverse row of six tubercles across the top of declivity and two prominent tubercles on declivity itself7
 - Elytra with a row of only four tubercles across the top of declivity8
7. Prothorax rugose and with a few large tubercle. Spermatheca with ramus strongly curved, slightly sinuate near base, apex blunt, cornu with apex not sharply hooked. Male genitalia with tegmen 1.86× as long as manubrium, spiculum gastrale with shaft having small spine near apex. First ventrite 2.86× as long as second***B. inaequalis***
 - Prothorax less rugose and without any larger tubercle. Spermatheca with ramus curved at base, apex broadly rounded, cornu with apex sharply hooked. Male genitalia with tegmen 1.42× as long as manubrium, spiculum gastrale with shaft without any spine near apex. First ventrite 3.4× as long as second.....***B. spongifer***
8. Elytra with a small humeral prominence; only two kinds of elytral vestiture present: predominant broadly ovate with 4–6 ridges and light brown or brown; less predominant elongate or very elongate with short or very short pedicel.....9
 - Elytra without humeral prominence; three kinds of elytral vestiture present: predominant broadly ovate with six ridges and light brown;

less predominant of two types, one ovate without any pedicel and other spindle shaped with a subrectangular pedicel.*B. bengalensis*

9. Hind tibial apex produced into a spine-like process. Elytra subquadrate and basal margin sinuate. Head with three furrows, as long as the rostrum; antennae with first funicle segment 1.44× as long as second; club 3× as long as seventh segment of funicle. Prothorax 1.52× broader than long; 1.54× as long as rostrum.....*B. marshalli* sp. nov.
- Hind tibial apex not produced. Elytra globose and basal margin deeply sinuate. Head with a single central furrow, 0.98× as long as the rostrum; antennae with first funicle segment 1.12× as long as second; club 2× as long as seventh segment of funicle. Prothorax 1.7× broader than long; 1.16× as long as rostrum.*B. thompsoni* sp. nov.

Description of species

Blosyrus asellus (Olivier)

(Figures 1D, 2A, 2J, 3A, 3J, 4A–C, 5A, 5F, 5K, 5P, 6A–B, 6M, 7A–C, 7O–R, 8A–B)

Curculio asellus Olivier, 1807: 366; Schoenherr, 1833: 552.

Blosyrus philippinensis Jekel, 1875: 153; Marshall, 1916: 33.

Blosyrus superciliosus Chevrolat, 1882: 93; Marshall, 1916: 33.

Specimens examined: Location, date and Coll. unknown, one specimen; Location unknown, 2.viii.1984, Coll. D.K. Balbir; **Assam:** Daguri, 24.iv.1979, Coll. unknown, Bushes; Silchar, 21.iv.1986, Dalip.K, on wild plant and M. light, two specimens; Guwahati, 2.ix.1958, Coll. Baldev Prasad, on paddy by sweeping; **Bihar:** Muzaffarpur, 2.xii.1904, Coll. T.V.R.A., two specimens; Pusa, 28.vii.1920, Haq Coll., on sweet potato leaf; Saran, date unknown, Mackenzie Coll.; Chapra, date unknown, Mackenzie Coll.; **Chandigarh:** Chandigarh, 26.ix.1972, Coll. unknown, on grass; P.U. Chandigarh, Hostel I, 14.ix.1984, Coll. M. Haq, at light; **Himachal Pradesh:** Solan, 22.vii.1977, Coll. unknown, tube light; **Nagaland:** Dimapur, 4.v.1978, Coll. unknown.

Description: **Colour** black, with greyish-brown vestiture; prothorax with two paler lines, which are continued on to the base of the elytra: each elytron with an oblique discal pale stripe from shoulder and a faint transverse band behind the middle. **Head** 0.93× as long and 1.04× as broad as rostrum, 0.59× as long as and 0.73× as broad as prothorax, with a deep central furrow and a shallow one on each side of it. **Rostrum** with transverse basal furrow continued right up to eyes, parallel sided, broadly and deeply impressed in the middle and with a narrow central carina, 0.77× as long as its breadth at base and 0.74× as long as the breadth at base of head (Figures 1D, 2A). **Antennae** with first segment of funicle longest, 1.47×, 2.16×, 2.39×, 2.03× and 1.73× as long as second, third, fourth and fifth, sixth, and seventh, respectively; in terms of breadth, seventh segment broadest of all, dilated anteriorly, 1.06×, 1.44×, 1.39× and 1.18× as broad as first, second,

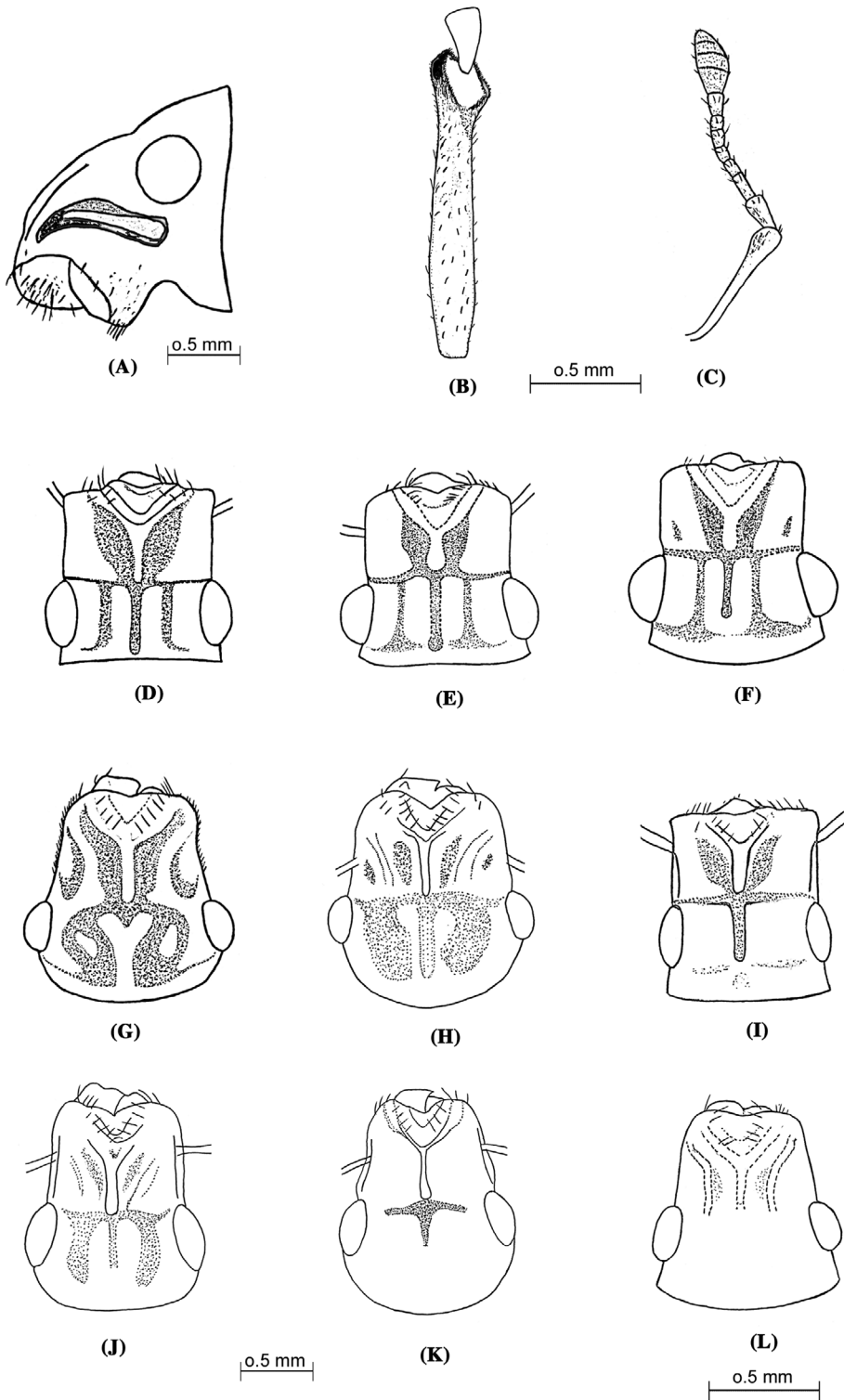


Figure 1A–L. *Blosyrus*: A–C, Genus characters, A, Head lateral view; B, Hind tibia; C, Antenna; D–L, Head dorsal view of: D, *asellus*; E, *oniscus*; F, *herthus*; G, *inaequalis*; H, *spongifer*; I, *unisulcatus*; J, *marshalli* sp. nov.; K, *thompsoni* sp. nov.; L, *bengalensis*.

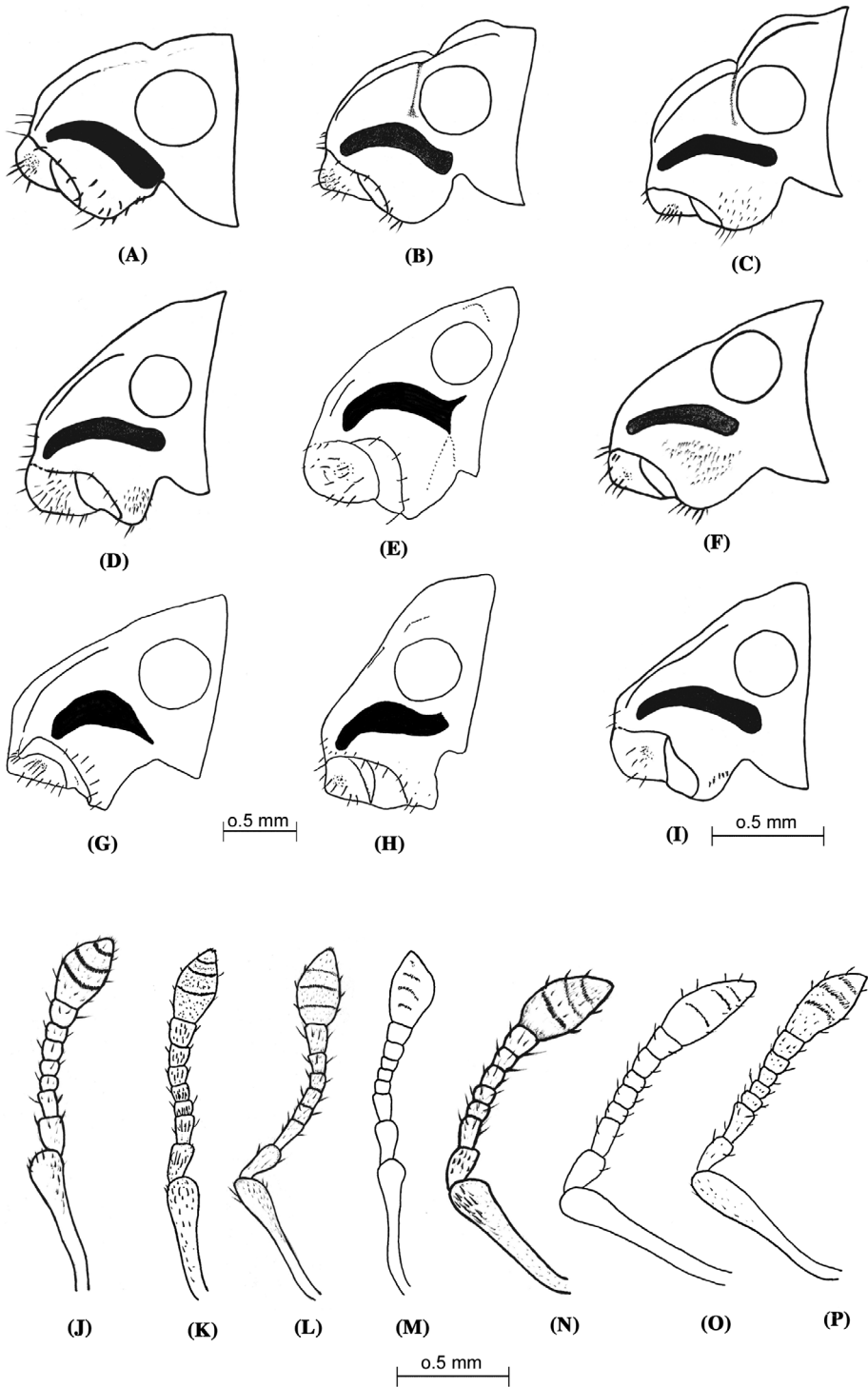


Figure 2A–P. *Blosyrus*: A–I, Head lateral view of: A, *asellus*; B, *oniscus*; C, *herthus*; D, *inaequalis*; E, *spongifer*; F, *unisolcatus*; G, *marshalli* sp. nov.; H, *thompsoni* sp. nov.; I, *bengalensis*; J–P, Antenna of: J, *asellus*; K, *oniscus*; L, *inaequalis*; M, *spongifer*; N, *unisolcatus*; O, *marshalli* sp. nov.; P, *thompsoni* sp. nov.

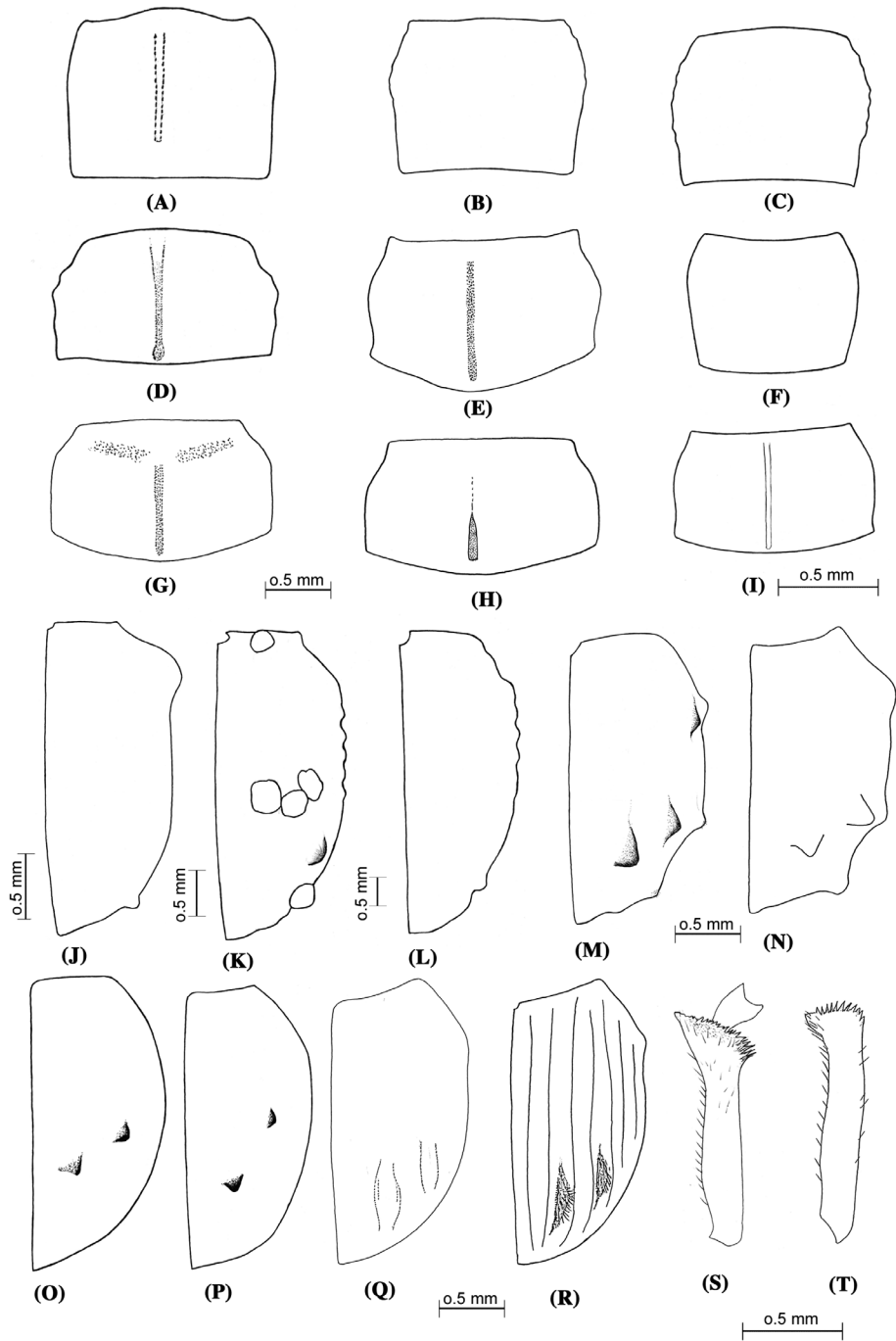


Figure 3A–U. *Blosyrus*: A–I, Prothorax dorsal view of: A, *asellus*; B, *oniscus*; C, *herthus*; D, *inaequalis*; E, *spongifer*; F, *unisulcatus*; G, *marshalli* sp. nov.; H, *thompsoni* sp. nov.; I, *bengalensis*; J–R, Elytron dorsal view of: J, *asellus*; K, *oniscus*; L, *herthus*; M, *inaequalis*; N, *spongifer*; O, *bengalensis*; P, *unisulcatus*; Q, *marshalli* sp. nov.; R, *thompsoni* sp. nov.; S–U, Hind tibiae of: S, *B. marshalli* sp. nov.; T, *B. thompsoni* sp. nov.

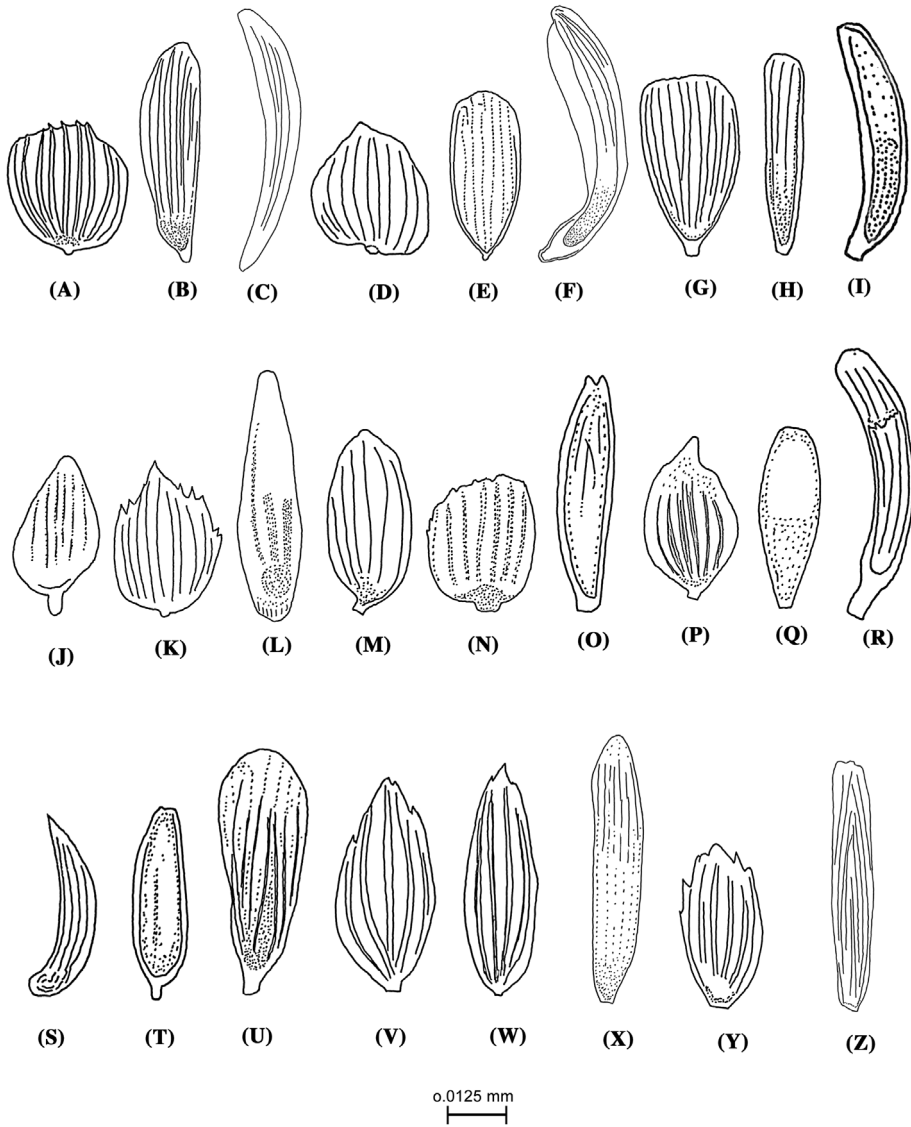


Figure 4A–Z. *Blosyrus*: Elytral vestiture of: A–C, *asellus*; D–F, *oniscus*; G–I, *herthus*; J–L, *inaequalis*; M–O, *spongifer*; P–R, *bengalensis*; S–U, *unisulcatus*; V–X, *marshalli* sp. nov.; Y–Z, *thompsoni* sp. nov.

third and fourth, fifth, and sixth, respectively; second to fourth equally broad. Club $1.92\times$ as long as first, and $3.31\times$ as long and $1.81\times$ as broad as seventh segment of funicle (Figure 2J).

Prothorax $1.56\times$ as long as and $1.45\times$ as broad as rostrum, $1.20\times$ broader than long at before middle; breadth before middle $1.33\times$ as broad as at apex, $1.10\times$ as broad as at base, both apex and base subtruncate, sides slightly rounded; upper surface convex, with deep scattered punctations, each containing a short scale-like seta, and with a narrow, more or less abbreviated, central carina (Figure 3A). Legs moderately stout, with vestiture dense brown having depressed pale setae.

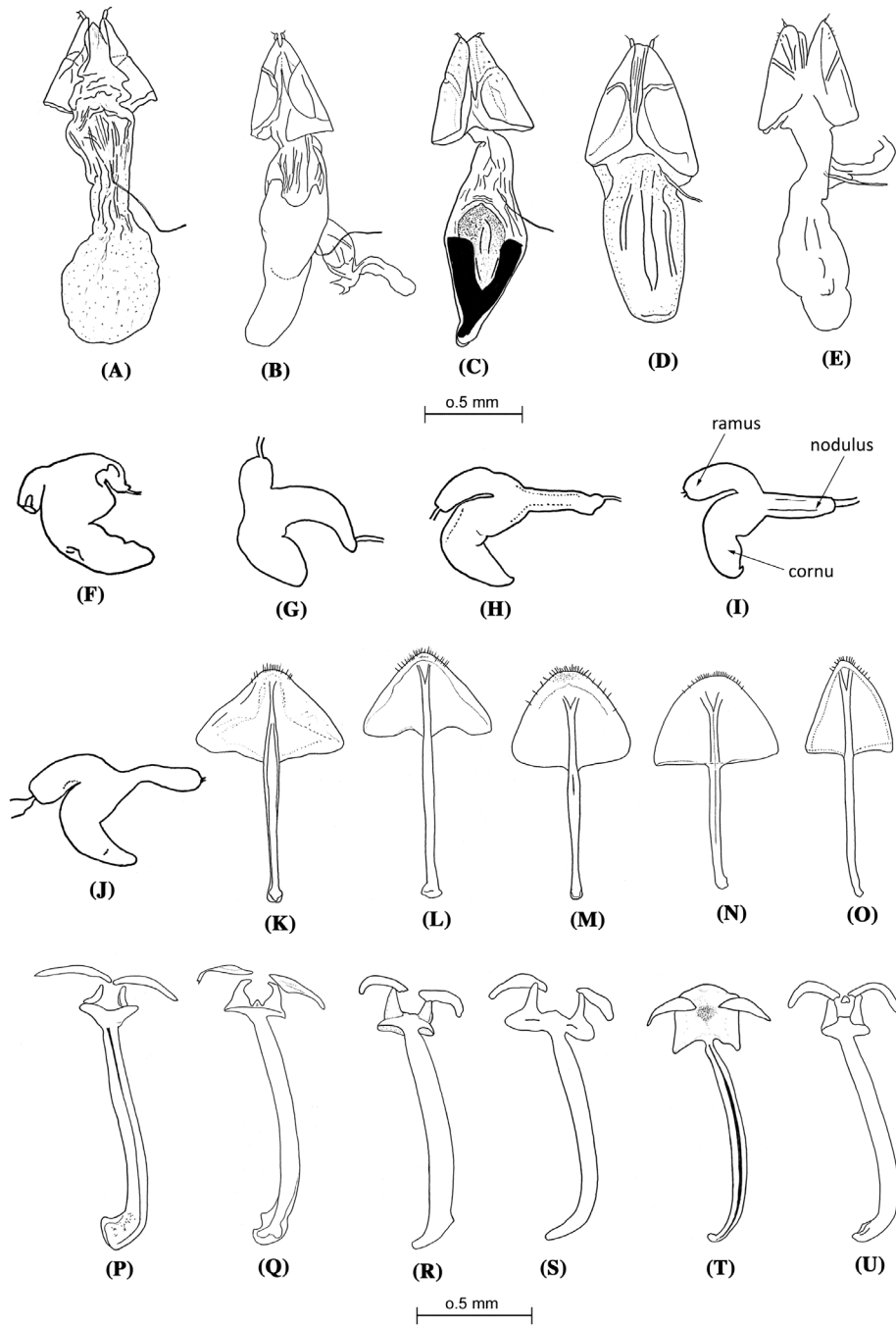


Figure 5A–U. *Blosyrus*: Female genitalia: A–E, genital chamber of: A, *asellus*; B, *oniscus*; C, *inaequalis*; D, *spongifer*; E, *thompsoni* sp. nov.; F–J, spermatheca of: F, *asellus*; G, *oniscus*; H, *inaequalis*; I, *spongifer*; J, *thompsoni* sp. nov.; K–O, spiculum ventral of: K, *asellus*; L, *oniscus*; M, *inaequalis*; N, *spongifer*; O, *thompsoni* sp. nov.; P–U, Male genitalia, spiculum gastrale of: P, *asellus*; Q, *oniscus*; R, *inaequalis*; S, *spongifer*; T, *bengalensis*; U, *marshalli* sp. nov.

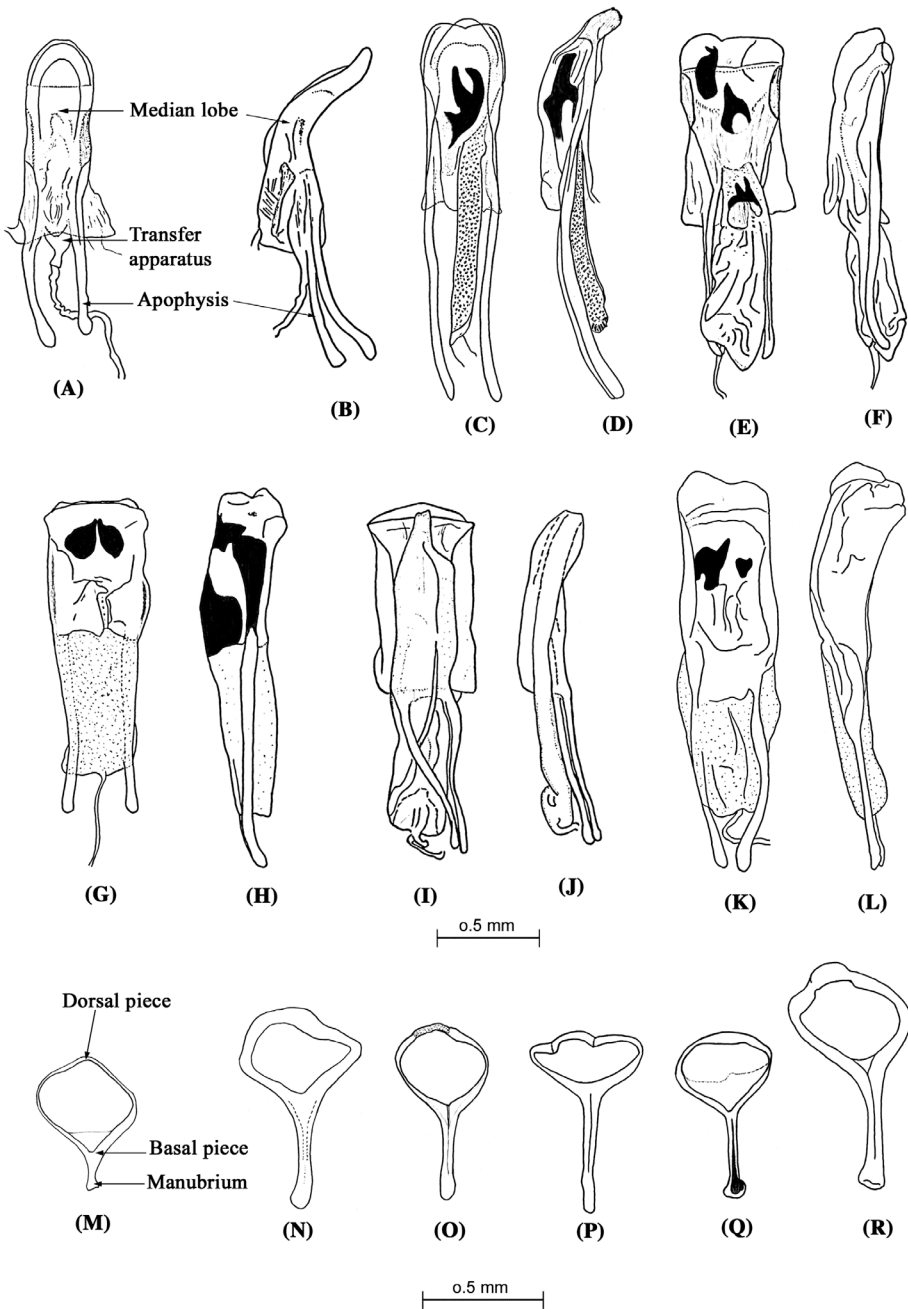


Figure 6A–R. *Blosyrus*: Male genitalia: A–K, median lobe, dorsal and lateral views of: A–B, *asellus*; C–D, *oniscus*; E–F, *inaequalis*; G–H, *spongifer*; I–J, *bengalensis*; K–L, *marshalli* sp. nov.; M–R, tegmen of: M, *asellus*; N, *oniscus*; O, *inaequalis*; P, *spongifer*; Q, *bengalensis*; R, *marshalli* sp. nov.

Elytra with basal margin subtruncate, 4.12× as long as rostrum, 2.64× as long as that of prothorax; its breadth at middle 1.87× as that of prothorax and 2.02× as that of its breadth at base, external angles scarcely projecting; shoulders broad

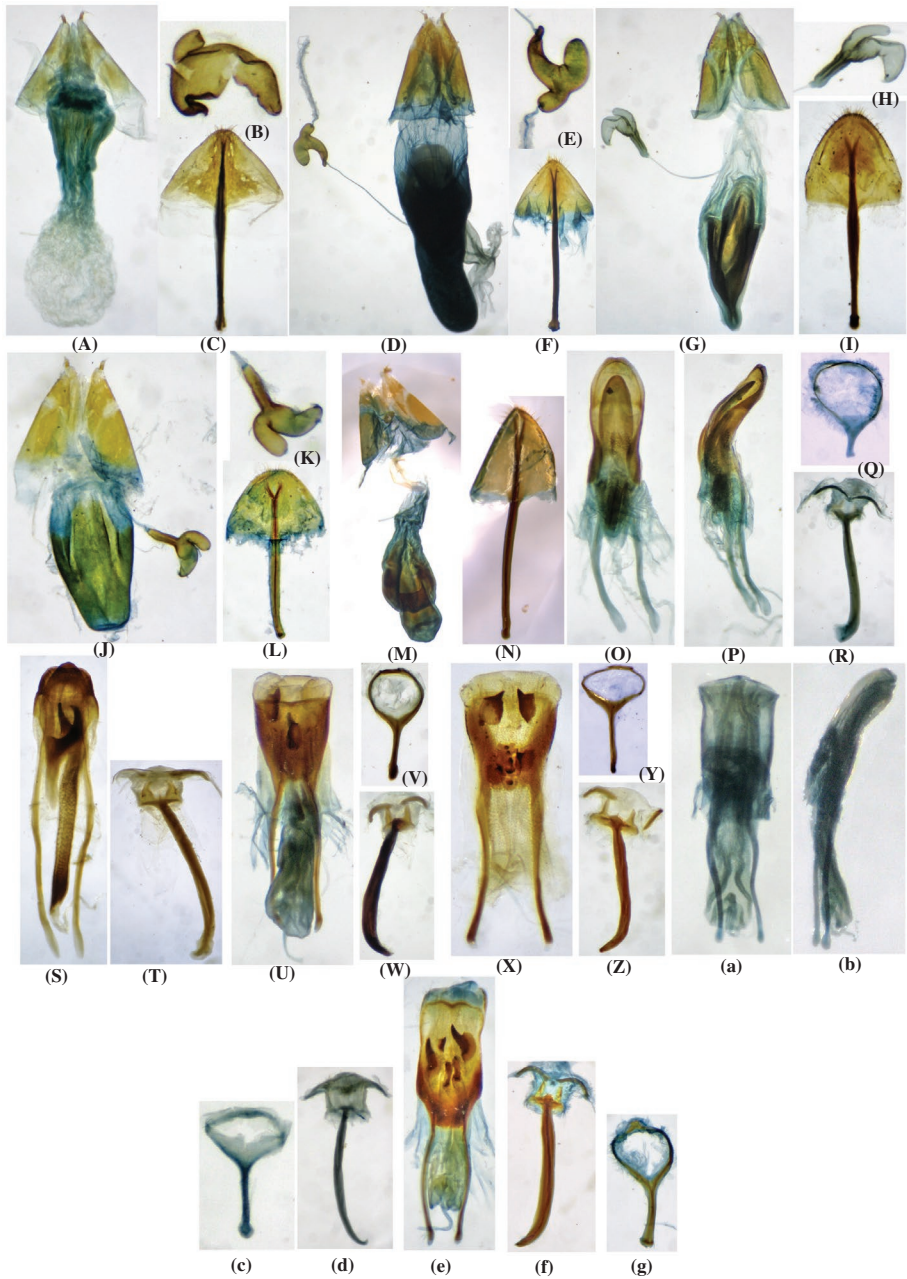


Figure 7A–Z, a–g. *Blosyrus*: Female genitalia, genital chamber, spermatheca and spiculum ventrale: A–C, *asellus*; D–F, *oniscus*; G–I, *inaequalis*; J–L, *spongifer*; M–N, *thompsoni* sp. nov.; Male genitalia: median lobe, tegmen and spiculum gastrale of: O–R, *asellus*, S–T, *oniscus*; U–W, *inaequalis*; X–Z, *spongifer*; a–d, *bengalensis*; e–g, *marshalli* sp. nov.

and strongly produced into a sharp humeral angle, sides subparallel from shoulder to the middle, upper surface convex, with regular deeply punctated striae, intervals comparatively broad, smooth and subcostate, alternate ones slightly

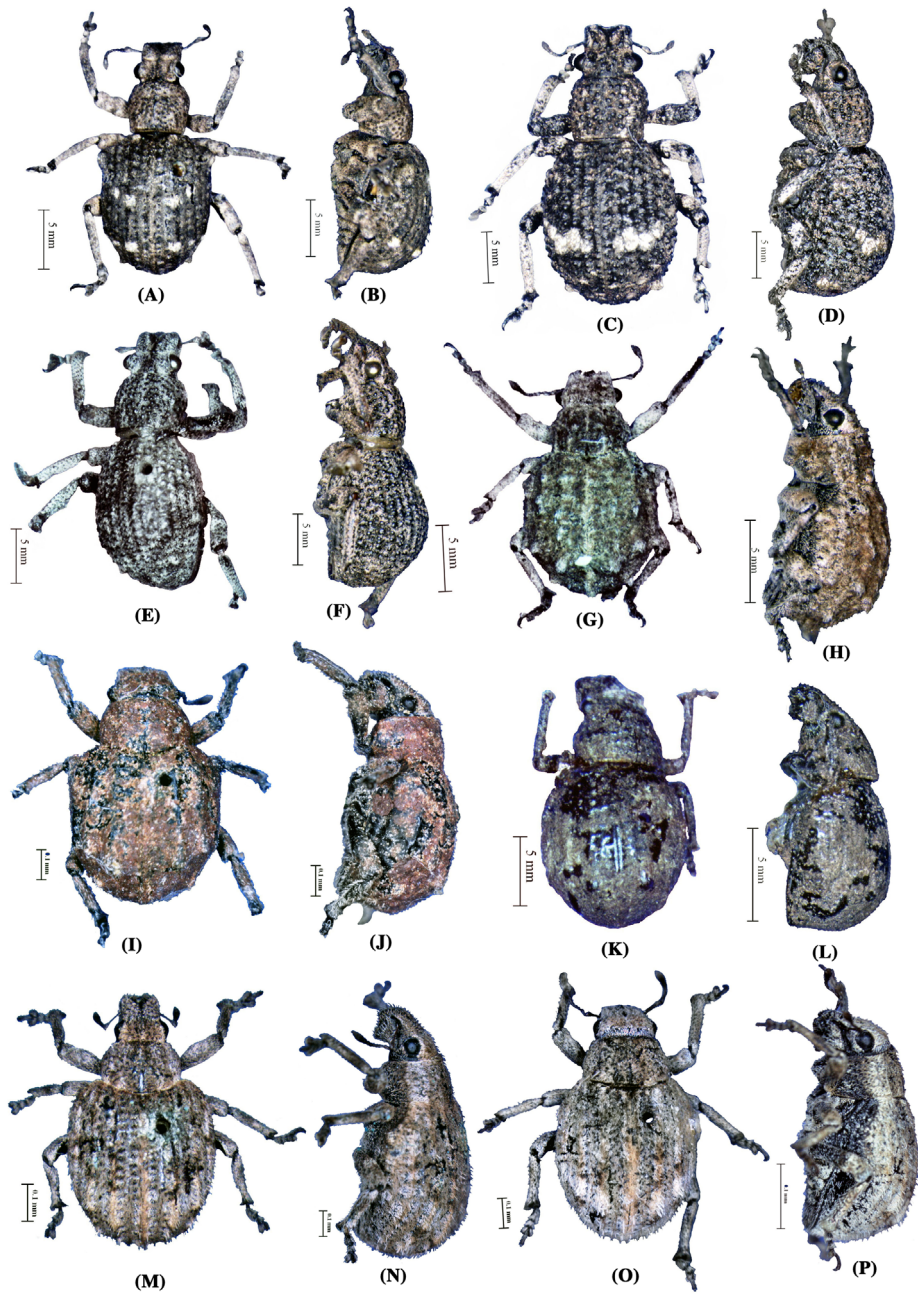


Figure 8A–P. *Blosyrus*: Dorsal and lateral view of: A–B, *asellus*; C–D, *oniscus*; E–F, *herthus*; G–H, *inaequalis*; I–J, *spongifer*; K–L, *bengalensis*; M–N, *marshalli* sp. nov.; O–P, *thompsoni* sp. nov.

more elevated and with rows of suberect broad scale-like setae, interval fourth with a small tubercle at apex (Figure 3J). Elytral vestiture of three types, predominant flat, ovate with 8–9 ridges, which approximate at the tip, with a very short pedicle and pale brown (Figure 4A); less prominent curved, of two types, one

very elongate, without any pedicel and dark brown and the other elongate with five ridges and a subrectangular pedicel, granulations at base and dark brown (Figures 4B, C).

Venter with first ventrite longest, $2.7\times$, $3.19\times$ and $1.03\times$ as long as second, third, and fourth and fifth, respectively; in term of breadth, first the broadest, $1.2\times$, $1.43\times$, $1.73\times$, and $2.0\times$ as broad as second, third, fourth and fifth, respectively.

Male genitalia with **aedeagus** $1.69\times$ as long as apophyses, $2.44\times$ as its median lobe, $0.99\times$ as long as spiculum gastrale, $2.64\times$ as long as tegmen; median lobe moderately sclerotised, slightly curved at middle, apex rounded, $3.64\times$ as long as manubrium, broadest at its junction with apophyses, breadth from sides $4\times$ as broad as that of apophyses. **Apophyses** $1.88\times$ as broad as manubrium (Figures 6A, B, 7O, P). **Tegmen** $3.37\times$ as long as manubrium, parameres absent, manubrium short, broader at base, apex flat (Figures 6M, 7Q). **Spiculum gastrale** $1.73\times$ as long as apophyses and $2.68\times$ as long as tegmen, breadth gradually increasing from base to apex, apex $2.17\times$ as broad as base, apex curved and knob like, its breadth $2.14\times$ as broad as apophyses and $4\times$ as broad as the breadth of manubrium (Figures 5P, 7R).

Female genitalia having **spermatheca** less sclerotised, with cornu $1.14\times$ as long as collum, angle between the arms not acute, nodulus small, tapering towards apex, ramus tubular, cornu slightly bent, bluntly pointed, projecting away from collum (Figures 5F, 7B). **Spiculum ventrale** with shaft elongate, $2.88\times$ as long as basal plate, broader at base, gradually narrowed towards apex, that is clubbed, basal plate $1.82\times$ as broad as long, apex rounded, with hairs (Figures 5K, 7C).

Length: 7.39 ± 0.59 mm.; **breadth:** 3.39 ± 0.35 mm.

Comments: Sexual dimorphism is not developed, except smaller size of the male; apical abdominal segment is not impressed in either sex.

Distribution: INDIA: Assam: Daguri, Guwahati, Silchar; Bihar: Muzaffarpur, Chapra; Chandigarh; Himachal Pradesh: Solan; Nagaland: Dimapur. CAMBODIA, INDONESIA, MYANMAR, PHILIPPINES.

***Blosyrus oniscus* (Olivier)**

(Figures 1E, 2B, 2K, 3B, 3K, 4D–F, 5B, 5G, 5L, 5Q, 6C–D, 6N, 7D–F, 7S–T, 8C–D)

Curculio oniscus Olivier, 1807: 365; Boheman in Schoenherr, 1833: 552.

Specimens examined: Assam: Chandkhira, Sylhet, date and Coll. unknown; Guwahati, 8.ix.1983. Coll. Mayaram and V.V. Ramamurthy, on weeds; Basishta, Guwahati, date and Coll. unknown; Meghalaya: Nongpow, Khasi hills, vii. 1907, Coll. unknown; Thuppa, Garo hills, 4.vi.1988, Coll. Baljinder, on wild plant; Mavmluh, Shillong, 14.x.1975, Coll. Gupta; Mandbri, Garo hills, 5.vi.1988, Coll. Dalip. K., on wild plant, two specimens; Tilkri hills, Garo hills, 16.vi.1988, Coll. Dalip. K., on wild plant; Dahi (Dalu), Garo hills, 10.vi.1988, Coll. Dalip. K., on wild plant; Garo hills, 5.vi.1988, Coll. Dalip. K., on grass; Nagaland: Dimapur, 4.v.1978, Coll. unknown.

Description: **Colour** black with grey and brown vestiture; prothorax usually with a faint whitish line on each side at base; each elytron with one white spot at base of interval third, one at shoulder, one near apex of interval fifth and a transverse row behind middle from second to sixth interval, more or less contiguous, and variable in size and shape, sometimes these entirely absent. **Head** coarsely punctate and with three very deep sulci on the frons, 1.02× as long and 1.12× as broad as rostrum, 0.62× as long and 0.71× as broad as prothorax. **Rostrum** 0.76× as long as its breadth at base and 0.68× as long as the breadth at base of head, separated from head by a deep transverse sulcus which extends to eyes, parallel sided, rugosely punctate, very broadly and deeply impressed in middle and with a narrow shining central carina (Figures 1E, 2B). **Antennae** with first segment of funicle longest, 1.46×, 2.29×, 2.23×, 2.17×, 1.87× and 1.6× as long as second, third, fourth, fifth, sixth and seventh, respectively; in terms of breadth, seventh segment broadest of all, dilated anteriorly, 1.07×, 1.29×, 1.32× and 1.09× as broad as first, second, third, fourth and fifth and sixth, respectively, and segments third to fifth equally broad. Club 1.92× as long as first, and 3.31× as long and 1.81× as broad as seventh segment of funicle (Figure 2K).

Prothorax 1.64× as long as and 1.58× as broad as rostrum, 1.29× broader than long at well before middle; breadth before the middle 1.35× as broad as at apex, 1.18× as broad as at base, base 1.15× as broad as apex, both apex and base truncate, sides rounded; upper surface convex, closely and evenly set with shining black granulations, without any central carina, but with a short transverse impressed line on each side about middle (Figure 3B).

Elytra ovate, basal margin faintly sinuate and 4× as long as rostrum, 2.45× as long as that of prothorax; 1.12× broader than base of prothorax, its breadth about middle 1.59× as that of prothorax and 1.68× as that of its breadth at base, with external angles acutely projecting, shoulders obliquely rounded, but sometimes (especially in female) with a small humeral tubercle, sides rounded, broadest about middle; upper surface convex, with regular sulci containing large ill-defined punctations, intervals narrow, evenly raised and with rugose granulations, interval fourth with two small tubercles in apical half, posterior one covered with white vestiture (Figure 3K). Elytral vestiture of three types, predominant flat with a short pedicel, of two types, one obovate with 6–7 ridges and the other somewhat triangular (cuneate) with 10 ridges and pale brown or yellowish (Figures 4D, E); less predominant curved, elongate, with a subrectangular pedicel, gradually widening up to near apex, black granulation in inner core of base and dark brown (Figure 4F).

Venter with first ventrite longest, 3.24×, 3.93× and 1.42× as long as second, third and fourth and fifth, respectively; in term of breadth, first broadest, 1.22×, 1.43×, 1.62× and 1.90× as broad as second, third, fourth and fifth, respectively.

Male genitalia with **aedeagus** 1.92× as long as apophyses, 2.1× as its median lobe, 1.04× as long as spiculum gastrale, 2.58× as long as tegmen; median lobe sclerotised, elongate with large, curved finger-like process at the middle, 2× as

long as the manubrium; its base 1.14× as broad as middle and the breadth just before apex 1.22× as broad as at middle and 1.08× as broad as at base, breadth from sides 3.6× as broad as that of apophyses, median lobe curved at apex laterally. **Apophyses** 1.57× as broad as manubrium (Figures 6C–D, 7S). **Tegmen** 1.63× as long as manubrium, parameres absent, manubrium gradually broadening from middle to apex and base (Figure 6N). **Spiculum gastrale** with shaft elongate, slightly curved before apex, which is clubbed, 1.86× as long as apophyses and 2.5× as long as tegmen, 1.92× as broad as apophyses and 3× as broad as that of manubrium (Figures 5Q, 7T).

Female genitalia having **spermatheca** with collum 1.69× as long as cornu, angle between arms acute, nodulus tubular, with bluntly pointed apex, ramus projecting out, subrectangular, apex rounded, cornu swollen, slightly bent, projecting close towards collum (Figures 5B, 5G, 7D, E). **Spiculum ventrale** with shaft elongate, 2.87× as long as basal plate, uniformly thick, basal plate 1.49× as broad as long, triangular, apex narrowly rounded with numerous hairs (Figures 5L, 7F). **Length:** 11.16 ± 1.37 mm.; **breadth:** 4.86 ± 0.59 mm.

Comments: Apical ventral segment has a deep central impression, which is deeper and in male as compared to female; anterior tubercle at the first interval is almost always obsolete in male. A very variable species, in few with all the white spots become indistinct except the two at base.

Distribution: INDIA: Assam: Guwahati, Silonibari; Meghalaya: Khasi hills, Garo hills, Shillong; Nagaland: Dimapur; West Bengal: Kolkata. MYANMAR, BANGLADESH.

***Blosyrus herthus* (Herbst)**

(Figures 1F, 2C, 3C, 3L, 4G–I)

Curculio herthus Herbst, 1797: 98; Schoenherr, 1840: 907.

Blosyrus chinensis Boheman, 1859: 120; Jekel, 1875: 147, 148.

Specimens examined: Myanmar: paratype, Tenasserim Jassy, P. Cardon (head broken); Locality, date and Coll. unknown, two specimens.

Description: **Colour** black, with fairly dense, uniform, grey vestiture, sometimes with a coppery reflexion. **Head** coarsely punctate and with three very deep sulci on frons, 0.9× as long and 1.17× as broad as rostrum, 0.56× as long and 0.7× as broad as prothorax. **Rostrum** 0.82× as long as its breadth at base and 0.7× as long as the breadth at base of head, separated from head by a deep transverse sulcus which extends to eyes, parallel sided, rugosely punctate, very broadly and deeply impressed in middle and with a narrow shiny central carina (Figures 1F, 2C). **Antennae** with first segment of funicle 1.47× as long and 1.17× as broad as second.

Prothorax 1.62× as long as and 1.68× as broad as rostrum, 1.28× broader than long well before middle, before the middle 1.35× as broad as at apex, 1.14× as broad as at base, base 1.19× as broad as apex, both apex and base truncate, sides rounded; upper surface convex, closely and evenly set with shiny black granules,

without any central carina, but with a short transverse impressed line on each side about middle (Figure 3C).

Elytra more narrowly ovate, basal margin subtruncate, 4× as long as rostrum, 2.48× as long as that of prothorax; its breadth 1.49× as that of prothorax and 1.58× as that of its breadth at base and slightly (1.1×) broader than base of prothorax, but with external angles scarcely projecting, shoulders obliquely rounded, female very rarely with a small humeral tubercle; upper surface with regular sulci, containing rather smaller and less distinct punctations than in *B. oniscus*, intervals narrow evenly raised and with fairly regular rows of shining black granulations; fifth interval without tubercles posteriorly, except very rarely in female (Figure 3L). Elytral vestiture of three types, predominant flat, ovate, with a subrectangular pedicel and 7–10 indistinct or distinct ridges and dark brown or pale yellow (Figure 4G); less predominant curved, of two types, one elongate, conical, brown, with three ridges, with dark granulation at base and the other spindle shaped and dark brown (Figures 4H–I).

Venter with first ventrite longest, 3.34× as long as second, third and fourth and 1.04× as long as fifth; in term of breadth, first broadest, 1.15×, 1.36×, 1.51× and 1.72× as broad as second, third, fourth and fifth, respectively.

Length: 8.99 mm.; **breadth:** 3.68 mm.

Comments: In this species, apical ventral segment is not impressed in female, and impression is much shallower in male than that observed in either sex of *B. oniscus*.

Distribution: INDIA: Assam. MYANMAR, CAMBODIA, MALAYSIA, CHINA.

Blosyrus inaequalis Boheman

(Figures 1G, 2D, 2L, 3D, 3M, 4J–L, 5C, 5H, 5M, 5R, 6E–F, 6O, 7G–I, 7U–W, 8G–H)

Blosyrus inaequalis Boheman in Schoenherr, 1845: 402.

Blosyrus tuberculatus Redtenbacher, 1868: 145; Marshall, 1916: 35.

Blosyrinus inaequalis Jekel, 1875: 149; Marshall, 1916: 31.

Specimens examined: **Karnataka:** Bengaluru, 14 km near, 22.ix.1991, Coll. B.C.H. Swamy, on Ashwagantha, Datura and Adhatoda, two specimens; vii.1992, Coll. Jayanth; date and Coll. unknown, two specimens; Hebbal, Bengaluru, 5.vi.1976, Coll. unknown; 21.vi.1976, Coll. unknown; 18.vi.1976, Coll. G.S. Prabhakar; 27.ix.1985, Coll. unknown, on grass; 5.vi.1976, Coll. unknown; 27.ix.1985, Coll. unknown, on grass; 27.ix.1985, Coll. M. Haq, on grass, three specimens; GKVK, Bengaluru, 20. vii. 1977, Coll. S.R; Lalbagh, Bengaluru, 25.ix.1985, Coll. M. Haq, on grass; 28.ix.1985, Coll. unknown, on grass; N. Park, Bengaluru, 26.ix.1985, Coll. M. Haq, on wild plant, three specimens; N. Park, Bengaluru, 28.ix.1985, Coll. M. Haq, on wild plant; **Kerala:** Walayar forest, 15.viii.1980, Coll. unknown, on wild plant; **Pondicherry:** Pondicherry, 7.x.1979, Coll. unknown, 10 specimens; **Tamil Nadu:** Nellikuppam, 12.viii.1928, Coll. A.J.G., on Indigo, two specimens; 12.viii.1921, Coll. A.J.G., on indigo (Head missing); Alandurai, Tamil Nadu, 15.x.1979. Coll. unknown; Coimbatore, 11.ix.1979, Coll. unknown; 6.vii.1955, Coll. T.R. Subramaniam, on wild plant; date and Coll. unknown.

Description: **Colour** black, with dense, uniform, brown or grey vestiture. **Head** with five frontal longitudinal sulci, varying in breadth and depth, supraocular elevation continuous with rostrum and not intersected by transverse sulcus, which does not reach eye, $0.82\times$ as long and $1.11\times$ as broad as rostrum, $0.61\times$ as long as and $0.73\times$ as broad as prothorax. **Rostrum** with $0.8\times$ as long as its breadth at base and $0.72\times$ as long as the breadth at base of head, with a straight central carina and a strongly curved carina on each side of it (Figures 1G, 2D). **Antennae** with first segment of funicle longest, $1.32\times$, $2.28\times$, $2.85\times$, $2.72\times$, $2.34\times$ and $1.57\times$ as long as second, third, fourth, fifth, sixth and seventh, respectively; in terms of breadth, seventh segment broadest of all, dilated anteriorly, $1.17\times$, $1.50\times$, $1.54\times$, $1.47\times$ and $1.34\times$ as broad as first, second, third and fourth, fifth and sixth, respectively, and segments three to fourth equally broad. Club $1.76\times$ as long as first, and $2.75\times$ as long and $1.79\times$ as broad as seventh segment of funicle (Figure 2L).

Prothorax $1.34\times$ as long as and $1.54\times$ as broad as rostrum, $1.45\times$ broader than long, $1.38\times$ as broad as at apex, $1.05\times$ as broad as at base, base $1.31\times$ as broad as apex, truncate at apex, base rounded, sides subangulated a little before middle, upper surface rugose, with numerous small granulations and a few large tubercles, central carina sometimes complete, but often obsolete anteriorly and usually bare at base (Figure 3D).

Elytra globose, basal margin deeply sinuate, $3.27\times$ as long as rostrum, $2.45\times$ as long as that of prothorax; its breadth $1.64\times$ as that of prothorax and $1.66\times$ as that of its breadth at base and $1.01\times$ broader than base of prothorax; shoulders oblique and with a distinct humeral tubercle, sides subparallel from this tubercle to behind middle, then rapidly narrowed to apex; upper surface convex, with regular rows of deep punctations, alternate intervals more elevated than rest: third, fifth and seventh interval obsoletely tuberculate in basal half and each with a distinctly larger tubercle behind the middle, these tubercles forming a curved, transverse row; fifth with an additional tubercle much nearer the apex (Figure 3M). Elytral vestiture of three types; predominant flat, of two types, one ovate with 5–6 indistinct ridges and a subrectangular pedicel, pale yellow with dark brown round spot at base, other broadly ovate, apex serrated, with 7–10 ridges, a short pedicel, pale yellow (Figures 4J–K); less predominant broadly elongate, with three indistinct ridges, base with dark brown spot, inner core opaque and dark brown (Figure 4L).

Venter with first ventrite longest, $3.40\times$, $3.78\times$, 3.58 and $1.05\times$ as long as second, third, fourth and fifth, respectively; in term of breadth, first broadest, $1.25\times$, $1.44\times$, $1.60\times$ and $1.82\times$ as broad as second, third, fourth and fifth, respectively.

Male genitalia with **aedeagus** $1.7\times$ as long as apophyses, $2.43\times$ as its median lobe, $0.85\times$ as long as spiculum gastrale, $1.7\times$ as long as tegmen; median lobe short, moderately sclerotised, with two finger-like processs, one at middle and another at before apex, apex subtruncate, $1.3\times$ as long as manubrium; its base $0.58\times$ as broad as middle and breadth at apex $1.2\times$ broad as at middle and $1.91\times$ as broad as at base, breadth from sides $6\times$ as broad as that of apophyses. **Apophyses** $0.84\times$

as broad as manubrium (Figures 6E–F, 7U). **Tegmen** 1.86× as long as manubrium, parameres absent, manubrium gradually broadening from middle to apex and base (Figures 6O, 7V). **Spiculum gastrale** sclerotised, elongate, 2.02× as long as apophyses and 2.02× as long as tegmen, uniformly thick from base to behind apex, apex curved with small projection at angle, its breadth 4× as broad as apophyses and 3.4× as broad as manubrium (Figures 5R, 7W).

Female genitalia having **spermatheca** with collum 2× as long as cornu, angle between arms acute, nodulus tubular with curved apex, ramus projecting out, strongly curved, sinuate at base, apex blunt, cornu curved, tubular, with bluntly pointed apex, projecting away from collum (Figure 5C, 5H, 7G–H). **Spiculum ventrale** with shaft elongate, 2.31× as long as basal plate, broadest at near the base, apex clavate, basal plate 1.2× as broad as long, subtriangular, apex rounded with numerous hairs (Figure 5M, 7I).

Length: 7.88 ± 0.45 mm; **breadth:** 3.84 ± 0.20 mm.

Distribution: INDIA: Andhra Pradesh: Adoni, Bellary dist.; Karnataka: Belgaum, Mysore, North Coorg, Bengaluru, South Kanara, Hadagali, Nagody, Lalbagh; Kerala: Walayar; Maharashtra: Sampgaon; Pondicherry; Tamil Nadu: Nellikuppam, Alandurai, Coimbatore. SRI LANKA.

Blosyrus spongifer Boheman

(Figure 1H, 2E, 2M, 3E, 3N, 4M–O, 5D, 5I, 5N, 5S, 6G–H, 6P, 7J–L, 7X–Z, 8I–J) *inaequalis* var. *spongifer* Boheman in Schoenherr, 1845: 403.

Specimens examined: Tamil Nadu: Coimbatore, vi.1972, Coll. P.V.S. Rao, on grasses, 6 specimens.

Description: **Colour** black, with dense uniform brown or grey vestitures. **Head** with five frontal longitudinal sulci, which vary in breadth and depth, supraocular elevation continuous with rostrum, not intersected by transverse sulcus, which does not reach eye and 0.98× as long and 1.14× as broad as rostrum, 0.69× as long as and 0.75× as broad as prothorax. **Rostrum** with 0.69× as long as its breadth at base and 0.61× as long as the breadth at base of head, with a straight central carina and a strongly curved carina on each side (Figures 1H, 2E). **Antennae** with first segment longest, 1.47×, 2.75× and 1.84× as long as second, third to sixth and seventh, respectively, and segments third to sixth equally long; in terms of breadth, seventh segment broadest of all, dilated anteriorly, 1.21×, 1.62× and 1.32× as broad as first, second to fifth and sixth, respectively, and segments two to fifth equally broad. Club 1.79× as long as first, and 3.27× as long and 1.69× as broad as seventh segment of funicle (Figure 2M).

Prothorax 1.43× as long as and 1.53× as broad as rostrum, 1.56× broader than long and 1.3× as broad as at apex, 1.08× as broad as at base, base 1.21× as broad as apex, truncate at apex, base rounded, sides less angulate a little before middle, upper surface much less rugose owing to granulations being approximately of equal size and without any larger tubercles, central carina sometimes complete, but often obsolete anteriorly and usually bare at base (Figure 3E).

Elytra globose, basal margin deeply sinuate, $3.33\times$ as long as rostrum, $2.34\times$ as long as that of prothorax; its breadth $1.57\times$ as that of prothorax and $1.64\times$ as that of its breadth at base, shoulders oblique and with a distinct humeral tubercle, sides subparallel from tubercle to behind the middle, then rapidly narrowed towards apex; upper surface convex, with regular rows of deep punctations, alternate intervals more elevated than rest: third, fifth and seventh obsolete tuberculate at basal half and each with a distinctly larger tubercle behind the middle, tubercles forming a curved transverse row; fifth interval with an additional tubercle much nearer the apex (Figure 3N). Elytral vestiture of three types, predominant flat, of two types, one with a short and broad pedicel, having 5–6 ridges and brown; other elongately ovate, with short pedicel, having six ridges and light brown (Figures 4M–N); less predominant, elongate, with broad and short pedicel, granulated and dark brown (Figure 4O).

Venter with first ventrite longest, $2.86\times$, $3.34\times$ and $1.12\times$ as long as second and fourth, third and fifth, respectively; in term of breadth, first broadest, $1.28\times$, $1.52\times$, $1.72\times$ and $1.97\times$ as broad as second, third, fourth and fifth, respectively.

Male genitalia with **aedeagus** $1.73\times$ as long as apophyses, $2.38\times$ as its median lobe, $0.91\times$ as long as spiculum gastrale, $1.8\times$ as long as tegmen; median lobe moderately sclerotised, with two triangular sclerite at near apex, apex flat, $1.07\times$ as long as manubrium; its base $0.75\times$ as broad as middle and breadth at apex $1.1\times$ broad as at middle and $1.47\times$ as broad as at base, breadth from sides $4\times$ as broad as that of apophyses. **Apophyses** $1.48\times$ as broad as manubrium (Figures 6G–H, 7X). **Tegmen** $1.42\times$ as long as manubrium, parameres absent, manubrium broader at base, but gradually narrowing towards apex (Figures 6P, 7Y). **Spiculum gastrale** sclerotised, stout, elongate, $1.9\times$ as long as apophyses and $1.98\times$ as long as tegmen, uniformly thick from base to behind apex, apex curved, $2.14\times$ as broad as apophyses and $2\times$ as broad as manubrium (Figures 5S, 7Z).

Female genitalia having **spermatheca** with collum $2\times$ as long as cornu, cornu at right angle to collum, nodulus tubular, ramus projecting out, tubular, curved at base, apex broadly rounded, cornu curved at middle, projecting away from collum, apex sharply hooked (Figures 5D, I, 7J–K). **Spiculum ventrale** with shaft elongate, $1.41\times$ as long as basal plate, uniformly thick, apex clubbed, basal plate $1.41\times$ as broad as long, apex with numerous hairs (Figures 5N, 7L).

Length: 6.66 ± 0.30 mm; **breadth:** 3.79 ± 0.18 mm.

Comments: *B. inaequalis* var. *spongifer* described by Boheman in Schoenherr, (1845) has gained a species status due to distinct taxonomic variations from *inaequalis* with respect to the following factors: less rugose prothorax without any larger tubercle; first ventrite 3.4 times as long as the second; spermatheca with ramus curved at base and broadly rounded at apex; cornu with sharply hooked apex; male genitalia with tegmen 1.42 times as long as manubrium; spiculum gastrale with shaft without any spine near apex; and different geographic distribution.

Distribution: INDIA: Tamil Nadu: Nilgiris, Kanchipuram.

***Blosyrus bengalensis* Marshall**

(Figures 1L, 2I, 3I, 3O, 4P–R, 5T, 6I, J, 6Q, 7a–d, 8K–L)

Blosyrus bengalensis Marshall, 1916: 36.**Specimens examined:** West Bengal: Barway, date unknown, P. Cardon, paratype.**Description:** **Colour** black, with brown vestiture, variegated with indistinct pale markings. **Head** with five longitudinal sulci on the frons, supraocular elevation continuous with rostrum, transverse sulcus not intersected rostrum, and does not reach eye, $0.74\times$ as long and $1.35\times$ as broad as rostrum, $0.54\times$ as long and $0.73\times$ as broad as prothorax. **Rostrum** $0.88\times$ as long as its breadth at base of rostrum and $0.66\times$ as long as the breadth at base of head, almost even, with a straight central carina and a strongly curved carina on each side (Figures 1L, 2I). **Antennae** with first few segments of funicle subequal, club elongate.**Prothorax** $1.37\times$ as long as and $1.86\times$ as broad as rostrum, $1.56\times$ broader than long $1.36\times$ as broad as at apex, $1.02\times$ as broad as at base, base $1.35\times$ as broad as apex, truncate at apex, base rounded, sides less angulate, upper surface much less rugose, with many fine granulations, central carina sometimes complete, but often obsolete anteriorly and usually bare at base (Figure 3I).**Elytra** $3.21\times$ as long as rostrum, $2.35\times$ as long as that of prothorax; its breadth $1.49\times$ as that of prothorax and $1.47\times$ as that of its breadth at base, without any humeral prominence, striae much narrower and comparatively finely punctate, intervals much broader than striae, all evenly raised and entirely devoid of granulations or tubercles, with the exception of a conical setigerous tubercle at top of the declivity on third interval and a similar much smaller one on fifth interval (Figure 3O). Elytral vestiture of three types, predominant flat broadly ovate, with six ridges and a short pedicel, light brown (Figure 4P); less predominant of two types, one ovate, without pedicel and pale yellow and the other spindle shaped, with a subrectangular pedicel, inner core opaque and dark brown (Figures 4Q–R).**Male genitalia** with **aedeagus** $2.21\times$ as long as apophyses, $1.83\times$ as its median lobe, $0.94\times$ as long as spiculum gastrale, $2.1\times$ as long as tegmen; median lobe cylindrical, truncate at apex, $2.1\times$ as long as the manubrium; its base and middle subequally broad, breadth just before apex slightly ($1.12\times$) broader than apex and middle, breadth from sides $9\times$ as broad as that of apophyses. **Apophyses** $0.63\times$ as broad as manubrium (Figures 6I–J, 7a–b). **Tegmen** $1.86\times$ as long as manubrium, parameres absent, manubrium clubbed at apex (Figures 6Q, 7c). **Spiculum gastrale** with shaft elongate, curved at apex, $2.38\times$ as long as apophyses and $2.3\times$ as long as tegmen, its breadth $4\times$ as broad as apophyses and $2.5\times$ as broad as breadth of manubrium (Figures 5T, 7d).**Length:** 5.17 mm.; **breadth:** 2.59 mm.**Distribution:** INDIA: West Bengal: Barway and Chota Nagpur.***Blosyrus unisulcatus* Marshall**

(Figures 1I, 2F, 2N, 3F, 3P, 4S–U)

Blosyrus unisulcatus Marshall, 1916: 38.

Specimens examined: Maharashtra: Bhajo, 6. viii. 1967, Coll. Gy. Topal, leg.

Description: **Colour** black, with sparse grey vestiture. **Head** on equal plane, with only a single shallow central furrow, eyes not very prominent, $0.9\times$ as long and $1.12\times$ as broad as rostrum, $0.62\times$ as long as and $0.7\times$ as broad as prothorax. **Rostrum** $0.87\times$ as long as its breadth at base of rostrum and $0.78\times$ as long as the breadth at base of head, separated from head by a straight furrow, dilated from base to apex in male, parallel sided in the female, shallowly impressed above and with a line central carina (Figures 1I, 2F). **Antennae** with scape nearly reaching posterior margin of eye, funicle with first segment longest, $1.50\times$, $2.25\times$ and $1.80\times$ as long as second, third to fifth, and sixth and seventh, respectively, and third to fifth as well as sixth and seventh equally long; in terms of breadth, sixth and seventh segments broadest of all, $1.20\times$ as broad as first to fifth segments. Club $2.12\times$ as long as first, and $3.8\times$ as long and $2\times$ as broad as seventh segment of funicle (Figure 2N).

Prothorax $1.46\times$ as long as and $1.61\times$ as broad as rostrum, $1.29\times$ broader than long, $1.34\times$ as broad as at apex, $1.14\times$ as broad as at base, base $1.18\times$ as broad as apex, sides strongly rounded in front, broadest just before apex, set with irregular, less deep granulations and with a transverse impression before middle (Figure 3F).

Elytra $3.6\times$ as long as rostrum, $2.48\times$ as long as that of prothorax, its breadth before middle $1.64\times$ as that of prothorax and 1.92 that of its breadth at base, subglobose, subtruncate at base, shoulders rounded, with shallow sulci containing large, subreticulate punctations, intervals narrow and rather uneven, with variable scattered small tubercles and granulations, intervals third and fifth sometimes with a rather prominent rounded tubercle behind middle, setae stout and erect, inflexed margins bare and shiny (Figure 3P). Elytral vestiture of three types, predominant flat, ovate, with 5–7 ridges, with a long pedicel, light brown or pale yellow (Figure 4U); less predominant, of two types, one ovate with a pedicel, pale yellow and other curved, ovate with pointed apex and dark brown (Figures 4S–T).

Length: 6.44 mm.; **breadth:** 2.82 mm.

Comments. Marshall (1916) has stated that the third interval is occasionally with a rather prominent rounded tubercle behind the middle, but third and fifth intervals also have these tubercles.

Distribution: INDIA: Karnataka: Belgaum, Londa, N. Kanara, Coorg; Maharashtra: Bombay, Bhajo; Tamil Nadu: Nilgiris.

Blosyrus marshalli sp. nov.

(Figures 1J, 2G, 2O, 3G, 3Q, 3S, 4V–X, 5U, 6K–L, 6R, 7e–g, 8M–N)

Specimens examined: HOLOTYPE male: Andhra Pradesh, Kanpa, Chandra dist., 20.xii.1917, Coll. E.A.D'Abreu; PARATYPES: four male: **Andhra Pradesh:** Chintalapudi, Krishna dist., 11–13.ix.1921, Ramakrishna Coll.; Mathimudongudem, Krishna dist., vi–viii.1923, P.S & R.M. Coll.; Narsapur, vii.1922, G.A.K. Marshall Coll.; **Maharashtra:** Kanpa, Chandra dist., 20.xii.1917, Coll. E.A.D'Abreu [NPC].

Diagnosis: This species resembles *thompsoni* sp. nov., and *bengalensis* from which it can be distinguished by the following characters: the hind tibial apex produced or elongated into a spine-like process (Figure 3S); the head with a deep central furrow and broad shallow furrows on each side (Figure 1J), the prothorax transversely impressed near apex (Figure 3G); the male genitalia with median lobes moderately sclerotised and with spine-like or finger-shaped sclerotised process around the middle (Figures 6K–L), and spiculum gastrale with an apex curved, and dorsoventrally flattened (Figure 5U).

Description: **Colour** black, with uniform dense brown or greyish vestiture. **Head** with a narrow, deep central furrow, and broad shallow furrows on each side, as long and $1.26\times$ as broad as rostrum, $0.66\times$ as long as and $0.72\times$ as broad as prothorax. **Rostrum** $0.75\times$ as long as its breadth and $0.6\times$ as long as the breadth at base of head, separated from head by a deep transverse furrow, which does not reach the eyes, with a broad, straight central carina and a curved carina on each side of it, and sides subparallel (Figures 1J, 2G). **Antennae** with first funicle segment longest, $1.44\times$, $3.69\times$, $2.95\times$, $2.46\times$ and $1.74\times$ as long as second, third, fourth and fifth, sixth, and seventh, respectively, and segments fourth and fifth equally long; in terms of breadth, seventh segment broadest of all, dilated anteriorly, $1.20\times$, $1.50\times$ and $1.31\times$ as broad as first, second to fifth and sixth, respectively, and segments two to fifth equally broad. Club $1.73\times$ as long as first, and $3\times$ as long and $1.54\times$ as broad as seventh segment of funicle (Figure 2O).

Prothorax $1.54\times$ as long as and $1.75\times$ as broad as rostrum, $1.52\times$ broader than long, $1.41\times$ as broad as at apex, $1\times$ as broad as at base, base $1.41\times$ as broad as apex, strongly transverse, length breadth ratio being 1: 1.52, truncate at apex, base slightly rounded, sides subparallel from base to near apex, upper surface rugose, granulate, with broad carinae, which are obsolete in basal half, effaced anteriorly and transversely impressed near apex (Figure 3G). Scutellum distinct. **Legs** stouter, with hind tibial apex produced or elongate into a long spine-like process (Figures 3S).

Elytra $4.11\times$ as long as rostrum, $2.68\times$ as long as that of prothorax; its breadth $1.72\times$ as that of prothorax and $1.66\times$ as that of its breadth at base, subquadrate, basal margin sinuate, a little broader than base of prothorax, shoulder oblique with small humeral prominence, sides subparallel from this prominence to about middle, then rapidly narrowed to apex, broadest before middle, upper surface convex, finely punctatostriae, intervals broad, third more elevated than rest, interval third and fifth slightly tuberculate at basal half or declivity and tubercles not prominent (Figure 3Q). Elytral vestiture of two types, predominant flat, ovate, with very short pedicel, with 4–5 ridges, brown (Figures 4V–W); less predominant elongate, with very short pedicel, granulated at basal half, dark brown (Figure 4X).

Venter with first ventrite longest, $3.21\times$, $4.28\times$ and $1.12\times$ as long as second, third and fourth and fifth, respectively; in term of breadths, first broadest, $1.19\times$, $1.41\times$, $1.56\times$ and $1.66\times$ as broad as second, third, fourth and fifth, respectively.

Male genitalia with **aedeagus** 2.34× as long as apophyses, 1.75× as its median lobe, 0.95× as long as spiculum gastrale, 1.75× as long as tegmen; median lobe moderately sclerotised with spine-like or finger-shaped sclerotised processes around the middle, slightly curved at middle, apex subtruncate, 1.76× as long as manubrium; median lobe at base 0.7× as broad as at middle and breadth at apex 1.05× as broad as at middle and 1.5× as broad as at base, breadth from sides 6× as broad as that of apophyses. **Apophyses** 0.94× as broad as manubrium (Figures 6K–L, 7e). **Tegmen** 1.76× as long as manubrium, parameres absent, manubrium gradually broadening from middle to apex and towards base, apex clavate and truncate (Figures 6R, 7g). **Spiculum gastrale** stout, 2.49× as long as apophyses and 1.87× as long as tegmen, uniformly thick, apex curved, flattened dorsoventrally, its breadth 2.4× as broad as apophyses and 2.25× as broad as that of manubrium (Figures 5U, 7f).

Length: 7.26 ± 0.35 mm.; **breadth:** 3.79 ± 0.18 mm.

Etymology: This species is named after Sir G.A.K. Marshall who is well known for his contributions to weevil taxonomy, in particular on the Indian fauna.

Distribution: INDIA: Andhra Pradesh: Krishna, Narsapur; Maharashtra: Kanpa, Chandra.

***Blosyrus thompsoni* sp. nov.**

(Figures 1K, 2H, 2P, 3H, 3R, 4Y–Z, 5E, 5J, 5O, 7M–N, 8O–P)

Specimens examined: HOLOTYPE female: **Andhra Pradesh:** Hyderabad, 15–16.i.1988, coll. B.P. Nathan, on light [NPC].

Diagnosis: This species is closely related to *bengalensis* in appearance but can be distinguished by following characters: the elytra with small humeral prominence (Figure 3R); the head with a very deep central furrow and the furrow is not ascending the vertex (Figure 1K), the elytra with alternate intervals slightly raised.

Description: **Colour** black, with uniform dense whitish or pale yellowish-brown vestiture and with long grey setae. **Head** with a deep central furrow, not ascending vertex, 0.98× as long and 1.27× as broad as rostrum, 0.85× as long as and 0.76× as broad as prothorax. **Rostrum** 0.86× as long as its breadth at base and 0.69× as long as breadth at base of head, separated from head by a very deep transverse furrow, which does not reach eyes, narrowed anteriorly, with a straight central carina and trace of curved carina on each side (Figures 1K, 2H). **Antennae** with first funicle segment longest, 1.12×, 2.5×, 3.34×, 2.50× and 2× as long as second, third, fourth and fifth, sixth and seventh, respectively; in terms of breadth, first and seventh segments broadest of all, 1.34× as broad as second to sixth segments. Club 1.9× as long as first, and 2× as long and 2.5× as broad as the seventh segment of funicle (Figure 2P).

Prothorax 1.16× as long as and 1.68× as broad as rostrum, 1.7× broader than long at middle; breadth at middle 1.33× as broad as at apex, 1.04× as broad as at base, base 1.29× as broad as apex, truncate at apex, base rounded, sides subparallel from base to near apex, upper surface rugose, with irregular granulations,

with a central carinae obsolete in basal half, and effaced anteriorly (Figure 3H). Scutellum distinct.

Elytra 3.59× as long as rostrum, 3.11× as long as that of prothorax; its breadth about middle 1.58× as that of prothorax and 1.54× as that of its breadth at base, globose, basal margin deeply sinuate, a little broader than base of prothorax, shoulder oblique with small humeral prominence, sides subparallel from this prominence towards middle, then narrowed towards apex, broadest at middle, upper surface convex, striae narrow and finely punctate, alternate intervals slightly elevated, interval third and fifth obsoletely tuberculate at basal half or declivity and with a small tubercle behind middle (Figure 3R). Elytral vestiture of two types, predominant flat, ovate, with broad and short pedicel, 5–6 ridges, light brown (Figure 4Y); less predominant very elongate, cylindrical, with broad and short pedicel, granulated, dark brown (Figure 4Z).

Venter with second segment as long as and 1.1× as broad as third.

Female genitalia having **spermatheca** with collum 1.67× as long as cornu, angle between arms acute, nodulus projecting out, tubular, bent at base, ramus projecting out, stout, apex rounded, cornu bent at middle, bluntly pointed, projecting away from collum (Figure 5J, 7M). **Spiculum ventrale** with shaft elongate, 1.53× as long as basal plate, uniformly thick, apex flat and slightly curved, basal plate 0.95× as broad as long, apex bluntly pointed with hairs (Figures 5O, 7N).

Length: 7.22 mm.; **breadth:** 3.30 mm.

Etymology: This species is named after R.T. Thompson who is well known for his contributions to weevil taxonomy at the Natural History Museum, London.

Distribution: INDIA: Andhra Pradesh: Hyderabad.

Disclosure statement

No potential conflict of interest was reported by the authors.

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