

Neotropical Blissinae: *Patritiodemus*, a new genus with six new species (Hemiptera, Lygaeidae)¹

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The question of the generic status of a number of „species groups“ that have generally been placed in the rather heterogeneous genus *Ischnodemus* Fieber is a difficult one to resolve and never more so than in the present situation. Certain of the species discussed in the present paper have many features in common with what is usually considered as „*Ischnodemus*,“ but others appear, at least superficially, to be more closely allied to such large neotropical forms as *Patritius* Distant. Nevertheless, we are convinced for a number of reasons that all of the species discussed in the present paper form a natural group and are closely allied and congeneric. The genus is in fact a transitional one between *Ischnodemus* and some of the large species with multispinose fore femora. Therefore it appears necessary to treat this complex as being of generic status for the present, despite the close relationship of some of the species to species of *Ischnodemus*.

Slater and Wilcox (1966) discuss the significance of the presence or absence of spines on the fore femora in the classification of the Blissinae. They point out the remarkable consistency of this character intraspecifically and between closely related species. These authors mention only one case in the Western Hemisphere where a natural unit appears to be present in which some species possess fore femoral spines and others do not. This taxon is analyzed in the present contribution. Of the seven species included three possess fore femoral spines and four lack them. Of those with spines *clavatus* and *nigellus* are closely related in many ways and possess a peculiar spur with a secondary spine or spur arising from the primary spur and projecting at nearly right angles to it (fig. 17). Interestingly the same modification occurs in *Aradademus* Slater from Madagascar which otherwise appears to have no real relationship to *clavatus* and *nigellus* and in which the fore femoral condition must represent convergence. The third spined species, *albomaculatus*, has a simple upright spine and is in size and habitus similar to the mutic species. The four mutic species are all very closely related and definitely separable chiefly by characters of the genitalia.

The most important recognition features for this new genus are the peculiar stalked, pedunculate eyes (figs. 2,18) rather similar to those found in the cymine

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genus *Ninus* Stal; the extremely short labium which does not extend posteriorly even as far as the fore coxae; the completely dull „velvety“ pronotum lacking shining areas even basally; the large sperm reservoir sac with attendant dorsal wing sclerites (figs. 1 — 6, 22—27), the surprisingly similar color pattern of dark head, pronotum and scutellum usually with suffused dark brown areas mesally on the hemelytra which contrast with pale testaceous lateral areas.

For all new species described measurements are given for the holotype and additional measurements are on file in the Department of Zoology and Entomology at the University of Connecticut.

Patritiodemus, gen. n.

Head with stalked, strongly divergent and protrudent eyes, hemelytra with dark suffusion along central area; labium very short, not attaining fore coxae and with second segment never reaching posterior margin of head; fore femora incrassate with or without spines; pronotum completely dull velvety in texture, usually with a shallow transverse impression in middle; fore coxal cavities closed, apical corial margin straight; abdominal connexivum pale yellow, usually contrasting with dark tergum; metathoracic scent gland orifice usually broad and round at apex; antennal segments two and three terete or clavate; antenniferous tubercles nearly straight, laterally very slightly produced forward; corium dull, covered with scattered punctures; bucculae very short, narrow apically, pointed and lying anteriorly adjacent to base of labium; fore tibiae usually terete, occasionally strongly curved at base and thick at apex (*clavatus*); second tarsal segment very small; body linear, nearly parallel sided.

Spermatheca with a circular bulb, short or elongated pump and usually with a long spermathecal duct; males never with seventh connexivum produced posteriorly into spines; claspers elongate with prominent outer knob and usually very strongly conically produced inner knob; sperm reservoir with highly developed and elongate dorsal sac and a free lateral sclerite, helecoid process always present.

Type species: *Ischnodemus dilutipes* Stal 1858.

This genus is closely related to *Ischnodemus*, as is evident not only in the general body form, closed fore coxal cavities, straight corial margins, but also in the character of the highly developed dorsal sac and dorsal sclerite of the sperm reservoir. In *sabuleti*, the type species of *Ischnodemus*, the dorsal sclerites are somewhat reduced, resembling the wing-like structures of some Western Hemisphere *Ischnodemus*-like genera such as *Extarademus* Slater and Wilcox and *Reticulatodemus* Slater and Wilcox. *Patritiodemus*, however, differs greatly from the above genera in having a free lateral sclerite in the sperm reservoir (fig. 4), usually a strongly produced inner knob in the claspers, and usually an elongate swollen spermathecal duct. Within the Western Hemisphere *Ischnodemus*-like forms *Patritiodemus* shows some relationship with the South American genus *Procellademus* Slater and Wilcox in having a similar type of sperm reservoir with a free lateral sclerite and highly developed dorsal sac. However, the two genera greatly differ in the structure of eyes, length of the labium, pronotal surface and fore femoral composition. *Patritiodemus* also

shows striking resemblance to some of the large neotropical genera like *Patritius* and *Riggiella* Kormilev in having stalked, divergent and protrudent eyes. However, it is closer to *Patritius*, for both genera have lunate inner surfaces of the claspers and greatly developed inner lobes, and both have dull velvety pronota, at least in the "typical" species of *Patritius*.

Key to the Species

1. Fore femora armed with at least one short spine below on distal third 2
- Fore femora mutic 4
2. Fore femoral spine simple, small and inconspicuous; small species little over 5.00 mm. in length (♀ unknown); membrane of hemelytra with a pale spot near base *albomaculatus*
- Fore femora with a very large spur-like spine with an acute accessory spine extending at right angles to it (fig. 17); large robust species, over 7.0 mm. in length; no pale spot on membrane of hemelytra 3
3. Pronotum and abdominal tergum unicolored, dark chocolate brown; antennal segments two and three slender; claspers without distinct inner lobes (fig. 8); male gonopore very small; spermathecal pump narrow and elongate (fig. 10) *nigellus*
- At least part of pronotum and abdominal tergum pale brown, antennal segments two and three distinctly clavate (fig. 19); clasper with well developed inner knob (fig. 7); male gonopore large; spermathecal pump wide and short relative to duct (fig. 12) *clavatus*
4. Antennae and legs black or very dark chocolate brown *unicoloris*
- Legs and at least basal segments of antennae light yellow to reddish-brown 5
5. Membrane strongly suffused with dark brown on basal half; inner knob of clasper little produced (fig. 15); scutellum distinctly broader than long *dilutipes*
- Membrane pale on basal half as well as distally; inner knob of clasper strongly produced (fig. 13); scutellum as long as basal width 6
6. Males less than 4.5 mm. in length; second antennal segment subequal to length of scutellum; base of sperm reservoir sac lacking an accessory „yoke-like“ sclerite (fig. 22) *minutus*
- Males over 6.00 mm. in length; second antennal segment considerably longer than scutellum; base of sperm reservoir sac with a distinct „yoke-like“ accessory sclerite (fig. 23) *singularis*

Patritiodemus dilutipes Stal, new combination

Ischnodemus dilutipes Stal 1858, Rio Jan. Hem. 1 : 42. — Walker 1872, Cat. Hem. Het. B. M. 5 : 127. — Stal 1874, Enum. Hem. 4 : 131. — Bergroth 1884, Mem. Arg. Emend. Add. p. 52. — Lethierry and Severin 1894, Gen. Cat. Hem. 2 : 163.
Ischnodemus punctiger Stal 1874, Enum. Hem. 4 : 131.

Body moderately robust linear; head, pronotum, scutellum and abdomen black; marked with chocolate brown to dull reddish brown as follows: lightly on clavus, posterior half of corium except broadly along corial margins, proximal half of membrane and second, third and fourth antennal segments; apex of tylus, corial margins, abdominal connexivum and all appendages testaceous yellow to pale reddish tan; head and anterior lobe of pronotum with small dense punctures, clothed above with semi-erect testaceous hairs, these very large on juga and sides of anterior lobe of pronotum; transverse impression marked by coarse scattered punctures.

Head across vertex moderately convex, length head .53 mm., width head .87 mm., interocular space .49 mm.; pronotum sinuately narrowed from humeral angles to anterior margins, anterior lobe rather flat, transverse impression obsolete, marked only by coarse punctures medially and scarcely visible at sides, posterior margin evenly and shallowly concave, length pronotum .99 mm, width pronotum 1.18 mm.; scutellum with median carina obsolete, laterally and basally with coarse punctures, slightly raised transversely across base, length scutellum .46 mm.; width scutellum .53 mm.; hemelytra with membrane extending over anterior third of seventh abdominal tergum, distance apex clavus — apex corium 1.03 mm., distance apex corium — apex abdomen 1.71 mm.; labium not attaining fore coxae, second segment reaching posterior third of head, length labial segments I .19 mm., II .14 mm., III .15 mm., IV .23 mm.; fore femora moderately incrassate, mutic, strongly inwardly curved near distal end; metathoracic scent gland orifice rather broad, sub-auricular; antennae slender, terete, fourth segment narrowly fusiform, length antennal segments I .19 mm., II .46 mm., III .42 mm., IV .68 mm.; total length 5.22 mm.; clasper with a thin and conical outer knob, inner knob inconspicuous (fig. 15); dorsal sac of sperm reservoir narrow and elongate, dorsal sclerite subrectangular, free lateral sclerite minute (figs. 3, 24); spermatheca with a very narrow elongate pump and a thin, short duct (fig. 21).

Material examined: 54 specimens; Brazil Nova Teutonia, Santa Catarina, 27° 11' — 52° 23' (Fritz Plaumann); Campinas (F. X. Williams); S. Paulo. argentina: Iguazu misiones (Birabea) In La Plata Museum, Stockholm Museum, Bishop Museum, Helsinki Museum, California Academy of Sciences, R. L. Usinger, P. D. Ashlock and J. A. Slater, collections.

Dilutipes is very similar in habitus to *singularis* and *minutus* but can readily be separated from either by genital details as discussed under the respective species. It also shows relationship to *unicoloris* by the similar nature of the narrow spermathecal duct and pump in the two species.

Present among the specimens examined was a pinned fifth instar nymph described below, from Brazil, Nova Teutonia, Santa Catarina (Fritz Plaumann).

Head, pronotum, scutellum, basal area of mesothoracic wing pads, area about dorsal abdominal scent gland orifices and terminal and penultimate abdominal terga black; wing pads with a pale testaceous lateral margin, this extending mesad to center of wing pads one-third way from apex; abdomen in great part bright reddish-brown with white bars at base of segment one and anterior lateral half of segment four and segment five; usual blissine black spots scattered over dorsal surface of abdomen; antennae with first segment testaceous, segments two, three and four dark brown; legs dark chocolate

brown, apical third of femur and all of tarsi testaceous; head below marked with red interspersed with irregular black patches; mesal area of abdominal sternum white, posterior dark and heavily sclerotized; head with eyes very small, widely separated, not transverse and stalked as in adult, nearly in contact with anterior lateral angles of pronotum; tylus little produced beyond apices of juga, extending one-half way to apex of first antennal segment, length head .53 mm., width head .87 mm., interocular space .59 mm.; pronotum broad, nearly flat, lateral margins rather acute, posterior margin nearly straight, very shallowly concave, transverse impression obsolete, length pronotum .87 mm., width pronotum 1.73 mm.; length mesothoracic wing pads 1.33 mm. body linear, abdomen slightly tapered to seventh segment; labium very short, extending only to fore coxae, length labial segments, I .17 mm., II .13 mm., III .15 mm., IV .23 mm.; length antennal segments, I .19 mm., II .40 mm., III .40 mm., IV .61 mm.; total length 4.20 mm.

[*Patritiodemus singularis*, sp. n.

Body small, linear; head, scutellum and abdomen black; apex of tylus, basal area of pronotum across humeri, extreme apex of scutellum and abdominal connexivum red-brown; hemelytra testaceous, clavus and broad area adjacent to apical corial margin suffused with red-brown to chocolate, entire membrane (even basal area) uniformly light, veins slightly darkened; first and proximal one-half of second antennal segments and all legs testaceous yellow, distal one-half of second antennal segment reddish; head and anterior lobe of pronotum with minute, inconspicuous punctures; more coarsely punctate in area of transverse impression and laterally on scutellum; clothed above with large semi-upright testaceous hairs.

Head across vertex convex, tylus extending anteriorly to midway on first antennal segment, length head .57 mm., width head 1.03 mm., interocular space .68 mm.; pronotum slightly and sinuately narrowed from humeral to anterior margins, anterior lobe slightly convex, transverse impression broad and very shallow, almost obsolete mesally, posterior margin evenly and shallowly concave, lateral margins sinuate, length pronotum 1.10 mm., width pronotum 1.29 mm.; scutellum with a faint median carina, laterally and basally with coarse punctures, slightly to prominently raised across base, length scutellum .54 mm., width scutellum .54 mm.; hemelytra with membrane reaching anterior margin of seventh abdominal tergum, distance apex clavus — apex corium 1.25 mm., distance apex corium — apex abdomen 2.0 mm.; labium not attaining fore coxae, second segment approaching posterior margin of head, length labial segments I .27 mm., II .19 mm., III .17 mm., IV .23 mm.; fore femora moderately incrassate, mutic; metathoracic scent gland orifice broad, outer margin rounded, somewhat auricular; antennae terete, moderately stout, second segment very slightly enlarged at apex, length antennal segments I .25 mm., II .67 mm., III and IV missing; total length 6.08 mm.; clasper similar to *dilutipes* with a slightly broader blade, rather thick and rounded outer knob and more prominent inner knob (fig. 13); dorsal sac of sperm reservoir with basal portion bent down and apical portion turned up, dorsal sclerite

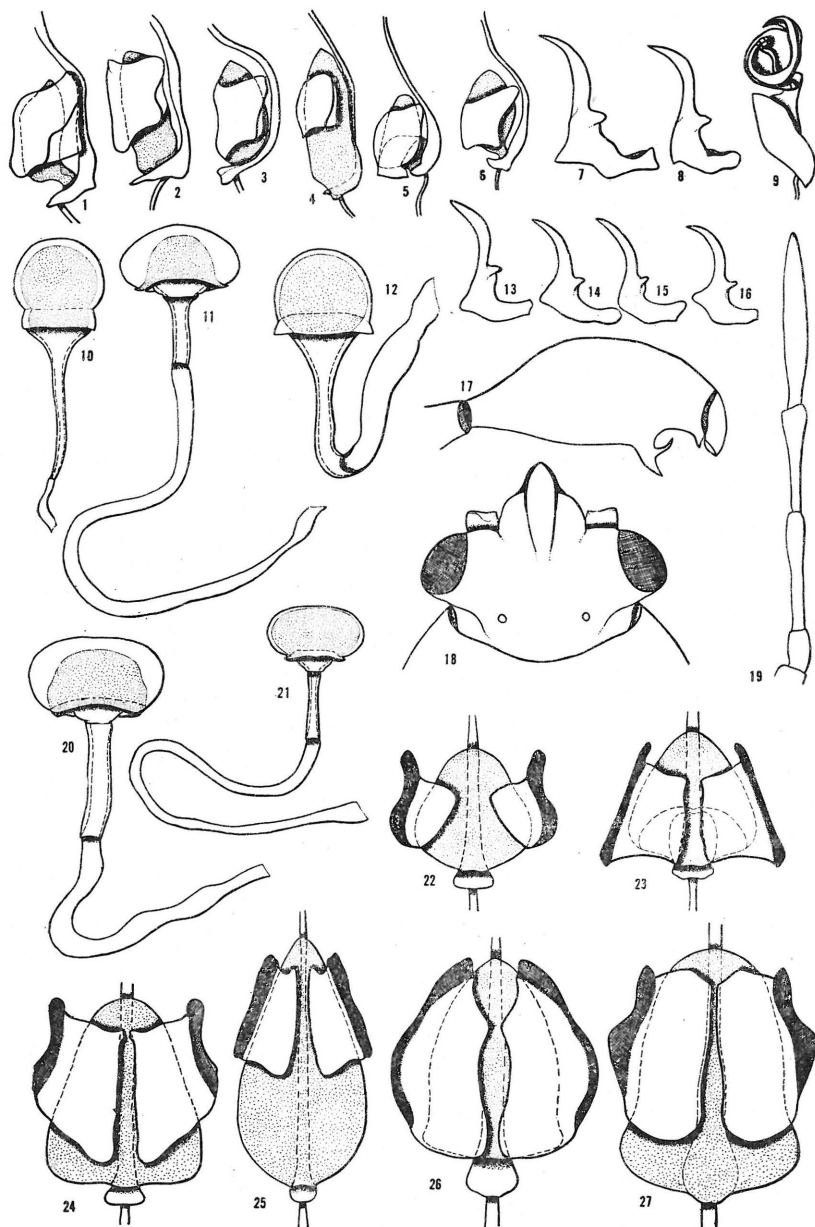


Fig. 1: Sperm reservoir, lateral view: *Patritiodemus clavatus*. Fig. 2: Sperm reservoir, lateral view: *Patritiodemus nigellus*. Fig. 3: Sperm reservoir, lateral view: *Patritiodemus dilutipes*. Fig. 4: Sperm reservoir, lateral view: *Patritiodemus albomaculatus*. Fig. 5: Sperm reservoir, lateral view: *Patritiodemus singularis*. Fig. 6: Sperm reservoir, lateral view: *Patritiodemus minutus*. Fig. 7: Clasper: *Patritiodemus clavatus*. Fig. 8: Clasper: *Patritiodemus nigellus*. Fig. 9: Terminal portion vesica:

subrectangular, curved inwardly at base, a free lateral sclerite forming a thin strip at inner margin (figs. 5, 23).

Holotype: male. Brazil W.: Muri est do Rio, 1000 m. (Wittmer). In United States National Museum. No. 67807.

Paratype: female. Brasilia: Itatiaya, Lahtivirta. In Helsinki Museum.

This species is very closely related to *dilutipes* in habitus. Externally it may be recognized by its completely pale membrane, whereas that of *dilutipes* is heavily suffused before the corial apices, and by having a noticeably thicker second antennal segment. These differences in themselves are scarcely of specific value, but useful when studied in conjunction with the striking difference in the sperm reservoir. *Singularis* (figs. 5, 23) has a much shorter reservoir sac, the dorsal sclerite reaches to the base of the sac, and an accessory free lateral sclerite curves as a mesally tapering yoke near the base of the sac. The spermatheca, while very similar to that of *dilutipes*, has a long, broader pump (fig. 20). The clasper is very similar to *dilutipes*, the inner knob slightly more produced (fig. 13).

Patritiodemus albomaculatus, sp. n.

Body short, linear; head, pronotum, scutellum, abdomen except lateral margins, posterior half of corium except lateral area, membrane, distal two-thirds of second and all of third antennal segments black to dark chocolate brown; membrane with a large oval white spot located mesally on basal half, its posterior extent at level of apex of corium; tylus, clavus, and abdominal connexivum red-brown; anterior half of corium and entire lateral area, first and basal third of second antennal segments and all appendages dull yellow; head and anterior pronotal lobe finely and obscurely punctate, posterior lobe and scutellum more coarsely punctate; clothed above with semi-decumbent moderately elongate testaceous hairs.

Head across vertex moderately convex, length head .53 mm., width head .88 mm., interocular space .5 mm.; pronotum sinuately narrowed from humeral angles to anterior margin, anterior lobe weakly convex, transverse impression very shallow, almost obsolete at meson, posterior margin shallowly concave, length pronotum .87 mm., width pronotum 1.18 mm.; scutellum with a faint median carina, laterally and basally with coarse punctures, prominently raised across base, length scutellum .49 mm., width scutellum .57 mm.; hemelytra with membrane apparently reaching well onto seventh abdominal tergum (distal portion of membrane missing), distance apex clavus — apex corium 1.14 mm., distance apex corium — apex abdomen 1.14 mm.; labium

Patritiodemus albomaculatus. Fig. 10: Spermatheca: *Patritiodemus nigellus*. Fig. 11: Spermatheca: *Patritiodemus unicoloris*. Fig. 12: Spermatheca: *Patritiodemus clavatus*. Fig. 13: Clasper: *Patritiodemus singularis*. Fig. 14: Clasper: *Patritiodemus albomaculatus*. Fig. 15: Clasper: *Patritiodemus dilutipes*. Fig. 16: Clasper: *Patritiodemus minutus*. Fig. 17: Fore femur: *Patritiodemus clavatus*. Fig. 18: Head, dorsal view: *Patritiodemus clavatus*. Fig. 19: Antenna: *Patritiodemus clavatus*. Fig. 20: Spermatheca: *Patritiodemus singularis*. Fig. 21: Spermatheca: *Patritiodemus dilutipes*. Fig. 22: Sperm reservoir, ventral view: *Patritiodemus minutus*. Fig. 23: Sperm reservoir, ventral view: *Patritiodemus singularis*. Fig. 24: Sperm reservoir, ventral view: *Patritiodemus dilutipes*. Fig. 25: Sperm reservoir, ventral view: *Patritiodemus albomaculatus*. Fig. 26: Sperm reservoir, ventral view: *Patritiodemus clavatus*. Fig. 27: Sperm reservoir, ventral view: *Patritiodemus nigellus*.

not attaining fore coxae, second segment reaching posterior area of head; length labial segments I .20 mm., II .15 mm., III .17 mm., IV .22 mm.; fore femora moderately incrassate, a single rather inconspicuous spine below on distal third; metathoracic scent gland orifice rather narrow, subauricular; antennae slender, terete, third segment slightly thickened at distal end, length antennal segments I .21 mm., II .51 mm., III .57 mm., IV missing; total length 4.92 mm.; clasper with thin and conical outer knob, and prominently developed conical inner knob (fig. 14), dorsal sac of sperm reservoir greatly elongate, dorsal sclerite very small, rectangular, covering only a portion of distal half of sac, free lateral sclerite forming a narrow strip (figs. 4, 25).

Holotype: male. Brasilien: Tapurucuara am, Rio Negro, Amazonas, 13. 11. 63. (C. Lindemann). In Munich Museum.

Albomaculatus is a most interesting species in that it represents a somewhat intermediate condition between small species with mutic fore femora such as *dilutipes* and *singularis*, and large robust species with strongly incrassate and heavily spined fore femora such as *clavatus* and *nigellus*. In many external details *albomaculatus* resembles a small *nigellus*, but the sperm reservoir is quite distinct with a much reduced dorsal sclerite on the sac and the spination of the fore femora is, of course, quite distinctly different.

Patritiodemus unicoloris, sp. n.

Body elongate, linear; head, pronotum and scutellum dull velvety black; apex of tylus, antennae, clavus, inner two-thirds of distal half of corium, membrane of hemelytra except extreme base, and abdomen black to dark chocolate brown; femora, tibiae, basal half and entire lateral one-third of corium, connexivum and all tarsal segments dull testaceous yellow; head and scutellum punctate, more finely so on head and anterior pronotal lobe; clothed above with scattered upright or semi-decumbent sericeous hairs.

Head convex, tylus extending anteriorly to middle of first antennal segment, slightly declivent, length head .57 mm., width head .91 mm., interocular space .61 mm.; pronotum with lateral margins weakly sinuate, evenly narrowed from humeral to anterior margins, moderately and evenly convex, transverse impression obsolete, posterior margin very shallowly and evenly concave, lacking shining areas across basal portion, length pronotum 1.22 mm., width pronotum 1.41 mm.; scutellum with median carina obsolete, slightly raised transversely across base, length scutellum .57 mm., width scutellum .55 mm.; distance apex clavus — apex corium 1.29 mm.; labium not attaining fore coxae, second segment not reaching base of head; length labial segments I .27 mm., II .17 mm., III .21 mm., IV .23 mm.; fore femora moderately incrassate, mutic; metathoracic scent gland orifice rather narrow, outer margin convex, distinctly auricular; antennae slender, segments two and three terete, fourth narrowly fusiform, length antennal segments I .23 mm., II .61 mm., III .60 mm., IV .80 mm.; total length 6.10 mm (approx.); spermatheca with a very short narrow pump and elongate slender duct (fig. 11).

Holotype: female. Bolivia: Songo. In Stockholm Museum.

It is with some reservations that we have described this species from a single female specimen. *Unicoloris* is very closely related to the widely di-

distributed *dilutipes*. Both species have a uniformly black velvety pronotum and scutellum. In both the transverse pronotal impression is obsolete and the scutellum distinctly broader than long. The spermatheca of both species has a relatively narrow pump and duct, but in *unicoloris* the pump is slightly broader and the duct slightly longer and broader (fig. 11).

Unicoloris can readily be distinguished from *dilutipes* by the almost black legs and antennae, the much less obliquely angulate eyes, and by the nearly evenly narrowing inner fore-femoral face. In *dilutipes* the legs and at least the first and usually the second antennal segments are orangish-yellow, the eyes very strongly obliquely angulate, and the inner face of the fore femora sharply and abruptly depressed or constricted distally.

Patritiodemus minutus, sp. n.

Body small, linear; head, pronotum, scutellum and abdomen black; tylus, area across humeri, apex of scutellum, abdominal connexivum and antennal segments three and four red-brown; hemelytra testaceous, clavus and a broad corial area adjacent to apical margin, but not reaching lateral margin, suffused with dark brown; membrane sordid white with an obscure elongate dark bar on either side of midline caudad of apex of corium; first and second antennal segments and legs testaceous yellow; head and anterior lobe of pronotum with small closely placed punctures, those on transverse impression coarse; clothed above with scattered semi-decumbent testaceous hairs, these elongate on anterior lobe of pronotum.

Head across vertex convex, length head .46 mm., width head .68 mm., interocular space .42 mm.; pronotum sinuately narrowed from humeral angles to anterior margins, transverse impression very shallow, posterior margin evenly and shallowly concave, length pronotum .80 mm., width pronotum .91 mm.; scutellum with a distinct prominent median carina, laterally with large coarse punctures, raised transversely across base, length scutellum .38 mm., width scutellum .38 mm.; hemelytra with membrane reaching nearly midway onto seventh abdominal tergum, distance apex clavus — apex corium .84 mm., distance apex corium — apex abdomen 1.25 mm.; labium not attaining fore coxae, second segment nearly reaching posterior margin of head, length labial segments I .18 mm., II .14 mm., III .11 mm., IV .17 mm.; fore femora moderately incrassate, mutic; metathoracic scent gland orifice narrow, subauricular; antennae slender, terete, fourth segment narrowly fusiform, length antennal segments I .15 mm., II .38 mm., III .38 mm., IV .57 mm.; total length 4.20 mm.; clasper with a thick, conical outer knob, inner knob strongly produced (fig. 16), dorsal sac of sperm reservoir short and broad, nearly as broad as long, dorsal sclerite small, subrectangular, with outer apical end produced like a cone (figs. 6, 22), free lateral sclerite broad, elongate and strip-like.

Holotype: male. Argentina: Caragnaty, Misiones, 5. 23. 1954 (Wittmer). In Museo Lillo.

We describe this species with some reluctance from a single specimen. *Minutus* is closely related to *singularis* in habitus, possessing the same combination of reddish-brown humeral pronotal area, pale mebrane, strongly produced

inner knob of the clasper and mutic fore femora. However, the dorsal sclerites of the sperm reservoirs (figs. 6, 22) are quite different in appearance and far beyond the degree of variation present in *dilutipes* — the only species of which we have had a reasonable series to study. On this basis primarily we feel the two species must be treated as distinct. The small size, short second antennal segment, and pair of elongate brown „dashes“ on the membrane are also useful recognition features.

***Patritiodemus clavatus*, sp. n.**
(fig. 28)

Body robustly linear; coloration chiefly yellowish testaceous; head, anterior pronotal lobe, area across humeri — at least adjacent to base of scutellum, fourth antennal segment, meso- and metapleuron and sternum black; inner half of corium and entire clavus suffused with smoky grey coloration; abdomen red-brown, connexival margin yellow; head and pronotum with obscure inconspicuous punctures, those on posterior pronotal lobe somewhat more conspicuous; clothed above with very short decumbent sericeous hairs.

Head across vertex moderately convex, length head .72 mm., width head 1.05 mm., interocular space .68 mm.; pronotum sinuately narrowed from humeral angles to anterior margins, anterior lobe convex, transverse impression broad, shallow, becoming obsolete laterad, posterior margin prominently concave, length pronotum 1.37 mm., width pronotum 1.71 mm.; scutellum with a very faint median elevation, coarsely punctate laterad, slightly raised transversely across base, length scutellum .76 mm., width scutellum .84 mm.; hemelytra with lateral corial margins at most feebly sinuate, membrane extending midway onto seventh abdominal tergum, distance apex clavus — apex corium 1.88 mm., distance apex corium — apex abdomen 1.90 mm.; labium at most barely approaching anterior margin of fore coxae, second segment reaching posterior third of head, length labial segments I .34 mm., II .23 mm., III .23 mm., IV .30 mm.; fore femora strongly incrassate, armed below on distal third with a large coarse spur from which a small straight spine projects distally at right angles to give a bifid appearance, fore femora also possessing a broad blunt projection near its distal end (fig. 17), fore tibiae strongly curved at base and strongly thickened at apex; metathoracic scent gland orifice rounded, auricular; antennae heavy, thick, second and third segments strongly clavate, fourth fusiform, length antennal segments I .27 mm., II .83 mm., III .76 mm., IV 1.22 mm.; total length 7.90 mm.; clasper with a very thick and rounded outer knob, inner knob greatly extended and conically projected (fig. 7), dorsal sac of sperm reservoir short and wide, dorsal sclerite squarish, free lateral sclerite rectangular (figs. 1, 26), spermatheca with pump and duct thick and broad (fig. 12).

Holotype: male. Peru: Marcapata. In Hungarian National Museum.

Paratypes: 1 male, 1 female same data as holotype; 1 male, Madre de Dios. In Hungarian National Museum and J. A. Slater collections.

There is a single male specimen before us from Uruguay in the C. J. Drake collection (USNM) which is closely related to the type series noted above, but which has a relatively shorter second antennal segment, slight differences

in the sperm reservoir, and somewhat different coloring on the pronotum. This specimen may represent a distinct species, but it is not described at present pending more adequate material for study.

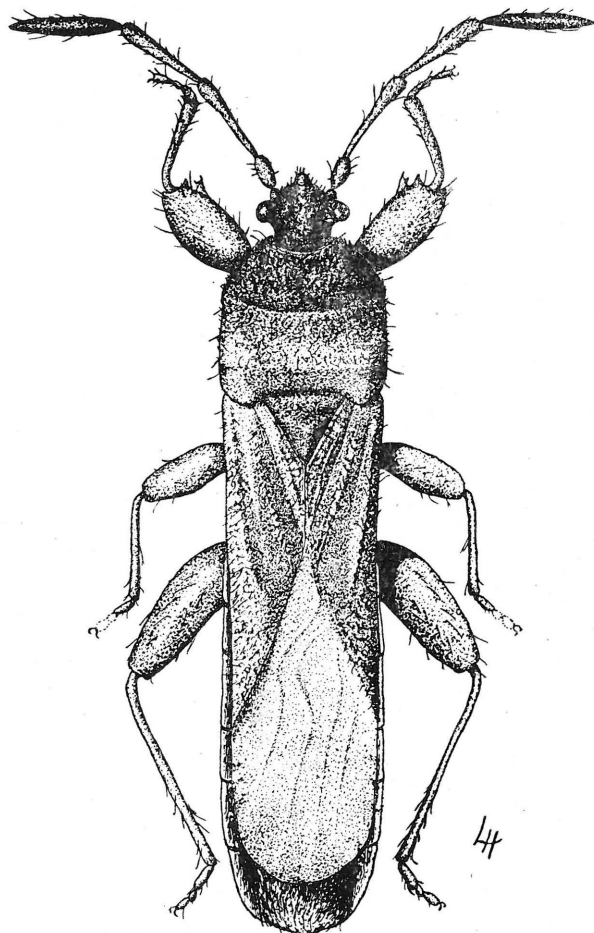


Fig. 28: *Patritiodemus clavatus*, dorsal view.

Clavatus is most closely related to the sympatric *nigellus*, but although both species have been taken at Marcapata, Peru, they appear to be definitely distinct taxa. *Clavatus* has much more strongly clavate antennae than does *nigellus*, the claspers of *clavatus* possess a very strongly produced inner lobe, while those of *nigellus* are almost evenly curved along the inner margin and lack a strongly protruding inner knob (figs. 7, 8). The free lateral sclerites of the sperm reservoir are differently shaped and the spermathecae very different

in size of the pump and relative length of the duct (figs. 1, 2, 26, 27). All of these features plus coloration makes it abundantly clear that two distinct species are involved.

***Patritiodemus nigellus*, sp. n.**

Body robustly linear; head, pronotum, scutellum, abdomen and third antennal segment black; apex of tylus, area across humeral angles, apex of scutellum, entire hemelytra except corial margins but including membrane, and three-fourths of second antennal segment chocolate brown; corial margins, abdominal connexivum, and all appendages yellow; head and entire pronotum very obscurely and inconspicuously punctate; clothed above with decumbent and semi-erect testaceous hairs, these becoming very thick on juga and on sides of anterior pronotal lobe.

Head convex across vertex, tylus not extending at most more than midway onto first antennal segment, length head .61 mm., width head .91 mm., interocular space .57 mm.; pronotum only slightly sinuately narrowed from humeral angles to anterior margin, anterior lobe convex, transverse impression very shallow, posterior margin nearly straight before base of scutellum and with well developed caudally directed lateral lobes, length pronotum 1.29 mm., width pronotum 1.50 mm.; scutellum with median carina obsolete, coarsely punctate laterad, slightly raised transversely across base, length scutellum .65 mm., width scutellum .72 mm.; hemelytra with membrane extending over anterior third of seventh abdominal tergum, distance apex clavus — apex corium 1.52 mm., distance apex corium — apex abdomen 1.79 mm.; labium not attaining fore coxae, second segment reaching posterior third of head; length labial segments I .22 mm., II .19 mm., III .17 mm., IV .27 mm.; fore femora strongly incrassate, armed below on distal third with a large coarse spur with a small curved spine projecting at right angles to spur, thus giving a bifid appearance, no spinelike blunt projecting area on distal end of femora, fore tibia short, stubby, curved at base and thickened at apex, distinctly shorter than fore femora; metathoracic scent gland orifice rather narrow, rounded, subauricular; antennae rather slender, second and third segments long, slightly clavate, length antennal segments I .27 mm., II .68 mm., III .57 mm., IV missing; total length 6.60 mm.; clasper with rather thin and pointed outer knob, inner knob inconspicuous (fig. 8), dorsal sac of sperm reservoir uniformly broad, dorsal sclerite rather conical, free lateral sclerite minute, conical (figs. 2, 27), spermatheca with pump slender and elongate, duct short and narrow (fig. 10).

Holotype: male. Peru: Marcapata. In Hungarian National Museum.

Paratype: female. Same data as holotype. In J. A. Slater collection.

As noted above this species resembles *clavatus* in general body form and in having a bifid fore femoral spur, but greatly differs from it in lacking a strongly developed inner lobe of the clasper, and other features discussed under *clavatus*. The nearly uniformly dark dorsal surface with contrasting pale corial margins give a distinctive appearance to this interesting species.

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LITERATURE CITED

- Slater, J. A. & D. B. Wilcox. 1966. An Analysis of Three New Genera of Neotropical Blissinae (Hemiptera: Lygaeidae). *Ann. Ent. Soc. Amer.* 50:1:60—76

The present paper's having been in press for nearly three years has led to an unfortunate situation which we feel should be clarified before it causes future confusion.

Subsequent to the submission of the present paper we received from the Carnegie Museum specimens representing an additional undescribed species of *Patritiodemus*. In the belief that the present paper would appear first we included this additional species in a paper entitled „New Genera and Species of Neotropical Blissinae (Hemiptera: Lygaeidae)“ by J. A. Slater and D. B. Wilcox. Unfortunately this paper was published in the Proceedings of the Entomological Society of Washington 70 (1):42—52 in March, 1968, thus preceding the present paper by some months.

The important question is whether *Patritiodemus* is validated in the earlier paper. It appears to us that the provisions of neither Article 13 (a) nor Article 13 (b) are met, that the prior use of *Patritiodemus* is a **nomen nudum**, and that the genus is validly established only in the present paper.