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BOLIVIAN RHINOTRAGINI IX: NEW GENERA (COLEOPTERA, CERAMBYCIDAE)

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ABSTRACT

Two new genera are described: Fissapoda for two species, F. barbicus (Kirby, 1818) and F. manni (Fisher, 1930), transferred from Epimelitta Bates, 1870; and Epipoda for two new species, E. abeli from Bolivia, and E. vanini from Brazil. All the species are illustrated (including their genitalia), and host plant and host flower records provided.

KEY-WORDS: Bolivia; Cerambycinae; Host flowers; Host plants; Taxonomy.

INTRODUCTION

This paper, the ninth on Bolivian Rhinotragini Thomson, 1861, describes two new genera resembling species of *Epimelitta* Bates, 1870 (*s. auct.*). The first, *Fissapoda* gen. nov., is a follow-up of Clarke (2014), in that it removes species with closed procoxal cavities from *Epimelitta*, a genus characterised by open procoxal cavities. The second, *Epipoda* gen. nov., is described for new species resembling some currently allocated to *Epimelitta* (*s. auct.*); but, like those referred to above, cannot be placed in this genus since their procoxal cavities are closed.

The species transferred to *Fissapoda* gen. nov. are: *Epimelitta barbicus*, described by Kirby (1818) as *Necydalis barbicus* was transferred to *Charis* by Gemminger & Harold (1872), then moved to *Charisia* by Gounelle (1911), and finally to *Epimelitta* by Aurivillius (1912); the second species described by Fisher (1930) as *Phygopoda manni*, was transferred by Monné & Giesbert (1992) to *Epimelitta*.

MATERIAL AND METHODS

Specimens analysed for the description of *Fissapoda* were generously loaned by the MZUSP, and some from the author's collection. Supplementary material examined (from Brazil, Argentina and Paraguay) was kindly provided by representatives of ACMT, CMNH, EMEC and USNM.

One new species described in *Epipoda* is from the humid Amazonian Forest of Bolivia (Department of Santa Cruz), and comes from the author's collection; the other is from Brazil (State of Goiás), and was found amongst unidentified material in MZUSP.

One character, commonly used in descriptions of Rhinotragini is the point at which the prothorax is widest. In an attempt to reduce inconsistency this character is presented in numerical form; and is referred to as the "prothoracic quotient" (the result of dividing the length of the prothorax by the distance from the front border to its widest point). For details see Clarke (2014).

The terminology used to describe the genitalia follow those used by Sharp & Muir (1912, reprint edition

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1969); aedeagus = the median lobe and tegmen together; tegmen = the term applied to the lateral lobes and basal piece together; median lobe = the central portion of the aedeagus upon which the median orifice is situated.

Specimens seen by the author have been divided into two groups. "Material analysed" refers to those specimens (one of each sex when both available) which have been used for the data set down in the descriptions of the genera and species. "Material examined" refers to those specimens that have been examined for intraspecific and sexual variation; mostly differences of colour and surface ornamentation, but also data contributing to the general measurements given for each new species.

It should be remembered that intraspecific variation may vary with smaller or larger specimens.

Measurements (were made using a cross-piece micrometer disc, 5 mm × 0.1 mm): total length = tip of mandibles to apex of abdomen. Forebody length (estimated with head straight, not deflexed) = apex of gena to middle of posterior margin of metasternum. Length of abdomen = base of urosternite I (apex of abdominal process) to apex of urosternite V. Length of rostrum = genal length (from apex of side to where it meets inferior lobe of eye). Length of inferior lobe of eye (viewed from above with the scale along side of gena): from the lobes most forward position to its hind margin (adjacent to, and slightly to the side of, antennal insertion). Width of inferior lobe of eye (with head horizontal and level viewed from directly above) = width of head with eyes at its widest point, minus width of interocular space, and divided by two. Interocular space between inferior lobes = its width at the narrowest point (including smooth lateral margins). References to antennal length in relation to body parts are made, as far as is possible, with head planar to dorsad and antenna straightened. Length of leg (does not include coxae) = length of femur (from base of femoral peduncle to apex of claw) + length of tibia + length of tarsus (does not include claws).

The acronyms used in the text are as follows: American Coleoptera Museum, San Antonio, Texas, USA (ACMT); Essig Museum of Entomology, Berkeley, California, USA (EMEC); Florida State Collection of Arthropods, Gainesville, Florida, USA (FSCA); Museo Noel Kempff Mercado, Universidad Autónoma Gabriel René Moreno, Santa Cruz de la Sierra, Bolivia (MNKM); Museu de Zoologia, Universidade de São Paulo, São Paulo, Brazil (MZUSP); National Museum of Natural History, Smithsonian Institution, Washington, DC, USA (USNM); Robin Clarke/Sonia Zamalloa private collection, Hotel Flora & Fauna, Buena Vista, Santa Cruz, Bolivia (RCSZ).

The bibliographic references for each taxon correspond to the original descriptions as cited in the catalogue by Monné (2005), and additions to this catalogue.

RESULTS AND DISCUSSION

Fissapoda gen. nov.

Figs. 1, 2, 6, 7

Type species: Necdalis barbicus Kirby, 1918, here designated.

Diagnosis: *Fissapoda* differs from all species correctly included in *Epimelitta* by its closed procoxal cavities, fissate elytra, and compact metatibial brushes. In *Epimelitta* (s. auct.) procoxal cavities are open, elytra never fissate, and metatibial brushes (when present) rather fragmented between one side or the other of the tibial surface, as in species of *Epimelitta* (sens. str.).

Distinctly fissate elytra are only found in ten other genera (*Catorthontus* Waterhouse, 1880), *Acyphoderes* Audinet-Serville, 1833, *Pseudagaone* Tippmann, 1960, *Pseudacorethra* Tavalilian & Peñaherrera-Leiva, 2007, *Pseudisthmiade* Tavalilian & Peñaherrera-Leiva, 2005, *Tomopteropsis* Peñaherrera-Leiva & Tavakilian, 2003, some species of *Xenocrasis* Bates, 1873, and *Pseudophygopoda* Tavalilian & Peñaherrera-Leiva, 2007 (and its related genera *Paraphygopoda* Clarke, 2014 and *Paramelitta* Clarke, 2014; but most of these have subulate elytra, leaving only three of them, *Catorthontus*, *Pseudacorethra* and *Tomopteropsis* which share cuneate elytra with *Fissapoda*; but none of these have metatibial brushes. Elytra are also cuneate and fissate in *Ischasia nevermanni* Fisher, 1947, but in this species the antennae are somewhat filiform, and the hind legs much more slender, with long peduncles, and tibiae lack metatibial brushes.

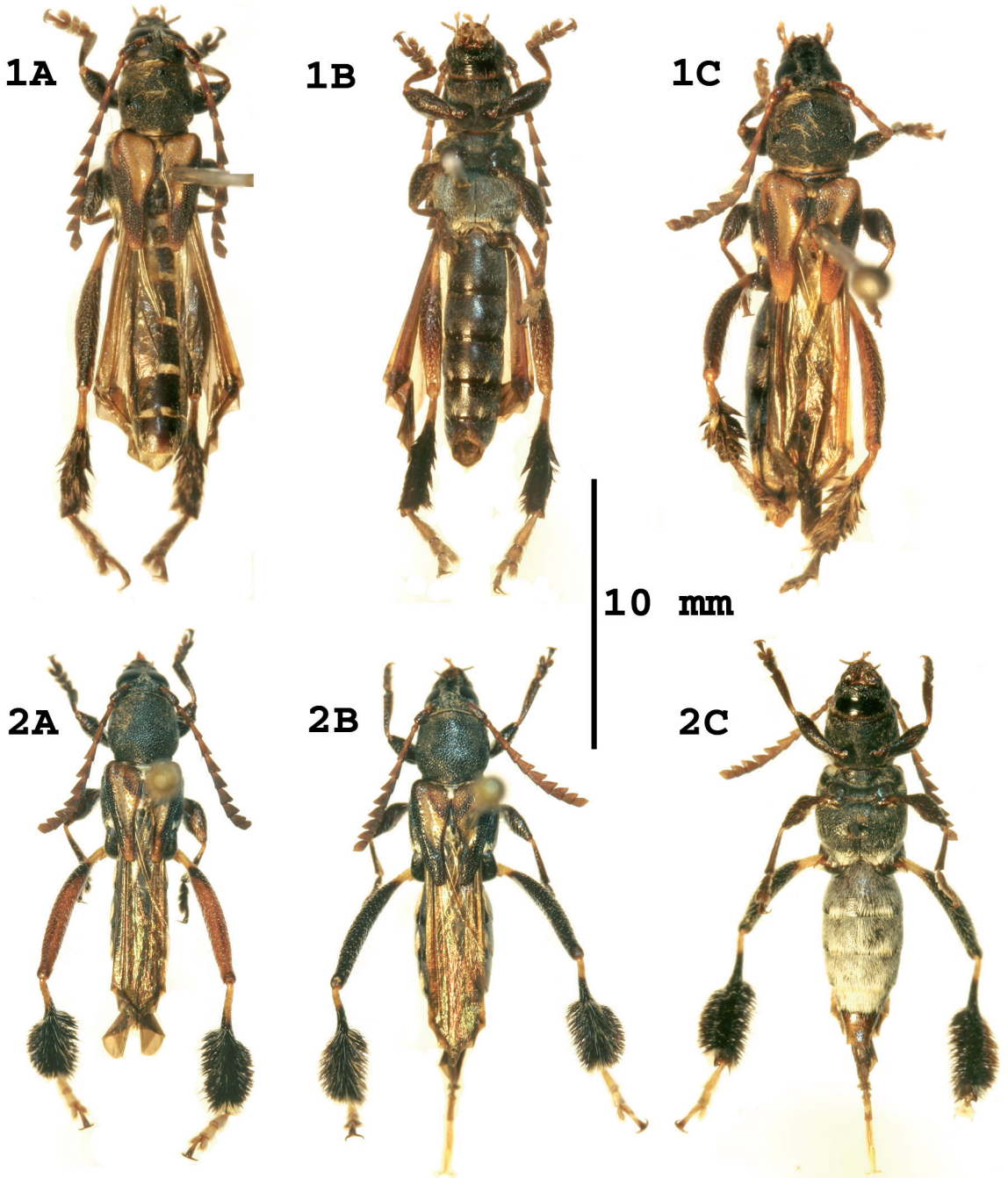
One last character, the male genitalia, may prove to be unique to *Fissapoda*, for among all the Rhinotragini male genitalia examined so far, the general shape of the tegmen (Figs. 6, 7) is only approached by species of *Pseudophygopoda* and its related genera, as illustrated in Clarke (2014).

In summary, *Fissapoda* differs from all other Rhinotragini genera by its short, very strongly fissate, cuneate elytra, well developed metatibial brushes, and, possibly, unique type of male genitalia.

Description of genus: small to moderately large (9-13 mm), but robust, compact species; forebody distinctly shorter to slightly longer than abdomen irrespective of sex.

Head with eyes distinctly narrower than width of prothorax in male, much narrower in female. Rostrum short and broad in male (3.3-3.8 wider than long); in female longer and narrower (2.4-3.0 wider than long), with sides rounded and contracted to apex. Apical palpomeres cylindrical, slightly constricted at apex (less so in *F. manni*) and truncate; galea long and narrow. Labrum moderately large and rect-

angular (in male *F. barbicus*), smaller and rather strongly rounded from base to middle of apical declivity (in female, and in male *F. manni*). Inferior lobes of eyes convex (more prominent than interocular), or rather flat (in female *F. manni*); longer than wide (in *F. barbicus*), or only slightly longer than wide (in *F. manni*); subcontiguous in male (width of one lobe 3.5-4.7 times interocular distance), widely spaced in



FIGURES 1-2: 1, *Fissapoda barbicus* (Kirby, 1818) comb. nov.: A, male, B, male ventral aspect, C, female. 2, *Fissapoda manni* (Fisher, 1930) comb. nov.: A, male (rufous form), B, female, C, female ventral aspect.

female (interocular distance slightly more than width of one lobe); their distal margins lying on genae, or some way on to frons (in male *F. barbicus*), proximal margins transverse. Superior lobes of eyes strongly lobate, or weakly so (in female *F. barbicus*), moderately large, in male the distance between them twice their own width, in female 2.4-2.8 their own width; with 13-16 rows of ommatidia mesally, narrowed to 2 or 3 rows laterally, or 6 to 7 rows (in female *F. barbicus*). Antennal tubercles moderately prominent, the surface between them slightly declivous. Antennae short, robust, just passing metacoxae in male, only reaching middle of coxae in female; subfiliform basally (antennomere III cylindrical, IV widened at apex), V-X deeply serrate (narrow at base, strongly widened at apex); scape subpyriform (when view from above subcylindrical); antennomere III shorter than scape, and not, or only just, longer than other antennomeres; antennomeres IV-VI as long as III (in *F. barbicus*), or slightly shorter than III (in *F. manni*); VII and VIII equal in length, shorter than VI, longer than IX; IX longer than X; XI usually longer than IX, rather rounded with small apical cone. Prothorax more or less cylindrical; moderately convex, but broadly flattened on disc; quadrate with parallel sides, but the lateral profile interrupted by prominent calli (in male *F. barbicus*), or similar, but weakly transverse with sides bisinuate and slightly contracted towards base (in female *F. barbicus*), or weakly transverse with sides of prothorax subparallel, slightly rounded from middle to apex, and rather strongly rounded from middle to base (in both sexes of *F. manni*); sides widest well before middle, or just before middle (in male *F. manni*); pronotal surface not differentiated at midline; slightly irregular, with weakly raised calli (in *F. manni*), or irregular with prominent calli (in *F. barbicus*); the calli distributed as follows: a pair of lateral calli, small but prominent, adjacent to apical constriction (only in male *F. barbicus*), a pair of round calli occupying latero-basal sides of pronotum, and slightly overhanging sides posteriorly; the latter strongly prominent (in *F. barbicus*), weakly so (in *F. manni*); apical constriction absent (in *F. manni*), limited to sides (in female *F. barbicus*), or strong throughout (in male *F. barbicus*); basal constriction narrow and almost planar with disc for middle third; apical and basal margins about equally wide, their borders raised and narrow. Prosternum almost flat (in male *F. barbicus*), or slightly tumid (in female, and male *F. manni*); prosternal process weakly arced (in *F. barbicus*), or flat (in *F. manni*); in male planar with prosternum, in female lying slightly below level of prosternum; base of process rather short, in male almost laminate

(nearly nine times narrower than width of procoxal cavity), in female slightly wider (about six times narrower than width of coxal cavity); apex of process a wide isosceles triangle, or a narrow equilateral triangle (in male *F. barbicus*). Procoxal cavities plugged at sides, closed behind. Mesosternum deeply and moderately declivous, slightly inclined in female, well inclined, with about 45° of slope, in male; mesosternal process short with broad, flat base, about as wide as width of mescoxal cavity, or distinctly narrower (in male *F. barbicus*), towards apex sides rather strongly divergent, to form a broad sub-lanceolate apex (as the apical margin is straight, not acuminate). Mescoxal cavity moderately open to narrow mesepimeron. Elytra cuneate; short, about 1.3 longer than width of humeri; just passing metacoxae in male, slightly longer in female; moderately widely and deeply fissate for apical two-thirds; rather flat behind humeri; the latter not hiding sides of mesosterna (when viewed from directly above), moderately projecting and strongly prominent; with broad, ill-defined, humero-apical costa (lying between apex of humeral prominence and apical sixth of elytron); with rather narrow translucent panel occupying central two-thirds of each elytron, the panels rather ill-defined (in *F. barbicus*), or clearly defined (in *F. manni*). Each elytron with basal margin inwardly curved and moderately declivous between humerus and sutural margin; increasingly narrower from just behind humerus to apex; lateral margin almost straight to apex; sutural margin strongly rounded for basal half, recurved at base of apical half, then straight to apex; the latter unarmed, blunt, and rather broad (in *F. barbicus*), narrower (in *F. manni*). Scutellum rather large and triangular (with blunt apex). Mesosternum shorter than metasternum (in male 0.8 length of metasternum, in female slightly shorter). Metathorax broad, uniformly tumid in male, slightly flattened on disc in female (more or less planar with mescoxae); sides rounded from base to middle of apex in male, parallel-sided and obliquely contracted to middle of apex in female; longitudinal suture moderately deep and long. Metepisternum sub-rectangular, moderately broad at base, slightly tapering towards apex, more strongly for apical third, apex blunt. Abdomen in male annulated, moderately wide and cylindrical (in *F. barbicus*), somewhat fusiform (in *F. manni*); slightly widening to middle of urosternite II (in *F. manni*), or to middle of II and III (in *F. barbicus*), tapering to apex of IV/base of V; urosternite I slightly elongate, II-IV distinctly transverse (more so in *F. manni*). Male urosternite V trapezoidal, with rounded sides (in *F. barbicus*), straight sides (in *F. manni*); strongly differentiated (in *F. barbicus*), less

so (in *F. manni*), but with wide, bell-shaped soleate depression demarcated by moderately narrow, raised sides; in *F. manni* the depression not occupying more than half the segment's surface, less deep, and the sides less prominent; in *F. barbicus* the depression occupying more than half the segment's surface, exceptionally deep, and the sides more prominent; sides of urosternite rounded, but somewhat alate (when viewed from the side). Abdomen in female fusiform, more strongly so in *F. manni*; with rather broad base widening to apex of urosternite I, contracted from middle of II to apex of V; urosternite I subconical (more so in *F. manni*); I-IV incrementally shorter and more transverse (IV unusually small). Urosternite V undifferentiated, slightly down-turned, short and subconical, contracted near apex (weakly in *F. barbicus*), leaving apical third parallel-sided; apical margin rounded (in *F. barbicus*), or excavate, with acute lateral angles (in *F. manni*). Abdominal process similar in both sexes, a flat, wide, isosceles triangle, with blunt apex intimately inserted between metacoxae. Ratio front/middle/hind leg 1.0:1.1-1.2:2.4-2.9. Front and middle legs moderately short; strongly pedunculate-clavate (but claws only moderately tumid). Protibiae shorter than profemora, straight, narrow at base, widening to apex; apical margin oblique, the apico-lateral angle with small tooth. Pro- and mesofemoral claws broad and abrupt (when viewed from the side), the base of the latter strongly flattened mesally (when viewed from above); profemoral peduncle short and wide; mesofemoral peduncle flat and moderately narrow, about half length of claw; mesofemora much longer than mesotibia. Hind legs relatively long, about as long as body length (in *F. manni*), shorter than body length (in *F. barbicus*); metacoxae characteristic (when viewed from above), tumid, and projecting well beyond sides of elytra. Metafemoral peduncle slightly flattened, moderately narrow; short (in *F. barbicus* about half length of claw), very short (in male *F. manni* about one fifth length of claw); claw subcylindrical and bisinuate (when viewed from above), long and robust, but not abrupt, apex reaching from middle of urosternite IV (in *F. barbicus*), to just past apex of abdomen (in *F. manni*). Metatibiae with dense, long-haired brush; strongly arced outwards (when viewed from above); shorter than metafemora, or slightly longer (in male *F. manni*); moderately slender, gradually widening from base to apex; extreme apex not strongly widened, but distinctly wider than metatarsus. Metatarsus rather short, less than half length of metatibia (in *F. barbicus*), or more than half as long (in *F. manni*); moderately narrow; metatarsomere I subcylindrical, gradually widening

from base to apex; slightly longer than length of II + III (in *F. barbicus*), or slightly shorter than II + III (in *F. manni*); II moderately elongate, and subcylindrical (base not visibly pediculate); III with long lobes (especially the lateral one in *F. manni*), weakly divergent, narrow and hardly rounded at sides (in *F. manni*), or wider and more rounded (in *F. barbicus*).

Male genitalia (Figs. 6, 7): aedeagus with characteristic tegmen, strongly arced (from apex of basal piece to apex of lateral lobes), and tongs-shaped in appearance; median lobe typical of many Rhinotrugini. *Tegmen*: lateral lobes (parameres) paddle-shaped; short (in *F. manni*), or long (in *F. barbicus*); each lobe with basal half triangular, apical half strongly widening to apical lobe, the latter large and densely setose (in *F. barbicus*), or moderately large and weakly setose (in *F. manni*), the setae long and moderately thick (in *F. barbicus*), or short and fine (in *F. manni*); basal piece Y-shaped (in *F. barbicus*), or V-shaped (in *F. manni*). Median lobe: moderately long (about 1.5 mm); rather robust and strongly arced (in *F. manni*), or less so (in *F. barbicus*); with sharply acuminate apex (when viewed laterally and dorsally); and dark bodies not evident.

Surface ornamentation: dorsad subglabrous (in *F. barbicus*), more pubescent (in *F. manni*), as follows: some fine, recumbent pubescence on frons; long semi-recumbent sparse, and untidy pubescence on apical half and sides of pronotum, the hairs sparser and slightly ochraceous in colour (in *F. barbicus*), or white, and denser on apical half of pronotum (in *F. manni*); elytra with short suberect hairs across base, otherwise almost glabrous. Underside generally pubescent (more so in *F. manni*); prosternum with dense to moderately dense, erect, long hairs, especially towards midline; mesosterna generally clothed with short, moderately dense, recumbent pubescence, in male becoming very dense on mesepimerum, the hairs ochraceous in colour (in *F. barbicus*), or white (in *F. manni*); metasternum clothed with moderately long and fine, recumbent pubescence, much denser in male, silvery-white (in *F. barbicus*), snow white (in *F. manni*), and towards sides and apex augmented by longer, more erect hairs, these spreading to metepisterna. Abdominal pubescence with markedly different aspect in the two species, the hairs not dissimilar (more or less uniformly distributed, recumbent, relatively dense in male, and white in colour), but the hairs very fine and short, and not at all remarkable (in *F. barbicus*), much longer and thicker, and, thereby, much more remarkable (in *F. manni*); and latero-basal

angles of urosternites I-IV with arc of dense white pubescence (in *F. manni*), much reduced, or apparently absent (in *F. barbicus*). In female pubescence on apical tergite also markedly different in the two species: apical tergite without dense recumbent pubescence (in *F. manni*), or clothed with dense, creamy-yellow, recumbent pubescence (in *F. barbicus*).

Puncturation on vertex of head and pronotum generally contiguous, uniformly small and alveolate; elytra similarly, and almost as densely punctured, towards base of elytra the punctures subalveolate and beveled; only on translucent panels sparse and shallow. Mentum-submentum in both sexes almost glabrous (and lacking long hairs); with transverse patch of contiguous, small alveolate punctures (with small, smooth area near centre), the patch, itself, almost non-carinate, the posterior margin followed by a few transverse carinas. Puncturation on ventral surface generally small and dense, but of three types, as follows: on prosternum rugose, contiguous and confluent, and alveolate, with a mixture of small and slightly larger punctures embedded in matrix of micropunctures; similar on meso- and metasterna, but not at all rugose (and predominantly composed of micropunctures on mesosterna), slightly more rugose, with mixture of deeper and larger alveolate punctures, and simple ones, evenly distributed across the surface of metasterna (but disc of latter uniformly micropunctate in male *F. manni*); abdomen very densely micropunctate, the punctures shallower, less alveolate, and often beveled.

The species included in this new genus are *Fissapoda barbicus* (Kirby, 1818) and *Fissapoda manni* (Fisher, 1930).

Etymology: the name of the genus is a combination of the Latin words “*Fissa*” (to indicate its fissate elytra), and “*poda*” (to indicate its probable relationship with the phygopodine Rhinotrugini). The genus is neuter.

***Fissapoda barbicus* (Kirby, 1818) comb. nov.**

Figs. 1A, 1B, 1C, 6

Necydalis barbicus Kirby, 1818: 443; 1834: 68.

Epimelitta barbicus; Monné, 2005: 460 (cat.).

Diagnosis: see under the description of *F. manni*.

Redescription: male (Figs. 1A, 1B): rather robust; length of forebody 0.8 times length of abdomen (5.75 mm); prothorax 1.19 wider than width of head across eyes (1.55 mm).

Colour: body generally black, or almost so; underside of head, mandibles, labrum and clypeus may be dark chestnut; antennae dark chestnut, or blacker, and all antennomeres weakly annulated with ochraceous-yellow; extreme elytral apex nearly always ochraceous yellow or rufous-chestnut; metafemora with ochraceous-yellow peduncles, claves black or dark chestnut dorsally, rufous-chestnut ventrally; metatibia with basal quarter yellowish; metatarsi blackish or dark rufescent.

Structure: head robust; rostrum 3.29 wider than long (0.35 mm). One inferior lobe of eye 3.50 wider than interocular distance (0.20 mm). Distance between superior lobes of eyes twice width of one lobe (0.25 mm). Distance between antennal tubercles 2.67 width of scape (0.30 mm). Lengths of antennal segments: scape 0.70 mm; pedicel 0.2 mm; III-VI 0.60 mm; VII and VIII 0.55 mm; IX 0.50 mm; X 0.45 mm; XI 0.50 mm.

Prothorax 1.08 longer than wide (1.85 mm); prothoracic quotient 3.33; apical margin as wide as basal margin (1.65 mm). Procoxal cavity 8.67 wider than base of prosternal process (about 0.08 mm). Mescoxal cavity 1.44 wider than base of mesosternal process (0.45 mm). Elytra 1.36 longer than width across humeri (2.20 mm); just passing metacoxae. Length of mesosternum 1.00 mm; length of metasternum 1.25 mm. Abdominal segments incrementally shorter towards apex; length urosternite I 1.60 mm; II 1.25 mm; III 1.15 mm, IV 0.90 mm; V 0.60 mm. Ratio front/middle/hind leg 1.0:1.1:2.4. Profemur 1.17 longer than protibia (1.50 mm); mesofemur 1.40 longer than length of mesotibia (1.50 mm); mesofemur 2.47 longer than width of clava (0.85 mm). Body 1.2 longer than hind leg (about 10.4 mm); metafemoral clava 2.40 longer than peduncle (1.25 mm); apex of metafemora reaching middle of urosternite IV. Metatibia 0.92 times length of metafemur (4.25 mm); metatibia 1.73 longer than metatarsus (2.25 mm); brush occupying apical three-quarters of tibia. Metatarsomere I 1.06 longer than length of II + III.

Description of female (Fig. 1C): sexual dichromatism diminished, but in female elytra with all of apical third ochraceous-yellow.

Structural dimorphism only moderately strong; differing significantly from male by the following characters: forebody 0.96 times length of abdomen (5.75 mm); prothorax 1.42 wider than width of head across eyes (1.55 mm); rostrum 2.40 wider than long (0.50 mm). One inferior lobe of eye 0.91 times interocular distance (0.55 mm). Distance between su-

terior lobes 2.40 width of one lobe. Antennae reach middle of metacoxae; antennomere III 0.77 times length of scape (0.65 mm). Length of prothorax 0.93 times its width (2.20 mm); prothoracic quotient 3.15. Procoxal cavity 6.50 wider than base of prosternal process (0.10 mm). Mesocoxal cavity 1.08 wider than base of mesosternal process (0.60 mm). Elytra reaching base of urosternite I. Ratio front/middle/hind leg 1.0:1.2:2.6. Mesofemur 2.67 longer than width of clava (0.75 mm). Metafemoral clava 2.61 longer than peduncle (1.15 mm). Metatibia 1.93 longer than metatarsus (2.05 mm). Metatarsomere I 1.13 longer than length of II + III.

Specimens analysed: BRAZIL, *Santa Catarina:* Nova Teutônia, 1 male, XI.1935, 1 female, IX.1935, B. Pohl col. (MZUSP).

Specimen examined: BRAZIL, *Santa Catarina:* Rio Vermelho, 1 male, III.1960, Dirings col. (MZUSP); Nova Teutonia, 1 male, 04.I.1940, 2 males, 09.I.1940, Tippmann collection, '57 # 213112 (USNM); Hansa Humboldt, 1 female, Tippmann collection, '57 # 213112 (USNM); *Paraná:* Caviuna, 1 female, I.1944, A. Maller collection (USNM). ARGENTINA, *Misiones:* El Soberbio, 1 female, 11.XII.1982, S. Bolle col. (ACMT). PARAGUAY, *Concepción:* Horqueta, 1 male, Tippmann collection, '57 # 213112 (USNM); *Cordillera:* Inst. Agr. Nac. Caacupe, 1 male and 2 females, 01.XI.1980, 2 males and 2 females, 08-13.I.1981 R.D. Cave col. (EMEC 202,825-831); *Guaira:* Villarrica, 1 female, Tippmann collection, '57 # 213112 (USNM).

***Fissapoda manni* (Fisher, 1930) comb. nov.**

Figs. 2A, 2B, 2C, 7

Phygopoda manni Fisher, 1930: 15.

Epimelitta manni; Monné, 2005: 461 (cat.).

Diagnosis: this species is readily separated from *Fissapoda barbicus* by the following: in *F. manni* hind legs appear to be longer (as the abdomen is short), with apex of metafemora passing apex of elytra in male, in female reaching middle of urosternite V (in both sexes of *F. barbicus* apex of metafemora do not pass apex of elytra, and only reach middle of urosternite IV); in *F. manni* apex of elytra rather narrow, and normally black, only in specimens with pale rufous metafemora apex ochraceous-orange (in *F. barbicus* apex of elytra rather broad, and always ochraceous-orange); in males of *F. manni* prothorax subcylindrical and pro-

notal calli weakly developed (in *F. barbicus* prothorax cylindrical, more so in male, and pronotal calli prominent, disrupting profile of sides); in *F. manni* male abdomen more fusiform and short (in *F. barbicus* more cylindrical and longer); in female *F. manni* apical tergite without dense recumbent pubescence (in female *F. barbicus* clothed with dense, creamy-yellow, recumbent pubescence); in *F. manni* metatibial brush shorter, occupying apical two-thirds of tibia (in *F. barbicus* brush occupying apical three-quarters of tibia); in *F. manni* metatarsomere I shorter than II + III together, I/II + III 0.9 (in *F. barbicus* I/II + III 1.1).

In the field identification only requires a cursory glance at the underside; in both sexes of *F. manni* the abdomen is densely clothed with recumbent, long, white pubescence (in both sexes of *F. barbicus* the abdomen is only sparsely, and not eye-catchingly pubescent).

Redescription: male (Fig. 2A): moderately robust; length of forebody 1.06 length of abdomen (4.70 mm); prothorax 1.29 wider than width of head across eyes (1.55 mm).

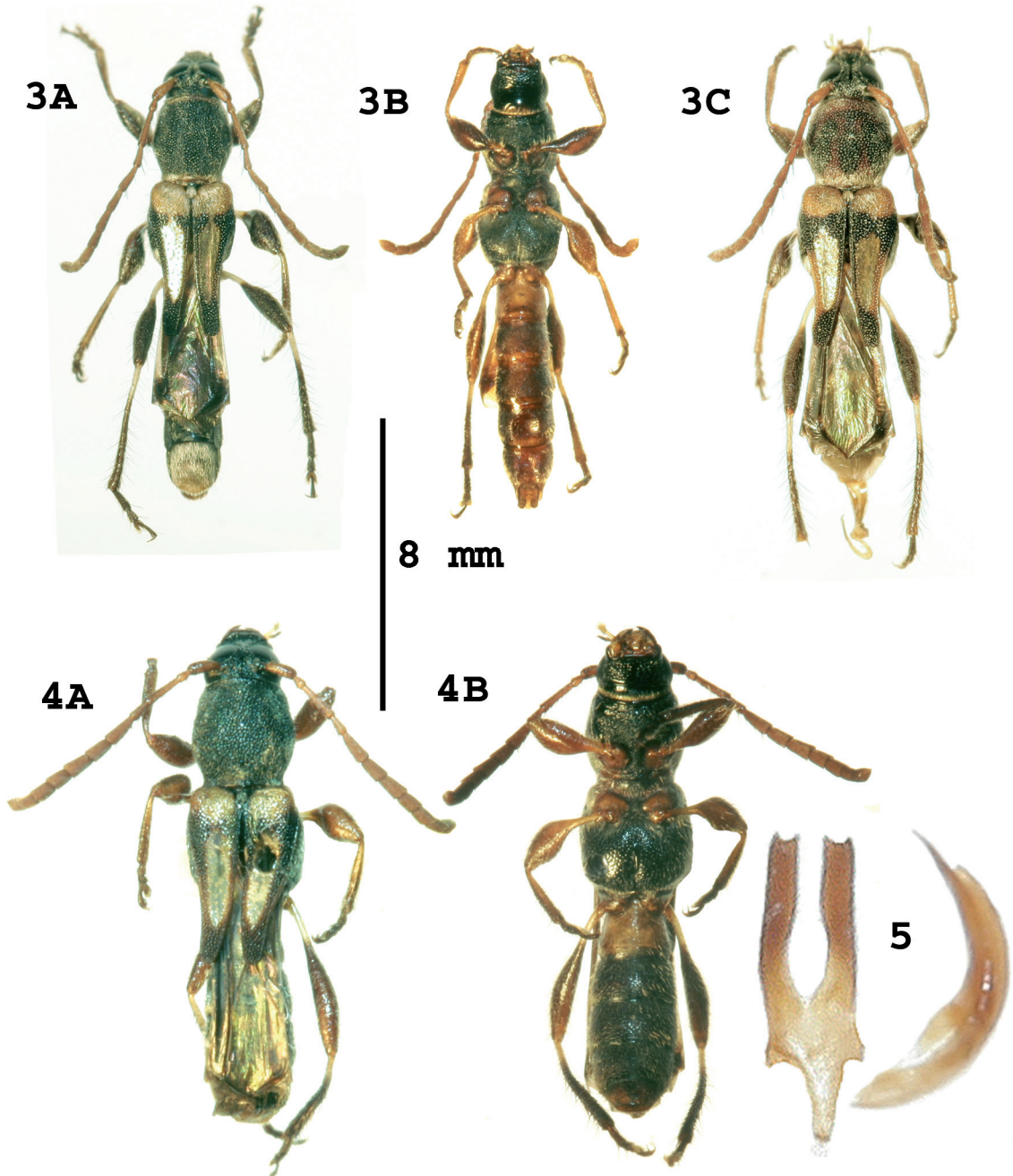
Colour: body generally black, base of mandibles, labrum and clypeus usually pale chestnut; antennomeres uniform pale chestnut (without paler annulations); apical third of elytra nearly always black (but see pale forms, and in some males from Brazil apices of elytra rufescent and abdomen partly, or entirely pale chestnut); metafemora black (mostly pale chestnut in pale forms), with base of peduncles pale yellow; metatibia with basal sixth yellowish; metatarsi yellow.

Structure: head rather narrow and female-like; rostrum 3.83 wider than long (0.30 mm); one inferior lobe of eye 4.67 wider than interocular distance (0.15 mm). Distance between superior lobes of eyes twice width of one lobe (0.25 mm). Distance between antennal tubercles 3.20 width of scape (0.25 mm). Lengths of antennal segments: scape 0.70 mm; pedicel 0.20 mm; III 0.60 mm; IV 0.50 mm; V and VI 0.55 mm; VII and VIII 0.50 mm; IX 0.45 mm; X 0.40 mm; XI 0.50 mm. Prothorax 1.05 longer than wide (2.00 mm); prothoracic quotient 2.21; apical margin 0.94 times width of basal margin (1.65 mm). Procoxal cavity 8.67 wider than base of prosternal process (about 0.08 mm). Mesocoxal cavity 1.09 wider than base of mesosternal process (0.55 mm). Elytra 1.35 longer than width across humeri (2.15 mm); just passing metacoxae. Length of mesosternum 1.05 mm; length of metasternum 1.25 mm. Abdominal segments I-IV incrementally shorter, IV and V equal in

length; length urosternite I 1.45 mm; II 0.85 mm; III 0.80 mm, IV and V 0.60 mm. Ratio front/middle/hind leg 1.0:1.1:2.8. Profemur 1.11 longer than protibia (1.40 mm); mesofemur 1.48 longer than length of mesotibia (1.35 mm); mesofemur 2.50 longer than width of clava (0.80 mm). Body and hind leg equal in length (about 11.4 mm); metafemoral clava 5.07 longer than peduncle (0.75 mm); apex of metafemora

just passing apex of abdomen; metatibia 1.02 longer than metafemur (4.55 mm); metatibia 2.11 longer than metatarsus (2.20 mm); metatibial brush occupying apical two-thirds. Metatarsomere I 0.89 times length of II + III.

Redescription of female (Figs. 2B, 2C): females are rather scarce in collections, but those examined hardly



FIGURES 3-5: 3, *Epipoda abeli* sp. nov.: A, male holotype, B, male paratype ventral aspect, C, female paratype. 4, *Epipoda vanini* sp. nov.: A, female holotype, B, female holotype ventral aspect. 5, *Epipoda abeli* sp. nov.: genitalia (length of median lobe about 1.2 mm), tegmen (left), median lobe (right).

differing from males in colour (except apparent lack of rufous forms among this sex).

Structural dimorphism only moderately strong; differing significantly from male by the following characters: forebody and abdomen equal in length (5.00 mm); prothorax 1.42 wider than width of head across eyes (1.55 mm); rostrum 3.00 wider than long (0.40 mm); one inferior lobe of eye 0.91 times interocular distance (0.55 mm); distance between superior lobes 2.80 width of one lobe. Antennae reach middle of metacoxae; antennomere III 0.77 times length of scape (0.65 mm). Length of prothorax 0.97 times its width (2.00 mm); prothoracic quotient 2.35. Procoxal cavity 6.00 wider than base of prosternal process (0.10 mm). Width of mesocoxal and base of mesosternal process equal (0.65 mm). Elytra reaching base of urosternite I. Ratio front/middle/hind leg 1.0:1.1:2.9. Mesofemur 2.86 longer than width of clava (0.70 mm). Metafemoral clava 3.17 longer than peduncle (1.15 mm). Metatibia 2.24 longer than metatarsus (2.10 mm). Metatarsomere I 0.94 times length of II + III.

Specimens analysed: BOLIVIA, *Santa Cruz:* 5 km SSE Buena Vista, 17°29'96"S/63°39'13"W, 440 m, Hotel Flora & Fauna, flying to/on felled "Penoco" sapling, 1 male, 11.III.2005, and 1 female, 17.III.2005, Clarke & Zamalloa col. (RCSZ).

Specimen examined: data as above, 1 male, 16.III.2005, and 1 male in cop with 1 female, 01.IV.2005, Clarke & Zamalloa col. (RCSZ).

Same locality, different host flowers: flying to/on flowers of "Barbasquillo" vine, 4 males, 02-03.VIII.2005, 2 males 28.VIII.2005, and 1 male, 03.IX.2005, Clarke & Zamalloa col. (RCSZ); flying to/on flowers of "Barbasquillo" B vine, 1 male, 23.X.2007, Clarke & Zamalloa col. (RCSZ); flying to/on flowers of "Bejuco hoja lanuda", 1 male, 30.IV.2005 and 1 male, 02.V.2005, Clarke & Zamalloa col. (RCSZ); flying to/on flowers of *Gomphrena vaga*, 1 male, 12.VIII.2007, 1 male, 21.VII.2008, and 1 male, 29.VII.2008, Clarke & Zamalloa col. (RCSZ); flying to/on flowers of "Guabira" tree, 2 males, 02.X.2005, Clarke & Zamalloa col. (RCSZ); flying to/on flowers of "Mango" tree, 1 male, 03.IX.2005, Clarke & Zamalloa col. (RCSZ); flying to/on flowers of "Turere" tree, 5 males, 07-09.X.2005, Clarke & Zamalloa col. (RCSZ).

Other locality and different host flower: BOLIVIA, *Santa Cruz:* 12 km ENE Buena Vista, road to San Javier,

on/flying to flowers of "Sama Blanca Chica", 1 male, 06.XI.2007, Clarke & Zamalloa col. (RCSZ).

Different country and data: BRAZIL, *Goiás:* Chapada, 5 males and 2 females (Acc. No. 2966, CMNH); *Pará:* Santarém, 1 male (Acc. No. 2966, CMNH).

Comment: the species was observed mating, and the females ovipositing, on the same "Penoco" sapling, making this the first host plant record for this species. "Penoco" is *Samanea tubulosa* (Benth.) of the family Mimosaceae.

Epipoda gen. nov.

Figs. 3, 4

Type species: *Epipoda abeli* sp. nov., here designated.

Diagnosis: *Epipoda* differs from all species of *Epimelitta* (s. auct.) and *Pseudophygopoda* (and its related genera) by its closed coxal cavities; except for one species, *Epimelitta postimelina* Giesbert, 1996, yet to be removed from this genus, which differs from *Epipoda* by its large size, fissate, relatively long elytra, and metatibial brushes.

Species of *Epipoda* are rather small, with short subulate (but not lobed), outwardly curved elytra (with distinct translucent panels), and with rather short, tumid hind femora; a combination of characters not found in any other genus, but approached by some species of *Ecliptoides* Tavakilian & Peñaherrera-Leiva, 2005 and *Cleptoides* Clarke, 2009, but in both these genera the elytra are longer, reaching beyond middle of urosternite II (hardly passing base of II in *Epipoda*), and legs generally much more slender than in *Epipoda*. *Tomopterchasia* Clarke, 2013 with elytra only just passing metacoxae (at least nearly reaching hind margin of urosternite I in *Epipoda*), and metafemora more slender than in *Epipoda*.

Odontocera mellea White, 1855, yet to be removed from this genus, has an undeniable similarity to species of *Epipoda*. Nevertheless, body of *O. mellea* is much more robust than the rather flattened form in *Epipoda*; elytra only slightly longer (reaching apical third of urosternite II), but with sharply truncate and armed apices (apices truncate and unarmed in *Epipoda*), and antennae longer (reaching base of urosternite II) and more filiform than in *Epipoda*.

Epipoda has one last character that is unique: the lateral lobes of the tegmen have distinctly notched apices (Fig. 5); among the many Rhinotragini genitalia examined so far the apices of lateral lobes are

rounded, or acuminate, but not truncate and excavate as in *Epipoda*.

Description of genus: small (about 8.0 mm), but moderately robust, compact species; forebody and abdomen of equal length (in male), longer than abdomen (in female).

Head with eyes distinctly narrower than width of prothorax. Rostrum short (about half length of inferior lobe of eye), 2.8-3.2 wider than long. Apical palpomeres cylindrical with truncate apices. Labrum short, two times wider than long; front margin straight, but declivous. Inferior lobes of eyes weakly convex (in female rather flat), slightly longer than wide; not contiguous, in male width of one lobe more than three times interocular distance, in female width of lobe 1.1-2.5 interocular distance; their distal margins lying adjacent to genae, proximal margins transverse. Superior lobes of eyes small and narrow, the distance between them about three times their own width; with 10 rows of ommatidia mesally, narrowed to 5 rows laterally. Mentum-submentum multicarinate and densely punctured (in transverse patch in both sexes). Antennal tubercles hardly prominent, the surface between them unusually rather flat. Antennae short, not reaching apex of urosternite I; filiform basally, crassate apically (especially in female *E. vanini*); scape subpyriform (when view from above cylindrical, with base of segment characteristically truncate and narrowly pediculate), hardly shorter, to distinctly shorter, than antennomere III; antennomeres III and IV filiform; III much longer than other antennomeres; IV short, about half length of III; V longer than IV and VI-XI, crassate in female *E. vanini*, in *E. abeli* somewhat widened in male, less so in female; VI-X intermittently shorter towards apex, and hardly serrate; VI and VII, and VII and IX usually equal in length, X always slightly shorter; XI as long as VI and VII, rather rounded with small apical cone. Prothorax subcylindrical, moderately elongate in male, quadrate and more rounded at sides in female; sides widest before or behind middle; in male sides rounded for middle third, usually almost straight and moderately converging to apical margin, and sometimes more rounded (and always rather strongly converging) to basal constriction. Disc of pronotum weakly convex and broadly flattened; surface slightly irregular, with weakly raised calli as follows: a pair of broad ones forming an arc towards sides of disc; and, only in male, a broad, parallel-sided callus occupying most of midline (this one so weakly raised it may not qualify for status of callus, but is made to look more like one by what appears to be a moderately depressed, nar-

row channel separating the median callus from the lateral ones); surface in female hardly irregular, with very weak pair of lateral calli only; apical constriction absent, basal constriction very narrow and almost planar with disc for middle third; apical and basal margins about equally wide, their borders weakly raised and narrow. Prosternum weakly declivous across apical third, in male almost flat, in female tumid at middle; prosternal process not arced, in male planar with prosternum, in female lying slightly below level of prosternum. Base of prosternal process long, in male moderately narrow, but not laminate (about five times narrower than width of procoxal cavity), in female wider (about one third width of coxal cavity); apex of process in male trapezoidal and transverse, in female a less transverse equilateral triangle. Procoxal cavities plugged at sides, just closed behind. Mesosternum strongly declivous, but in male mesosternal process inclined (*ca.* 45° of slope) from base to its apex, in female nearer vertical. Mesosternal process with moderately broad, flat base (in female about one third width of mesocoxal cavity, in male slightly narrower); towards apex sides rather strongly divergent, and apical margin deeply excavate, to form two rather narrow acuminate lobes. Mesocoxal cavity rather narrowly open to mesepimeron, the latter narrow at middle, 3-4 times wider at lateral and mesal margins. Elytra subulate with moderately broad truncate apices (apex slightly oblique in female), rather flat, without humero-apical costa; short, 1.7-1.9 longer than width of humeri; reaching from apex of urosternite I to basal third of II; humeri moderately projecting and prominent, not quite hiding sides of mesosterna (when viewed from directly above); incrementally dehiscent for apical two-thirds; the latter slightly to moderately strongly curved outwards; apices unarmed; each elytron with translucent panel occupying central half. Mesosternum in female slightly shorter than metasternum (0.9 length of metasternum), in male shorter (0.8 length of metasternum). Metathorax broad and somewhat tumid, but flattened on disc (even so, more prominent than mesocoxae); sides rounded from base to middle of apex; longitudinal suture represented by very narrow sulcus, lying in broad depression on apical two thirds of metasternum. Metepisternum moderately broad at base and subacuminate at apex, with unusual shining, impunctate, triangular area between basal and lateral margins. Abdomen in male almost cylindrical, annulated, moderately narrow (narrowest at base and apex of urosternite I, moderately widening to apex IV/base of V; urosternite I slightly elongate, II weakly transverse, III-V distinctly transverse. Male urosternite V weakly trapezoidal

with rounded sides; well differentiated: with narrow, bell-shaped soleate depression reaching from base to apex, delineated laterally by narrow, weakly raised sides; sides of urosternite not alate (when viewed from the side); apical margin truncate. Abdomen in female much as male in shape, slightly more fusiform and much wider; narrowest at base of urosternite I, widening to middle of III, contracted to apex of V; all segments transverse; urosternite I subconical. Female urosternite V undifferentiated and not downturned, short and subconical, contracted near apex, (leaving apical third parallel-sided in *E. abeli*); apical margin hardly rounded. Abdominal process in male a narrow isosceles triangle, distinctly inclined (about 20°), and intimately inserted between metacoxae; in female broader, and hardly inclined to abdomen. Ratio front/middle/hind leg 1.0:1.1-1.2:1.8-1.9. Front and middle legs rather short; strongly pedunculate-clavate. Protibiae slightly shorter than profemora, straight, narrow at base, gradually widening to middle (in male *E. abeli*), or cylindrical for apical two-thirds (in female); apical margin oblique, and in female micro-tuberculate. Pro- and mesofemoral claws broad and abrupt (when viewed from the side), the latter flatter laterally, strongly tumid mesally (when viewed from above); profemoral peduncle short and moderately narrow; mesofemoral peduncle flat and narrow, about half length of claw; mesofemora longer than mesotibia. Hind legs relatively short (lengths body/hind leg 1.3-1.4); metafemoral peduncle slightly flattened, moderately broad and short (about half length of claw); claw fusiform, weakly abrupt, apex reaching from apical third of urosternite III to basal quarter of V. Metatibiae clothed with long, narrow, sparse setae; bisinuate (when viewed from above); longer than metafemora; slender, gradually widening from middle to apex; extreme apex rather abruptly, but not strongly widened, and distinctly wider than metatarsus. Metatarsus rather short (less than half length of metatibia), and narrow; metatarsomere I cylindrical in male (gradually widening from base to apex in female), short (but slightly longer than length of II + III); II moderately elongate, trapezoidal (base not pediculate); III small, short, and narrow, the lobes hardly diverging.

Male genitalia (based on *E. abeli*, fig. 5): aedeagus with characteristic tegmen; median lobe typical of many Rhinotragini. *Tegmen*: lateral lobes (parameres) long (length of lateral lobe 0.75 mm) and rather flat; each lobe almost equally wide (about 0.13 mm) from base to apex, moderately arced for basal half; apical margin of each lobe distinctly and abruptly excavate,

and hardly setose; basal piece somewhat characteristic, V-shaped, short and rather narrow (and lacking stem of Y-shaped basal piece). Median lobe: moderately long (about 1.2 mm), slender, modestly arced; with acuminate apex (when viewed laterally), rounded with small acuminate projection (when viewed dorsally); and dark bodies not evident.

Surface ornamentation: dorsad subglabrous; some fine, recumbent pubescence on frons, long suberect pubescence on pronotum, and noticeably denser, long suberect, and short recumbent mixture of hairs on basal third of elytra. Underside generally pubescent (more so in *E. abeli*); brassy or silver coloured patches of recumbent pubescence on sides of mesothorax (particularly dense and yellower on mesepimeron and adjacent side of mesosternum), covering most of metasternum in male (basal part in female), and most of abdomen in female, less so in male (maybe rubbed); longer, suberect, ashy-coloured hairs on prosternum (untidy), and in rows on apical half of metasternum, and metepisternum, and scattered across surface of abdomen.

Puncturation on vertex of head and pronotum generally contiguous, uniformly small and alveolate (in the male *E. abeli* mixed with micropunctures in the narrow channels separating the lateral calli from the midline); elytra similarly, and almost as densely punctured, towards base of elytra the punctures subalveolate and beveled; on translucent panels sparse and shallow. Ventral surface generally covered by much finer puncturation, consisting of dense, very small, semi-alveolate punctures lying on smooth, reticulate surface; in a transverse patch across basal two-thirds of prosternum, on basal two-thirds of metasternum, and away from margins of each urosternite.

The species included in this genus are *Epipoda abeli* sp. nov. and *Epipoda vanini* sp. nov.

Etymology: the name of the genus is a combination of the Latin words “*Epi*” (to indicate its relative similarity to the epimellitines), and “*poda*” (its probable, closer, relationship with the phygopodines). The genus is neuter.

***Epipoda abeli* sp. nov.**
Figs. 3A, 3B, 3C, 5

Holotype: male, 8.65 mm, deposited in the MNKM.

Diagnosis (based on females of nearly equal size): both species very much the same in most characters; but rather different in those that follow: in *E. abeli* sides of

elytra adjacent to translucent panels rufous and black (in *E. vanini* entirely black); in *E. abeli* pro- and meso-femora black with chestnut sides (in *E. vanini* all femora entirely chestnut); in *E. abeli* abdomen blackish, with urosternite I mostly yellow, II-IV with patches of yellow, and V entirely yellow (in *E. vanini* abdomen black, and only urosternite I yellow); in *E. abeli* interocular of inferior lobe of eyes 1.38-1.46 width of one lobe (in *E. vanini* interocular 2.50 wider than width of one lobe); in *E. abeli* antennae slightly more slender; scape longer and wider, 1.2×0.5 units; antennomeres V-XI less crassate, and middle of V hardly wider than apex of IV (in *E. vanini* scape shorter and narrower, 1.0×0.4 units; antennomeres V-XI distinctly more crassate, with middle of V distinctly wider than apex of IV); in *E. abeli* all tibiae noticeably longer and more slender (in *E. vanini* all tibia comparatively robust); in *E. abeli* metatibia bisinuate when viewed from the side, straight when viewed from above (in *E. vanini* metatibia straight when viewed from the side, bisinuate when viewed from above), and in *E. abeli* metatibial setae long and narrow, and nowhere dense (in *E. vanini* metatibial setae shorter and thicker, and somewhat dense towards apex).

Description of holotype (Figs. 3A, 3B): length of forebody and abdomen both 3.75 mm; prothorax 1.27 wider than width of head across eyes (1.10 mm).

Colour: the following black: head (except basal two-thirds of mandibles, labrum and clypeus pale chestnut), prothorax (only post coxal process pale

chestnut), meso- and metasterna (except sides of mesosterna pale chestnut), and abdomen (except disc of urosternite I and apical tergite with pale chestnut infusion). Mouthparts yellowish, apical palpomeres black. Elytra with basal fifth brownish-buff, posteriorly black, except for translucent panels (the latter entirely framed by black colour, except anteriorly where the frame is narrowly interrupted). Antennae entirely pale chestnut. Front and middle legs pale chestnut with black infusion on claws and tarsi (only mesofemoral peduncles and base of mesotibia yellow); hind legs with yellow femoral peduncles, chestnut infused with black claws, black tibia (with basal quarter yellow), and black tarsi; on all legs coxae (and narrow area around procoxal cavity) pale chestnut.

Structure: rostrum 2.83 wider than long (0.30 mm); one inferior lobe of eye 3.33 wider than interocular distance (0.15 mm). Distance between superior lobes of eyes 3.33 width of one lobe (0.15 mm). Distance between antennal tubercles 2.50 width of scape (0.20 mm). Lengths of antennal segments: scape 0.55 mm; pedicel 0.2 mm; III 0.7 mm; IV 0.35 mm; V 0.50 mm; VI and VII 0.40 mm; VIII and IX 0.35 mm; X 0.30 mm; XI 0.40 mm. Prothorax 1.10 longer than wide (1.45 mm); prothoracic quotient 1.88; apical margin 1.05 wider than basal margin (1.10 mm). Procoxal cavity 5.50 wider than base of prosternal process (0.10 mm). Mesocoxal cavity 3.67 wider than base of mesosternal process (0.15 mm). Elytra 1.87 longer than width across humeri (1.50 mm); reaching base of urosternite II.



FIGURES 6-7: Genitalia (length of median lobes about 1.5 mm): 6, *Fissapoda barbicus*, A, tegmen dorsal aspect, B, tegmen ventral aspect, C, median lobe lateral aspect. 7, *Fissapoda manni*, A, tegmen dorsal aspect, B, tegmen ventral aspect, C, median lobe lateral aspect.

Length of mesosternum 0.75 mm. Length of metasternum 0.95 mm. Abdominal segments incrementally shorter towards apex; length urosternite I 1.00 mm; II 0.75 mm; III 0.70 mm, IV 0.65 mm; V 0.60 mm. Urosternite IV with moderately deep, round fossa occupying most of ventral surface. Ratio front/middle/hind leg 1.0:1.2:1.8. Profemur 1.13 longer than protibia (1.15 mm); mesofemur 1.18 longer than length of mesotibia (1.40 mm); mesofemur 2.75 longer than width of clava (0.60 mm); length of body 1.4 longer than hind leg (5.9 mm); metafemoral clava 1.87 longer than peduncle (0.80 mm); apex of metafemora reaching apical third of urosternite III; metatibia 1.07 longer than metafemur (2.30 mm); metatibia 2.13 longer than metatarsus (1.15 mm); metatarsomere I about 1.13 longer than length of II + III.

Variation: among the 14 male paratypes colour variation modest: apical palpomeres often chestnut; apical and basal borders of prothorax chestnut in many specimens; basal third of elytra more ochraceous in many specimens; black frame surrounding translucent panels on elytra entire in some specimens, but latero-posteriorly black colour replaced by pale chestnut in most specimens; mesotibia may be entirely pale chestnut; metatarsus in many paratypes chestnut; margins of all coxal cavities vary from entirely black to entirely chestnut.

Structural variation: one inferior lobe of eye 3.00-4.50 wider than interocular distance, the quotient only smaller than holotype in one example. Prothorax 1.07-1.15 longer than wide, the average quotient about the same as that of holotype. Antennomere III 1.27-1.36 longer than scape, the quotient as holotype for two paratypes, larger for the rest. Elytra 1.83-2.16 longer than width across humeri, the quotient larger than holotype in three paratypes (in one of which length of elytra more than twice width across humeri).

Description of female (Fig. 3C): colour much as male in both species; labrum and clypeus darker; in one paratype black frame surrounding translucent panels on elytra entire (except for latero-posterior pale chestnut section); in one paratype pronotal disc mottled with rufous-chestnut, and sides broadly rufous-chestnut; basi-lateral margins of urosternites II-IV, and all of V, pale chestnut; femoral claws and antennae darker.

Structural dimorphism somewhat reduced in this species, but female differs significantly from male by the following characters: rostrum 3.17 wider than long (0.30 mm). One inferior lobe of eye 1.38-1.46 wider than interocular distance (0.32 mm).

Antennomeres generally less crassate, middle of V not wider than apex of IV, and apex of V only 4,0 units wide; and VII-IX 4,0 to nearly 5,0 units wide; antennomere III 1.08 longer than scape (0.6 mm), and VII-IX of equal length (0.35 mm). Prothorax 1.03-1.06 longer than wide; apical margin 0.96 width of basal margin. Procoxal cavity 3.33 wider than base of prosternal process (0.18 mm). Mesocoxal cavity 3.14 wider than base of mesosternal process (0.15 mm). Elytra reaching basal 1/3 of II. Length of mesosternum 0.90 mm, and metasternum 1.00 mm. Urosternite I with strongly rounded sides, giving it a broadly conical appearance; urosternite IV not fossate. Ratio front/middle/hind leg 1.0:1.2:1.9. Mesofemur 2.91 longer than width of clava (0.55 mm). Metafemoral clava 2.13 longer than peduncle (0.80 mm); apex of metafemora reaching basal quarter of urosternite IV. Metatibia 2.30 longer than metatarsus (1.20 mm).

Measurements (mm): 15 males, 2 females: total length 7.55-9.00/8.65-9.15; length of pronotum 1.45-1.70/1.65-1.80; width of pronotum 1.35-1.50/1.60-1.70; length of elytra 2.45-2.95/2.95-3.05; width at humeri 1.35-1.65/1.60-1.75.

Holotype: male, BOLIVIA, *Santa Cruz*: 5 km SSE Buena Vista, 17°29'96"S/63°39'13"W, 440 m, Hotel Flora & Fauna, on felled trunk/branch of "Jorori", 04.IX.2005, Clarke & Zamalloa col. (MNKM).

Specimens analysed: holotype; location as for holotype, flying to/on flowers of "Barbasquillo", 1 female, 15.VIII.2005, Clarke & Zamalloa col. (RCSZ).

Specimen examined: same locality as holotype, on felled trunk/branch of "Jorori", 6 males, 04-05. IX.2005 (RCSZ); flying to/on flowers of *Gomphrena vaga*, 5 males, 08-15.VIII.2007, Clarke & Zamalloa col. (RCSZ); *ditto*, 1 male, 26.VII.2008 (FSCA), *ditto*, 1 male (USNM), *ditto*, 1 male (MZUSP); flying to/on flowers of "Ramaneo", 1 female, 14.VIII.2008, Clarke & Zamalloa col. (RCSZ).

Comment: since the species was observed mating, and the females ovipositing, on the same tree trunks and branches, "Jorori" is the first host plant record for this species. "Jorori" is *Swartzia jorori* Harms, of the family Fabaceae.

Etymology: this species is named in honour of my good friend, Abel Monasterio, to thank him for providing me with a personal, and much subsidised dental service.

Epipoda vanini sp. nov.

Figs. 4A, 4B

Holotype: female, 8.35 mm, deposited in the MZUSP. Male not known.

Diagnosis: see under *Epipoda abeli*.

Description of holotype (Figs. 4A, 4B): forebody about 1.22 longer than abdomen (estimated 3.35 mm); prothorax 1.33 wider than width of head across eyes (1.20 mm).

Colour: the following black: head (except mandibles, labrum and clypeus chestnut), prothorax (only post coxal process pale chestnut), meso- and metasterna (except sides of mesosterna pale chestnut), abdominal segments (except most of urosternite I with pale chestnut infusion, and apical tergite almost entirely pale chestnut). Mouthparts yellowish, apical palpomeres chestnut. Elytra with basal fifth pale chestnut, posteriorly black, except for translucent panels (the latter framed by black colour, except anteriorly where the frame is narrowly interrupted). Antennae entirely chestnut. Coxae, and margins of all coxal cavities partially, pale chestnut. Legs pale chestnut (the claws lacking black infusion), femoral peduncles and base of tibiae yellow (basal fifth of metatibia); tarsi almost black.

Structure: rostrum 3.00 wider than long (0.30 mm). Width of one inferior lobe of eye 2.50 interocular distance (0.2 mm). Distance between superior lobes of eyes 3.00 width of one lobe (0.15 mm). Distance between antennal tubercles 2.75 width of scape (0.20 mm). Scape short and narrow, 1.0 × 0.4 units; but antennomeres generally more crassate: middle of V much wider than apex of IV, and apex of V 5 units wide; and VII-IX 5 to nearly 6 units wide). Lengths of antennal segments: scape 0.50 mm; pedicel 0.20 mm; III 0.65 mm; IV 0.30 mm; V 0.50 mm; VI and VII 0.40 mm; VIII and IX 0.35 mm; X 0.30 mm; XI 0.40 mm. Prothorax 1.06 longer than wide (1.60 mm); prothoracic quotient 2.13; apical and basal margin equally wide (1.20 mm). Procoxal cavity 5.50 wider than base of prosternal process (0.10 mm). Mesocoxal cavity 3.67 wider than base of mesosternal process (0.15 mm). Elytra 1.72 longer than width across humeri (1.60 mm); nearly reaching apex of urosternite I. Length of mesosternum 0.90 mm, length of metasternum 1.00 mm. Abdominal segments incrementally shorter towards apex; length urosternite I 0.95 mm; II 0.75 mm; III 0.70 mm, IV 0.65 mm; V 0.45 mm (partly retracted). Urosternite IV without fossa. Ratio front/middle/

hind leg 1.0:1.2:1.9. Profemur 1.17 longer than protibia (1.15 mm); mesofemur 1.23 longer than length of mesotibia (1.30 mm); mesofemur 3.20 longer than width of clava (0.50 mm). Length of body 1.4 longer than hind leg (6.15 mm); metafemoral clava 1.78 longer than peduncle (0.90 mm); apex of metafemora reaching basal quarter of urosternite IV; metatibia 1.04 longer than metafemur (2.50 mm); metatibia 2.48 longer than metatarsus (1.05 mm); metatarsomere I about 1.13 longer than length of II + III.

Measurements (mm): holotype, total length 8.35; length of pronotum 1.70; width of pronotum 1.60; length of elytra 2.75; width at humeri 1.60.

Holotype: female, BRAZIL, *Pará*: Serra Norte, 11-14. VIII.1984, I.G. Fefoca col. (MZUSP).

Etymology: this species is named in honour of my good friend, Sergio Vanin, for his contributions to the knowledge of South American Coleoptera.

RESUMO

Dois gêneros novos são descritos: Fissapoda para duas espécies, *F. barbicus* (Kirby, 1818) e *F. manni* (Fisher, 1930), transferidas de *Epimelitta*; e *Epipoda* para duas espécies novas, *E. abeli* da Bolívia, e *E. vanini* do Brasil. Todas as espécies são ilustradas (incluindo a genitália) e as plantas e flores hospedeiras são registradas.

PALAVRAS-CHAVE: Bolívia; Cerambycinae; Plantas hospedeiras; Taxonomia.

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APPENDIX

Summary: Host plants utilised by Bolivian Rhinotragini

LOCAL NAME

| | | |
|--|----------------------------------|------------|
| Jorori | <i>Swartzia jorori</i> Harms | FABACEAE |
| <i>Epipoda abeli</i> sp. nov. | | |
| Penoco | <i>Samanea tubulosa</i> (Benth.) | MIMOSACEAE |
| <i>Fissapoda manni</i> (Fisher, 1930) comb. nov. | | |

Summary: Host flowers visited by Bolivian Rhinotragini

| | | |
|--|--|---------------|
| Barbasquillo | <i>Serjania lethalis</i> St. Hilaire | SAPINDACEAE |
| <i>Epipoda abeli</i> sp. nov. | | |
| <i>Fissapoda manni</i> (Fisher, 1930) comb. nov. | | |
| Barbasquillo "B" | indet | SAPINDACEAE |
| <i>Fissapoda manni</i> (Fisher, 1930) comb. nov. | | |
| Bejuco hoja lanuda | <i>Gouania mollis</i> Reiss. | RHAMNACEAE |
| <i>Fissapoda manni</i> (Fisher, 1930) comb. nov. | | |
| Gomphrena | <i>Gomphrena vaga</i> Mart. | AMARANTHACEAE |
| <i>Epipoda abeli</i> sp. nov. | | |
| <i>Fissapoda manni</i> (Fisher, 1930) comb. nov. | | |
| Guabirá | <i>Campomanesia aromatica</i> (Aublet) | MYRTACEAE |
| <i>Fissapoda manni</i> (Fisher, 1930) comb. nov. | | |
| Mango | <i>Mangifera indica</i> Linn. | ANACARDIACEAE |
| <i>Fissapoda manni</i> (Fisher, 1930) comb. nov. | | |
| Ramoneo | <i>Iresine diffusa</i> Willd. | AMARANTHACEAE |
| <i>Epipoda abeli</i> sp. nov. | | |
| Sama blanca chica | <i>Matayba guianensis</i> Aublet | SAPINDACEAE |
| <i>Fissapoda manni</i> (Fisher, 1930) comb. nov. | | |
| Turere | <i>Rhamnidium elaeocarpum</i> Reissek | RHAMNACEAE |
| <i>Fissapoda manni</i> (Fisher, 1930) comb. nov. | | |