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Autor(en): **Erber, Dieter / Medvedev, Lev N.**

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A revision of the genus *Barybaena* Lacordaire, 1848 (Chrysomelidae, Clytrinae)

by **Dieter Erber & Lev N. Medvedev**

Abstract. The genus *Barybaena* is revised and a key to the known species is given. Three new species are described: *Barybaena orangensis*; *B. somaliensis* and *B. tibialis* spp.nov. The following taxa are synonymised: *Damia strigatipes* Jacoby, 1904 syn.nov. (with *Barybaena lurida* Lacordaire, 1848), *B. lineella* (Lacordaire, 1848) syn.nov. and *B. bicoloripes* L. Medvedev, 1992 syn.nov. (both with *B. bilineolata* Lacordaire, 1848). *Smaragdina* (*Gynandrophthalma*) *vittigera* Lacordaire, 1848 is a synonym open to question.

Key words. Chrysomelidae – Clytrinae – South Africa – new species – new synonyms

Introduction

The relatively small genus *Barybaena* Lacordaire, 1848 has been the subject of recent intensive study but is still not very well known, partly because of very large differences between the sexes. For a long time, the genus was considered a subgenus of *Tituboea* Lacordaire, 1848. *Barybaena* was proposed by LACORDAIRE (1848), who described four species based of necessity on males only; however, he included almost all the females in the genus *Gynandrophthalma* Lacordaire, 1848. Later JACOBY (1898, 1901) described five more species that he placed partly in *Barybaena* (JACOBY 1901), partly in *Miopristis* Lacordaire, 1848 and *Damia* Lacordaire, 1848 (JACOBY 1898, 1901). Four more species were described by MEDVEDEV (1992, 1993a, b). All these species were found only in South Africa. Finally, two more species were found in East Africa (MEDVEDEV & REGALIN 1998).

Of 17 species known to date, 15 species are distributed in South Africa, especially in the Cape region (Cape – 10, Natal – 5, Transvaal – 4, Orange State – 1). In East Africa, the genus is represented very poorly (Tanzania – 1, Kenya – 1, Ethiopia – 1, Somali – 1). A preliminary key to species was published by MEDVEDEV (1993a).

Material and methods

For the current article, we have studied materials held in several European museums and in the collections of both authors, including almost all types.

External and internal characters have been used for differentiation of the species. Internal structures as aedeagus, spermatheca and kotpresse have been dissected, macerated in KOH and lateron fixed in Canada balsam on paper card, pinned together with the beetle.

Abbreviations

NHMB ..... Naturhistorisches Museum, Basel (Dr. E. Sprecher-Übersax)
NHML ..... British Museum of Natural History, London (Dr. S. Shute)
ZMHUB ..... Zoological Museum, Berlin (Dr. J. Frisch)
PCDE ..... Private Collection, Dieter Erber, Giessen
PCLM ..... Private Collection, Lev Medvedev, Moscow
PCRR ..... Private Collection, Renato Regalin, Milano

Taxonomy

Barybaena Lacordaire, 1848

Clythra (*Barybaena*): LACORDAIRE (1848): Monographia Phytophagorum vol. II: 95.
Type species: *Barybaena lurida* Lacordaire, 1848 (by present designation).

The genus might be characterised as follows: Eyes small and rounded (except for a small incision behind antennae), first antennal segment thick and short, mostly a little longer than wide, anterior margin of prothorax straight, elytra without epipleural lobe, pygidium covered by elytra, propleurae not pubescent, the first segment of anterior tarsus elongate. Sexual dimorphism is very marked. In the male, the prothorax is usually enlarged, anterior legs are enlarged and elongate, with strongly prominent coxae, very thick femora, thin and curved tibiae. The females closely resemble members of the genus *Smaragdina* Chevrolat, 1837. The structure of the prothorax is a important distinguishing character between females. This feature divides species of females into two groups: (1) a group with explanate and transparent lateral margins and an impressed line along the anterior margin (excepting *B. transvaalica* L. Medvedev, 1993 which has a flat impression only a little distant from the anterior margin); (2) a group with a row or cluster of deep punctures in the middle of the anterior margin, often combined with a triangular impression.

A key to species

(Length always given without head.)

1(14) Prothorax with broad explanate lateral margins.

2(3) Prothorax black or piceous with all margins narrowly fulvous. Elytra fulvous. Mandibles, scutellum, underside and legs black. Aedeagus with long, finger-like apex (Fig. 1). Length 5.6–7.8 mm. .... *B. bryanti* L. Medvedev et Regalin, 1998 (male)

3(2) Prothorax fulvous.

4(5) Prothorax slightly impressed behind anterior margin, without impressed line along anterior margin. Elytra with dark pattern: transverse spot beyond centre and narrow oblique stripe from humerus to black discal spot. Prothorax sometimes with elongate central spot (Fig. 42). Elytra with more or less regular rows. Preapical antennal segments distinctly serrate

(Fig. 56). Legs black with underside of femora more or less fulvous. Apex of anterior tibia rounded with an obtuse tooth (Fig. 69). Aedeagus (Fig. 2) with narrow, elongate apical process. Length 8.2–9.0 mm. .... *B. transvaalica* L. Medvedev, 1993 (male)

5(4) Prothorax with impressed line along anterior margin.

6(11) Elytra with more or less regular rows of punctures.

7(8) Elytra with almost regular rows of punctures and subcostate interspaces. Upperside fulvous. Scutellum, underside and legs black. Spermatheca, Fig. 16. Length 6.85 mm. .... *B. bryanti* L. Medvedev et Regalin, 1998 (female)

8(7) Elytra with regular rows, less distinct.

9(10) Elytra fulvous, with more or less distinct and regular rows. Mandibles fulvous with darkened apex. Antennae distinctly serrate, segments 5–10 about as long as wide. Tibiae, tarsi, apices of femora and thorax ventrally black. Aedeagus with finger-like apical process (Fig. 3). Length 4.3 mm. Female unknown. ..... *B. minuta* (male) L. Medvedev et Regalin, 1998

10(9) Elytron with 2 black spots, at base and beyond centre, connected along side margin (Fig. 43). Legs and underside fulvous. Spermatheca, Fig. 17; kotpresse, Fig. 30. Length 5.1 mm. ..... *B. somaliensis* sp.nov. (female)

11(6) Elytra with irregular punctation.

12(13) M a l e s : Length at least 4.6 mm. Head fulvous, only mandibles and at least inner margins of eyes black. Pronotum yellowish fulvous; elytra yellow; scutellum fulvous; legs yellowish fulvous, only knees and anterior tibia partly black, tarsi fulvous, at least on anterior legs brownish darkened; underside yellowish fulvous, only metasternum black. Anterior angles of clypeus almost exactly 90°. Antennae see Figs 57, 58. Apex of aedeagus more elongated, right-angled (Fig. 4).
F e m a l e s : Length at least 4.6 mm. Coloration variable: Head black or fulvous; pronotum entirely fulvous; scutellum black; elytra from black with fulvous spot at apex to fulvous with two large black spots on each one (Figs 44–46) or entirely fulvous (two females described as *B. strigatipes* Jacoby, 1904: with entirely fulvous upper side, only base of scutellum black, are probably only forms of this species; see remark in *Barybaena lurida*). Spermatheca in Figs 18–20, kotpresse in Figs 31–33: both very similar to the following species. ..... *B. lurida* Lacordaire, 1848

13(12) M a l e s : Maximum length 4.6 mm. Head black, only a small fulvous spot behind each eye; pronotum fulvous; elytra yellowish fulvous, rarely with black stripe; scutellum black, at least apex brown or fulvous; legs in anterior tibiae, all tarsi and knees in middle and posterior legs more black than in previous species; underside black except propleura. Anterior angle

of clypeus about 120°. Antenna, Fig. 59. Apex of anterior tibia short, obtusely angled (Fig. 70). Apex of aedeagus very short, angle at apex about 115° (Figs 5, 6).

F e m a l e s : Maximum length 4.6 mm, mostly only up to 4.0 mm. Head black except labrum and a small spot behind each eye fulvous; pronotum fulvous; scutellum black with brown or fulvous apex; elytron yellowish fulvous with broad, longitudinal black stripe, shortened before apex and mostly retracted in the centre from the outer side (Fig. 48), rarely absent. Legs entirely black or entirely fulvous or fulvous with black knees. Spermatheca in Figs 21–23, kotpresse in Figs 35, 36: both very similar to previous species. ..... *B. bilineolata* Lacordaire, 1848

14(1) Prothorax without broad explanate lateral margins, usually with a few large punctures in centre of anterior margin in a more or less flatly impressed area.

15(28) Prothorax and elytra entirely fulvous, very seldom with small humeral spot and black suture only indicated. Elytra irregularly punctate. Prothorax of male impunctate, prothorax of female with a few punctures on disc at most (except for anterior group of punctures).

16(19) Head black with clypeus, labrum and mandibles fulvous (occasionally darkened in female). Legs fulvous with black tarsi. Antennal segments 2–4 thin and short, 5–10 distinctly serrate (Fig. 60). Prothorax of male impunctate (except for anterior group of punctures), prothorax of female with sparse, large punctures on whole surface.

17(18) Aedeagus relatively small and thick, anteriorly widened, apex with small point (Fig.7). Spermatheca, Fig. 24; kotpresse, Fig. 37. Length 3.8–5.4 mm. ..... *B. parvula* Lacordaire, 1848

18(17) Aedeagus similar, but slightly more slender, anteriorly less widened, apex with broadly obtuse point (Fig. 8). External characters as in previous species ..... *B. pusilla* (Jacoby, 1898)

19(16) Head entirely black, including labrum and mandibles. Clypeus and labrum rarely weakly glossy or only labrum fulvous.

20(27) Legs or at least femora black. (females rarely with entirely fulvous legs; see *B. mendax*).

21(24) Prothorax red or orange, elytra flavous. Prothorax of male distinctly broader than elytra, in female as wide as elytra, impunctate (except anterior group of punctures), a few punctures occur rarely on the sides of the pronotum in the female.

22(23) Elytra without black humeral spot (humerus occasionally dark fulvous or marked brownish-black), suture not darkened. Antennal segments 2–4 broad, segment 2 very short, disc-like, segment 4 about as long as wide (Fig. 61). Legs of male black or with fulvous bases of tibiae, of female

fulvous with black femora. Aedeagus, Fig. 9 (cf. MEDVEDEV & ERBER 2003: Fig. 24); Spermatheca, Fig. 25; kotpresse, Fig. 38. Length of males 3.9–5.2 mm, females 3.6–4.4 mm. ..... *B. mendax* Lacordaire, 1848

23(22) Elytra with humeral spot and suture very narrowly black. Antennae as in *B. mendax*. Spermatheca, Fig. 26; kotpresse, Fig. 39. Length 4.1 mm. Male unknown. ..... *B. sanguinicollis* Lacordaire, 1848

24(21) Upperside fulvous, elytra sometimes paler than prothorax. Prothorax of male not broader than elytra. Antennal segments 2 and 3 transverse.

25(26) Anterior tibiae of male feebly curved, without long protuberance on apex. Antennal segment 4 about as long as wide (Fig. 62). Legs black. Aedeagus, Fig. 10. Length 4.2 mm. Female unknown. .... *B. gracilis* L. Medvedev, 1993

26(25) Anterior tibiae of male strongly curved, with long protuberance on apex (Fig. 71). Antennal segment 4 elongate (Fig. 63). Legs black with fulvous tibiae. Aedeagus, Fig. 11. Length 5.1 mm. Female unknown. .... *B. tibialis* sp.nov.

27(20) Legs fulvous with black tarsi. Antennal segments 2 and 3 very short, transverse, segment 4 as long as wide (Fig. 64). Aedeagus, Fig. 12; spermatheca, Fig. 27; kotpresse, Fig. 40. Length 4.7 mm. .... *B. fulvipes* L. Medvedev, 1993

28(15) Upperside with dark spots or stripes. Prothorax of male impunctate (except for anterior group of punctures), prothorax of female strongly punctate.

29(32) Legs yellow or fulvous, sometimes femora darkened brownish.

30(31) Elytra with black suture in two posterior thirds but shortened before apex; humerus and lateral stripe black and as long as sutural stripe (Fig. 50). Elytra punctate in semiregular rows. Head black with fulvous clypeus, labrum and mandibles. Antenna with disc-like 2nd segment, segments 3 and 4 nearly quadrangular, median antennal segments distinctly wider than preapical ones, apical segment with long thin process looking like a 12th segment (Fig. 65). Pronotum in one male specimen with black spots, two large and one very small (Fig. 51), in another male entirely fulvous. Aedeagus, Fig. 13. Length 4.7–5.2 mm. Female unknown. .... *B. distanti* (Jacoby, 1898)

31(30) Elytra with broad, black lateral stripe (including humerus) shortened before apex; suture weakly black in three posterior quarters (Fig. 49, cf. MEDVEDEV & ERBER 2003: 11, Fig. 25), irregularly punctate. Head black with fulvous labrum. Mandibles of male with sharp dorsal edge. Median antennal segments not wider than preapical ones (Fig. 65). Aedeagus, Fig. 14; spermatheca, Fig. 28; kotpresse, Fig. 41. Length of males 3.7–4.4 mm, females 3.4–3.6 mm. ..... *B. oneili* (Jacoby, 1904)

32(29) Legs black, at least middle and posterior tibiae brownish or fulvous.

33(34) Humerus as well as suture in posterior three quarters black; beyond humerus a brownish shadow reaches towards about fourth quarter and inconspicuous shadow occurs along suture in posterior third. Elytra irregularly punctate. Head black with fulvous to brownish labrum and mandibles (points of latter black), mandibles broad and flattened (Fig. 53). Antennal segments 2–4 thin, median segments not broader than preapical ones (Fig. 67). Apex of anterior tibia with short, triangular protuberance (Fig. 72). Similar to male of *B. mendax*, species differ especially in mandibles (Figs 53–55). ..... *B. orangensis* sp.nov.

34(33) Humerus only darkened brownish, suture extremely narrowly black. Head black with fulvous labrum and partly fulvous mandibles. Antenna, Fig. 68. Prothorax of male broader than elytra, with 6 more or less distinct elongate piceous spots in a transverse row (Fig. 52); impunctate in male, strongly punctate in female. Ventral surface and legs black. Aedeagus, Fig. 15; spermatheca, Fig. 29. Length of male 3.5 mm, female 3.1 mm. .... *B. humeralis* Jacoby, 1901

Barybaena bryanti L. Medvedev et Regalin, 1998

Material examined. Type material: Paratype (male): Kenya, Vei, Sagala Hills, XII. 1993, leg. Werner (PCLM).
Further material: Ethiopia: "Abyssinie, A. Raffray, voy[age] 1881" (PCLM).

Distribution. Kenya, Ethiopia.

Barybaena transvaalica L. Medvedev, 1993

Material examined. Type material: Paratype (male): Waterkloof, Pretoria district, leg. F. Noome (PCLM).

Distribution. SAR: Transvaal province.

Barybaena minuta L. Medvedev et Regalin, 1998

Material examined. Type material: Holotype (male): Tanzania, 30km W Songea, Ruvuma Prov., XI.1993, leg. Werner (PCRR).

Distribution. Tanzania.

Barybaena somaliensis sp.nov.

Material examined. Type material: Holotype (female): N. E. Africa, S. Somali, leg. S. G. Erlanger (PCLM).

Description. Fulvous, elytra with basal band and large postmedial spot, connected to one another by broad, black, lateral stripe (Fig. 43), apical antennal segments and sides of metasternum darkened.

Head smooth and glossy, with feeble groove in the middle, anterior margin of clypeus with semicircular emargination. Antennae distinctly serrate from the 5th segment, segments 5–10 about as long as wide, segment 4 elongate triangular. Prothorax 2.1 times as wide as long, with broad explanate lateral margin, widest before broadly rounded hind angles, surface glossy, impunctate. Scutellum triangular with rounded apex, impunctate. Elytra 1.5 times as long as wide, glossy, with comparatively regular rows of punctures, especially laterally. Anterior femora a little longer and slightly thicker than middle ones. Spermatheca, Fig. 17; kotpresse, Fig. 30. Length 5.1 mm.

Distribution. Somalia.

Differential diagnosis. Spermatheca nearly same as in *B. bryanti*, but difference in colour pattern (scutellum, underside and legs are fulvous) and with very different, non-costate, sculpture of elytra.

Name derivation. Named after the country in which it was recorded as a new species.

Barybaena lurida Lacordaire, 1848

Damia strigatipes Jacoby, 1904 **syn.nov.**

Material examined. Type material: Syntype (male), labelled: 1. round, white with red margin "Type H.T."; 2. "E. Coll. Chev."; 3. "67–56"; 4. handwritten "Barybaena lurida Chev. Lac. type"; 5. "SYNTYPE Baybaena lurida Lac." (NHML). *B. strigatipes* (female), labelled: 1. round, white with red margin "Type H.T."; 2. "Jacoby Coll. 1909–28a"; 3. "31."; 4. "Algoa Bay, Capland, Dr. Brauns"; 5. handwritten "Damia strigatipes Jac." (NHML); B. strigatipes (female), labelled: 1. "Algoa Bay, Capland, Dr. Brauns", 2. "Jacoby Coll. 1909–28a" (NHML) (N.B. remarks below).
Further material: SAR, Natal, Pietermaritzburg, XII. 1959, leg. E. Haaf, (1 male: PCLM); SAR, Cape Province, Somerset East, 10–22. XII. 1930, leg. R. E. Turner, (1 male: PCLM); SAR, Cape Province, Hogsback, 10–11. XII. 1956, leg. V. Son & Martin, (1 female, elytra black with fulvous apex: PCLM); Natal, without more exact indications, (1 female with black head and spotted elytra: PCLM); SAR, Cape Province, 70km W. Grahamstown, N2, 19.X.1990, leg. W. Wittmer, (2 males: NHMB).

Distribution. SAR: Transvaal, Natal, Cape.

Remarks. Types of *B. lurida* and *B. strigatipes* were studied. In *B. strigatipes*, however, only 2 females are known, one of them with fulvous head, the other with black head. Spermatheca and kotpresse of both species virtually identical (see Figs 18–20, 31–33).

Barybaena bilineolata Lacordaire, 1848

Barybaena lineella (Lacordaire, 1848) **syn.nov.**
Barybaena bicoloripes L. Medvedev, 1992 **syn.nov.**

Material examined. Type material: Holotype of *B. bicoloripes* (male): SAR: Cap bona spei, 1893, Drege, (PCLM); paratype of *B. bicoloripes* (male): SAR, Cape, Alexandria, 10–200 m, 14. X. 1984, leg. W. Wittmer (NHMB); paratype of *B. bicoloripes* (male): SAR, Natal, Cathedral Peak, 1380–1580m, 7.X.1986, leg. W.Wittmer (1 male: NHMB).
Further material: SAR, Cape, Amatole Isidenge For. St. (32°41'S, 27°18'E), 18. XI. 1987, grassnet, leg. Endroedy-Younga (1 female: PCLM); SAR, Cape Prov., Beacon Bay, 21. X. 1990, leg. H. Dombrow (1 female: PCLM); SAR, Cape Prov., 70 km W Grahamstown, N2, 19. X. 1990, leg. W. Wittmer (1 female: PCDE; 2 females: NHMB); SAR, Beacon Bay , R348, 37km NW, 3.X.1986, leg. W. Wittmer (1 female: NHMB); SAR, N. P., Umkomaas, 20–22. X. 1969, leg. A. L. Capener (1 female: PCDE); SAR, Kuysua [or Kuysna) (1 female:

PCLM); SAR, Natal, New Hanover, 9. XI. 1913, leg. Hardenberg (1 female: PCLM); SAR, Cape Prov., 23 km N East London, 20. IX. 1989, leg. W. Wittmer & S. Gussmann (1 male: PCLM); SAR, E. Cape Prov., Boesmanriviermand (33°42'S, 26°40'E), 13. X. 1984, leg. E. Mueller (1 male: PCLM); SAR, Transkei, 25 km N Butterworth, 22. X. 1990, leg. W. Wittmer (1 male, 1 female: PCLM; 3 females: NHMB); SAR, Natal, Howick Midmar, 29. XI. 1991, leg. Richter (1 male: PCDE); SAR, Natal, Pietermaritzburg, XII. 1959, leg. E. Haaf, (2 females: PCLM).

Distribution. SAR: Cape, Natal.

Remarks. Three female specimens with broad longitudinal black stripe on elytron (Fig. 47) cannot be assigned definitely to *B. lurida* or *B. bilineolata* because spermatheca and kotpresse of both species are nearly identical (cf. Figs 18–23 and 31–36). The species are labelled as following: "SAR, Transkei, Lusikisiki, 17.XI.1991, leg. Richetr, (1 female: PCDE); SAR, E Cape Province, Bedford, 6km E, (32°40'S, 26°01'E), 11.X.1984, E-Y: 2143, ground vegetation, leg. R. Müller, (1 female: PCDE). SAR, Caffraria, Krebs, 23225, *Gynandrophthalma vittigera* Lacord., rot: Cotypus *Gynandrophthalma vittigera* Lac., 1 female (ZMHUB: ??16?)".

The latter was previously described by LACORDAIRE (1848) as *Smaragdina* (*Gynandrophthalma*) *vittigera*. The species remains as a probable synonym of *B. lurida* or *B. bilineolata*. Spermatheca, Fig. 21; kotpresse, Fig. 34.

Barybaena parvula Lacordaire, 1848

Material examined. SAR, Capland, Algoa Bay, leg. M. Brauns (1 male: PCLM); SAR, Cape Province, 12–24 km W of Heidelberg, 5. XI. 1988, leg. W. Wittmer & M. Brendell (3 males, 7 females: NHMB; 1 male, 1 female: PCDE); SAR, Cape Province, Nuwerus (21°08'S, 18°22'E), 15. IX. 1986, leg. W. Wittmer & Oberprieler (1 female: PCLM);–SAR, W. Cape, 7–10 km E of Nieuwoudtville, 700 m, 15. IX. 1985, leg. W. Wittmer (1 female: NHMB); SAR, Cape Province, 4km N Bailey's Pass (30°07'S, 18°14'E), 12.IX.1986. leg. Wittmer & Oberprieler (1 female: NHMB).

Distribution. SAR: Cape, Natal, Transvaal.

Barybaena pusilla (Jacoby, 1898)

Material examined. SAR, Cape of Good Hope, Table Mt., 1906, leg. W. Bevins (1 male, 1 female: PCLM).

Distribution. SAR: Cape, Natal.

Remark. Type was described from Natel (Malvern). We studied specimens from Cape which were obtained from NHML. This species is possibly identical with *B. parvula*, but study of the type specimens is required.

Barybaena mendax Lacordaire, 1848

Material examined. SAR, W. Cape, Clanwilliam (32°10'S, 18°52'E), 3. X. 1986, on *Emex australis*, leg. J. Scott, Mway (1 male: PCDE); SAR, Promont b.(ona) sp.(ei) (= Cape of Good Hope) Lichtst., 23095, blue and handwritten: Antipe N. Krebs, Pr.b.Sp. Lichtenst. (4 males: ZMHUB); SAR, Cape Province, 4 km N Wolseley, 290 m, 30.X.1988, leg. W. Wittmer & M. Brendell, (2 males, 4 females; NHMB; 1 male, 1 female: PCLM; 1 female: PCDE); SAR, 22km S of Clanwilliam, 100m, 21.IX.1984, leg. W. Wittmer (1 female: NHMB); SAR, Cape, (1 male: PCLM); without any dates, 885 (1 male: NHMB).

Distribution. SAR: Cape.

Barybaena sanguinicollis Lacordaire, 1848

Material examined. Type material: Lacordaire's type (female), labelled: 1st label blue, handwritten "Promont. b. sp. Mund."; 2nd label "23217"; 3rd label white, handwritten "Gynandrophthalma sanguinicollis Lac."; 4th label blue, handwritten "Pr. b. sp. Mund."; 5th label "Barybaena sanguinicollis Lac. L. Medvedev det". (ZMHUB).

Distribution. SAR: Cape.

Barybaena gracilis L. Medvedev, 1993

Material examined. Type material: Holotype (male): SAR, SW Cape (PCLM).

Distribution. SAR: Cape.

Barybaena tibialis sp.nov.

Material examined. Type material: Holotype (male): SAR, W Cape, 7–10 km W Neuwoudtville, 700 m, 15. IX. 1985, leg. W. Wittmer (NHMB).

Description. Head black with fulvous labrum, antennae black with 4 basal segments fulvous, upperside fulvous with black scutellum, prothorax more intensely coloured than elytra, underside and femora black, tibiae and tarsi fulvous.

Head punctate and pubescent, frons with central groove, anterior margin of clypeus emarginate. Antennae serrate from the 5th segment, segments 5–7 a little larger than the following ones, segments 2–4 thin, 2 and 3 very short, transverse, 4 a little longer than 2 and 3 together (Fig. 63). Prothorax not wider than elytra, broadest behind mid-point, glossy and impunctate except for anterior row of punctures. Elytra finely and irregularly punctate, with dense microsculpture. Anterior femora thick, anterior tibiae curved, serrate beneath, with long apical protuberance. Tarsi thin and long. Aedeagus, Fig. 11.

Length 6.2 mm.

Distribution. SAR: Cape.

Differential diagnosis. Related to *B. fulvipes* and *B. gracilis* by shape of aedeagus but apex shorter than in both these species. Anterior tibiae strongly curved, with a long protuberance (Fig. 68), (this feature, however, may depend on size of specimen).

Name derivation. Named after the anterior tibiae, which are very strongly curved.

Barybaena fulvipes L. Medvedev, 1993

Material examined. Type material: Holotype (male) and paratype (female): SAR, Cape of Good Hope, leg. Lichtenstein (PCLM).

Distribution. SAR: Cape.

Barybaena distanti (Jacoby, 1898)

Material examined. Type material: Syntype (male), labelled: 1. white, printed "Pretoria (W.L.D.)"; 2. white, printed "Distant Coll. 1911–383"; 3. white, printed "SYNTYPE Barybaena distanti Jac." (NHML).
Further material: SAR, O.F.S., Florisbad 686, Brandfort, SE 2826 Cc; Sept.1982–Aug.1985, Preservative Traps (1 male: PCLM).

Distribution. SAR: Transvaal (Pretoria).

Barybaena oneili (Jacoby, 1904)

Material examined. SAR, Cape Province, 20 km S Loereisfontain, 7.X.1990, leg. W. Wittmer (2 males: PCLM);– SAR, Karoo, Swaershoekpas, 1200–1500 m, 10.X.1984, leg. W. Wittmer (1 male: PCLM); SAR, Cape Province, 70 km W Grahamstown, N2, 19.X.1990, leg. W. Wittmer (1 male: PCDE); S. Africa, Cape Province, 3 km NW Bonnievale, 1.X.1984, leg. W. Wittmer (1 female: PCLM); SAR, Cape, Dumbrody, leg. R. R. O'Neil (1 female: PCLM, ex. coll. Clavareau).

Distribution. SAR: Cape.

Remarks. Feeding has been recorded on *Mimosa* (JACOBY 1904). A female of this species was earlier referred to as *Barybaena* sp. A (MEDVEDEV 1993).

Barybaena orangensis sp.nov.

Material examined. Type material: Holotype (male): SAR, Orange Free State, White Hills, Ladybrand, 10. XI. 1983 (PCLM).

Description. Head black with fulvous labrum and apices of mandibles, antennae black with 4 basal segments fulvous, prothorax red-fulvous with trace of small dark spot before black scutellum, elytra pale flavous, humeral spot and suture very narrowly black, sides with indistinct piceous stripe from humerus to apical stripe, underside black, legs black with mid- and hind tibiae more or less fulvous.

Head roughly sculptured, with white pubescence and shallow groove on frons, anterior margin of clypeus feebly emarginate. Mandibles (Fig. 53) broad, flattened above, without dorsal ridge, typical of *B. oneili* (Fig. 55). Antennae serrate from the 5th segment onwards, intermediate segments not enlarged, segments 2–4 not widened, segment 2 short and transverse, 3 short, as long as wide, 4 feebly triangular, as long as wide (Fig. 67). Prothorax wider than elytra, broadest in middle, surface glossy and impunctate apart from anterior group of punctures. Elytra dull, finely and irregularly punctate and microsculptured. Anterior femora moderately thickened, anterior tibiae curved, with acute apical tooth, anterior tarsi thin and elongate (Fig. 69).

Length 5.2 mm.

Distribution. SAR: Orange Free State.

Differential diagnosis. Very near to *B. oneili* and *B. mendax* but larger, with different male mandibles and structure of dorsal surface. Differs from the former in basal segments of antennae, which are more slender, from the latter in size and absence of black spots on pronotum. Differs from both species in shape of mandibles: ridges on dorsal side absent (cf. Figs 53–55).

Name derivation. Named after Orange Free State, previously its only recorded location.

Remarks. Aedeagus is unfortunately absent, probably removed earlier but not fixed on the label.

Barybaena humeralis Jacoby, 1901

Material examined. Type material: Syntype (male), labelled: 1. round, white with red margin "Type H.T."; 2. "7B"; 3. "Jacoby Coll. 1909–28a"; 4. blue, handwritten "Miopristis distanti Jac."; 5. blue, handwritten "Barybaena humeralis Jac."; 6. white, printed "SYNTYPE Barybaena strigatipes Jac."; 7. white, printed "SYNTYPE Barybaena humeralis Jac." (NHML); Syntype (female), labelled: 1. "8B"; 2. "Jacoby Col.l 1909–28a"; 3. white, printed "SYNTYPE Barybaena strigatipes Jac."; 4. white, printed "Barybaena humeralis Jac." (NHML).

Distribution. SAR: Natal (Malvern).

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Zusammenfassung

Die Gattung *Barybaena* wurde revidiert; ein Bestimmungsschlüssel für die bekannten Arten wurde aufgestellt. Drei neue Arten wurden beschrieben: *Barybaena orangensis* sp.nov., *B. somaliensis* sp.nov. und *B. tibialis* sp.nov. Die folgenden Taxa wurden zu neuen Synonymen: *Damia strigatipes* Jacoby, 1904 syn.nov. von *Barybaena lurida* Lacordaire, 1848, *B. lineella* (Lacordaire, 1848) syn.nov. und *B. bicoloripes* L. Medvedev, 1992 syn.nov. von *B. bilineolata* Lacordaire, 1848. *Smaragdina* (*Gynandrophthalma*) *vittigera* Lacordaire, 1848 bleibt ein Synonym ohne klare Zuordnung.

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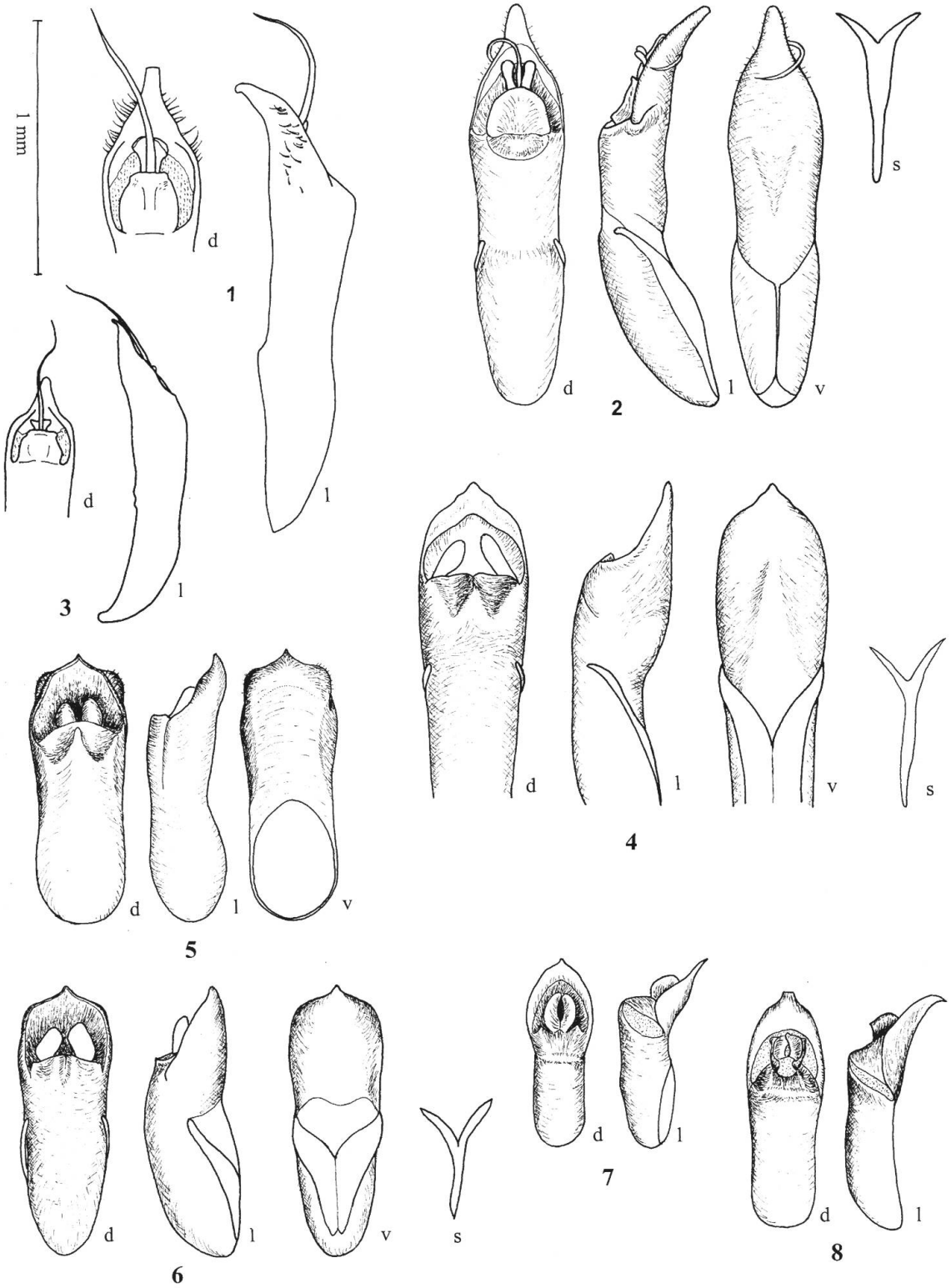
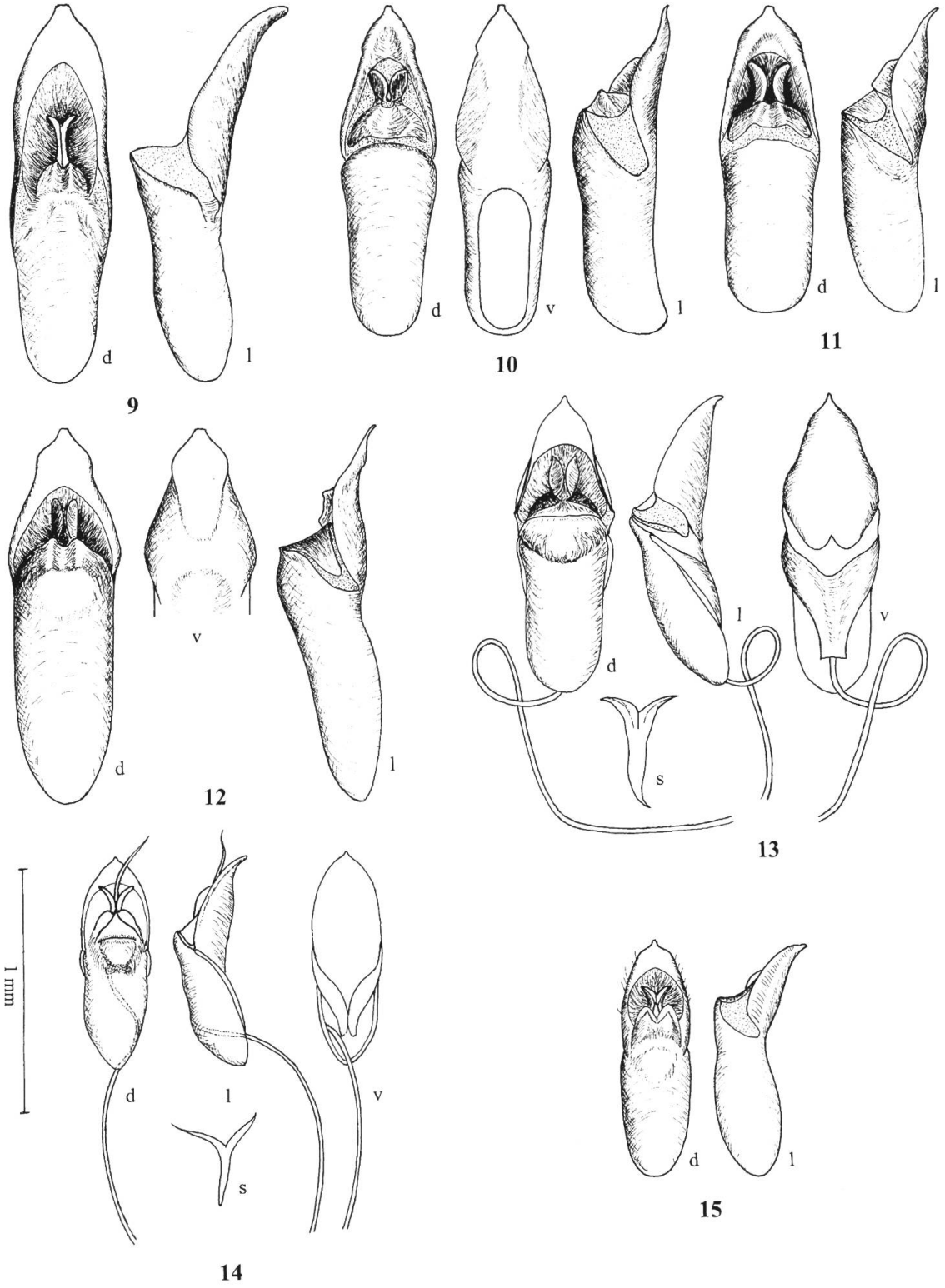
Addresses of authors:

Dr. Dieter Erber
Institut für Biologiedidaktik
Justus Liebig-Universität
Karl Glöckner-Str. 21
D-35394 Giessen
DEUTSCHLAND

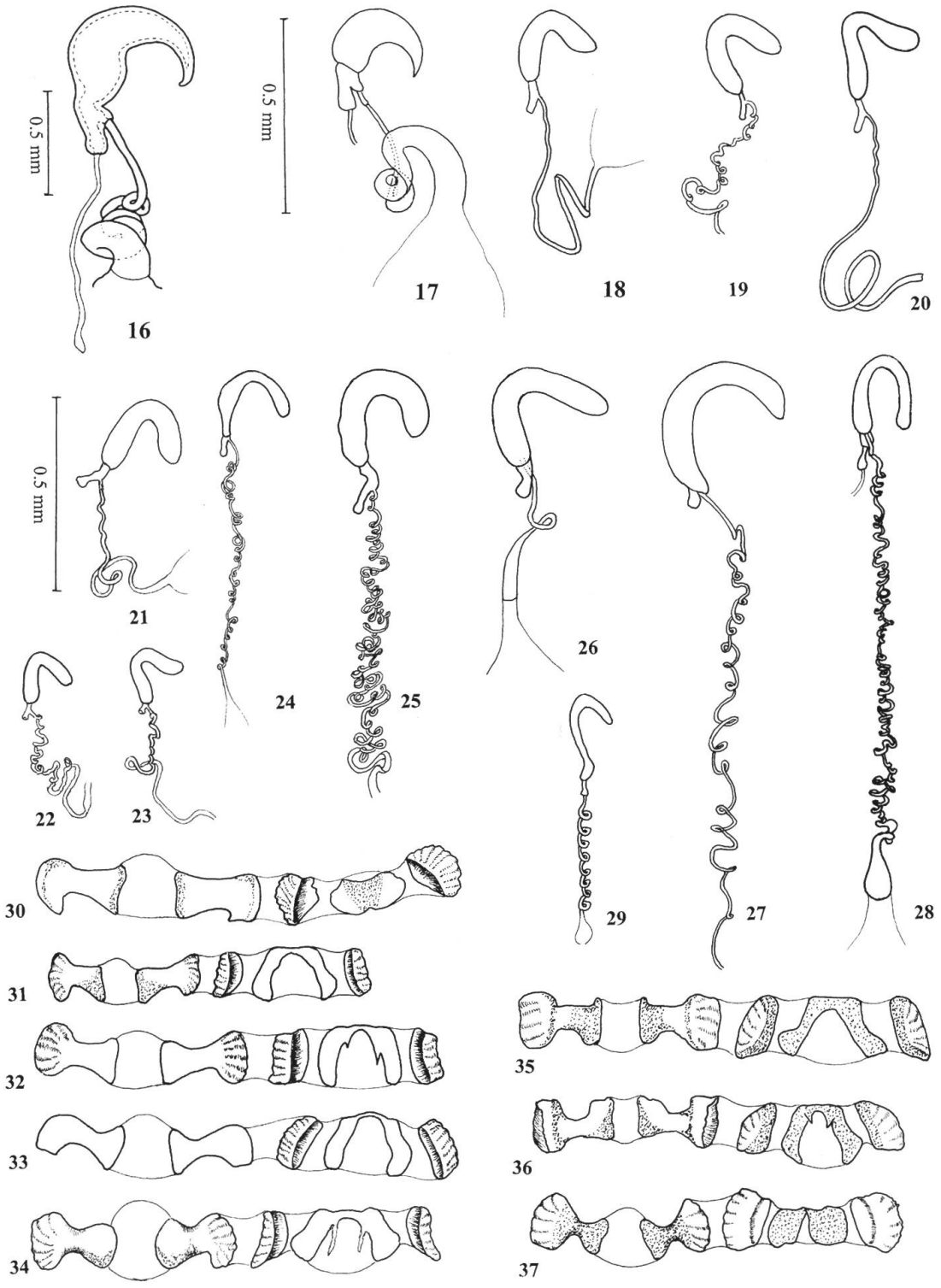
Prof. Lev N. Medvedev
Institute for Problems in Ecology and Evolution
Russian Academy of Sciences
Leninsky prospect 33
Moscow 119 071
RUSSIA



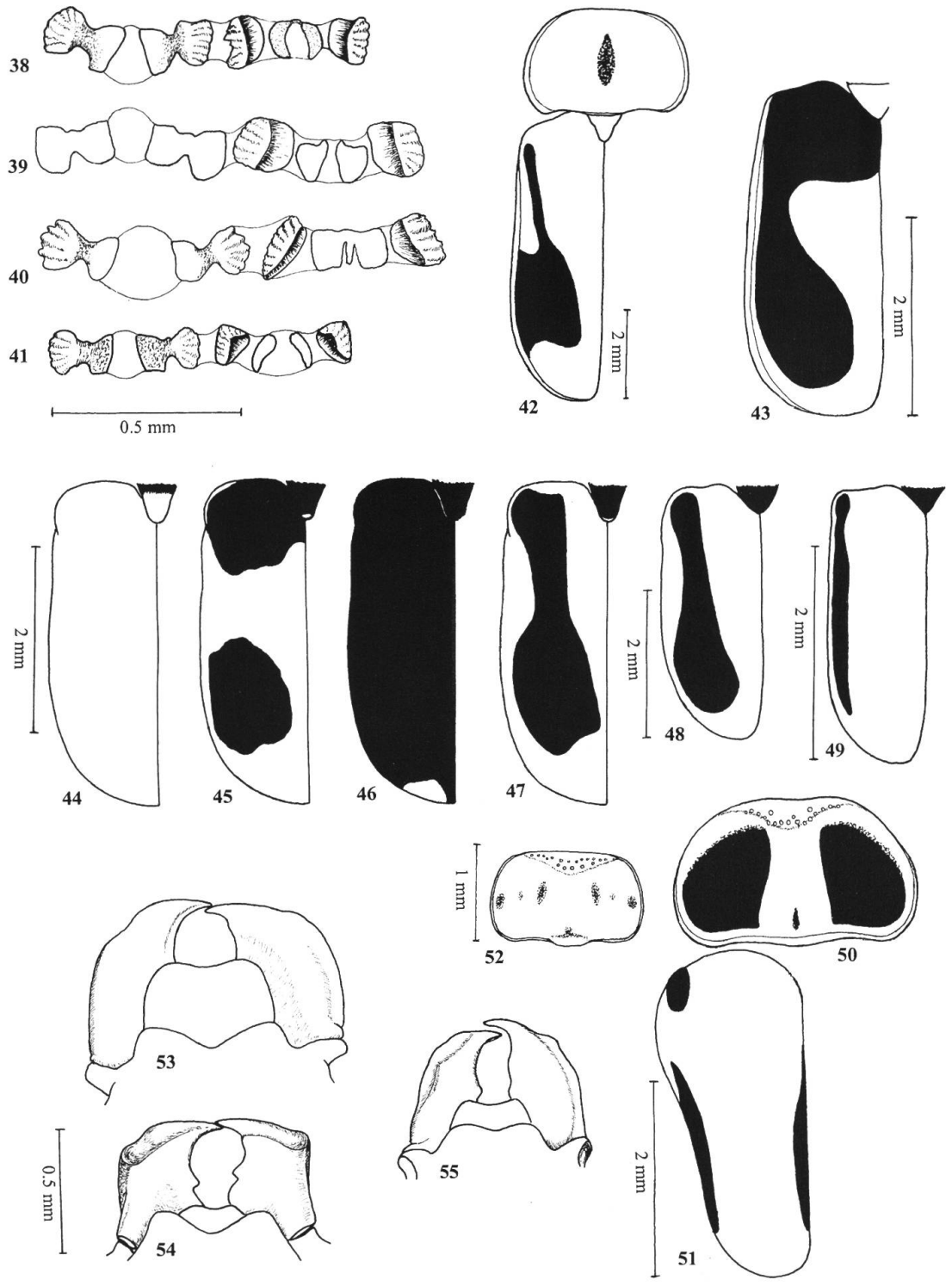
Figs 1–8. Aedeagus (d = dorsal, l = lateral, v = ventral, s = spiculum): 1, *Barybaena bryanti* L. Medvedev et Regalin (after MEDVEDEV & REGALIN 1998: Figs 28, 30); 2, *B. transvaalica* L. Medvedev; 3, *B. minuta* L. Medvedev et Regalin (after MEDVEDEV & REGALIN 1998: Figs 29, 31); 4, *B. lurida* Lacordaire (holotype); 5, 6, *B. bilineolata* Lacordaire (5, holotype; 6, *B. bicoloripes* L. Medvedev syn.nov., holotype); 7, *B. parvula* Lacordaire; 8, *B. pusilla* Lacordaire.



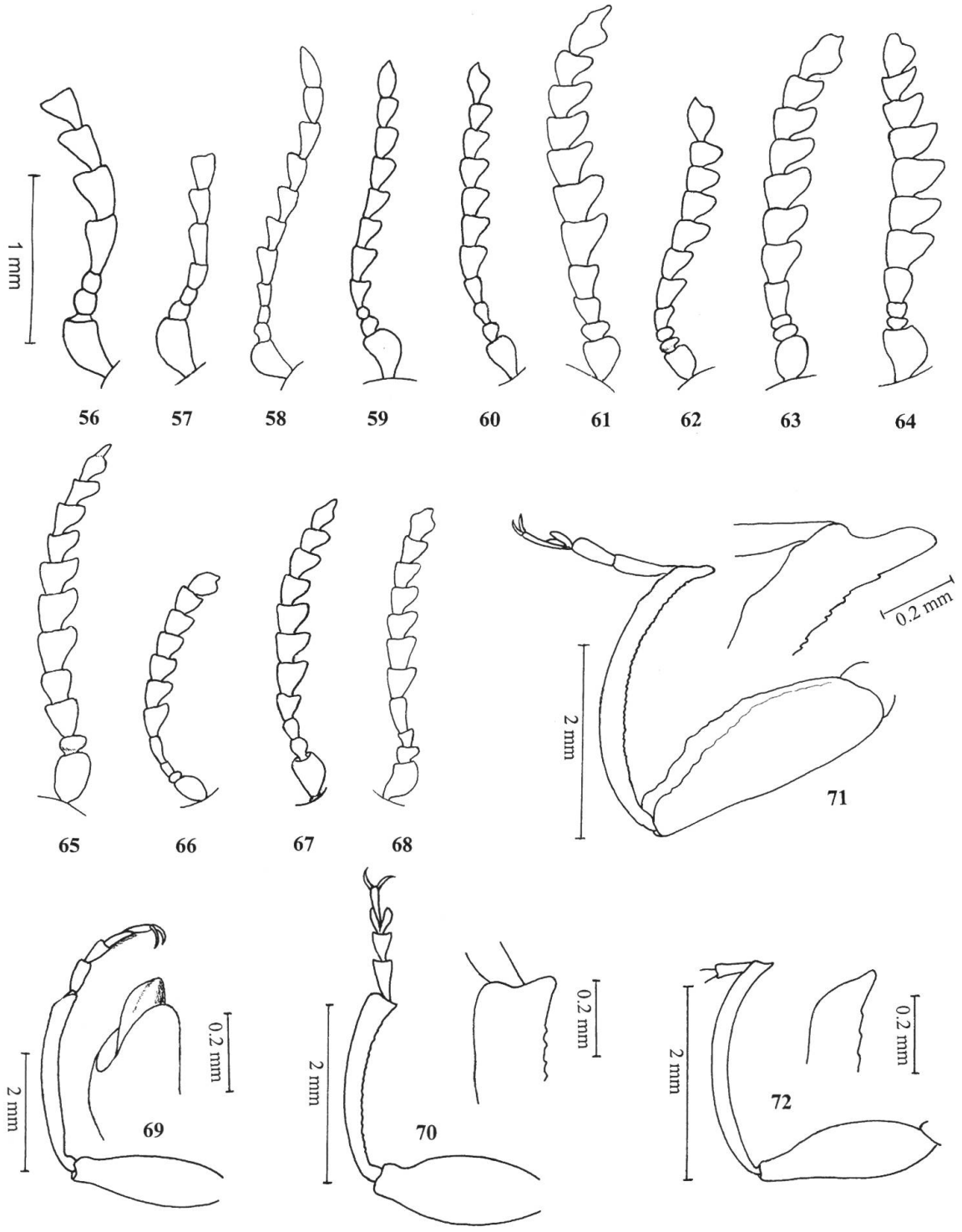
Figs 9–15. Aedeagus (d = dorsal, l = lateral, v = ventral, s = spiculum): 9, *Barybaena mendax* Lacordaire; 10, *B. gracilis* L. Medvedev; 11, *B. tibialis* sp.nov.; 12, *B. fulvipes* L. Medvedev; 13, *B. distanti* Jacoby, syntype; 14, *B. oneili* Jacoby; 15, *B. humeralis* Jacoby, syntype.



Figs 16–37. Figs 16–29, spermatheca: 16, *Barybaena bryanti* L. Medvedev et Regalin (after MEDVEDEV & REGALIN 1998: Fig. 32); 17, *B. somaliensis* sp.nov.; 18–20, *B. lurida* Lacordaire (18, 19, variations; 20, *B. strigatipes* Jacoby, holotype); 21, *Barybaena* sp. (=*Smaragdina vittigera* Lacordaire, "cotypus"); 22, 23, *B. bilineolata* Lacordaire (variations); 24, *B. parvula* Lacordaire; 25, *B. oneili* Jacoby; 29, *B. humeralis* Jacoby, syntype. Figs 30–37, kotpress: 30, *B. somaliensis* sp.nov.; 31–33, *B. lurida* Lacordaire (31, 32, variations; 33, *B. strigatipes* Jacoby syn.nov., holotype); 34, *B.* spec. (=*Smaragdina vittigera* Lacordaire, "cotypus"); 35–36, *B. bilineolata* Lacordaire, variations; 37, *B. parvula* Lacordaire.



Figs 38–55. Figs 38–41, kotpresse: 38, *Barybaena mendax* Lacordaire; 39, *B. sanguinolenta* Lacordaire; 40, *B. fulvipes* L. Medvedev; 41, *B. oneili* Jacoby. Figs 42–52, pattern of pronotum and/or elytron: 42, *B. transvaalica* L. Medvedev, paratype male; 43, *B. somaliensis* sp.nov., female; 44–46, *B. lurida* Lacordaire (44, *B. strigatipes* Jacoby syn.nov., female from Algoa Bay; 45, *B. lurida* Lacordaire, female from Natal; 46, *B. lurida* Lacordaire, female from Hogsback; 47, *Barybaena* sp., female (see remark in *B. bilineola* Lacordaire); 48, *B. bilineolata* Lacordaire, "cotypus" female; 50–51, *B. distanti* Jacoby, syntype male; 52, *B. humeralis* Jacoby, syntype male. Figs 53–55, male mandibles: 53, *B. orangensis* sp.nov.; 54, *B. mendax* Lacordaire; 55, *B. oneili* Jacoby.



Figs 56–72. Figs 56–68 Left (or right = r) male antenna: 56, *Barybaena transvaalica* L. Medvedev (r); 57–58, *B. lurida* Lacordaire (57, holotype, r; 58, specimen from Pietermaritzburg, r); 59, *B. bilineolata* Lacordaire; 60, *B. parvula* Lacordaire; 61, *B. mendax* Lacordaire; 62, *B. gracilis* L. Medvedev; 63, *B. tibialis* sp.nov.; 64, *B. fulvipes* L. Medvedev; 65, *B. distanti* Jacoby; 66, *B. oneili* Jacoby; 67, *B. orangensis* sp.nov.; 68, *B. humeralis* Jacoby, syntype. Figs 69–72, male anterior leg with enlarged tibial apex: 69, *B. transvaalica* L. Medvedev; 70, *B. bilineolata* Lacordaire; 71, *B. tibialis* sp.nov.; 72, *B. orangensis* sp.nov.