

A revision of the genus *Brachelytrium* Obenberger, 1923 (Coleoptera: Buprestidae: Anthaxiini)

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The genus *Brachelytrium* Obenberger is revised for the first time. A new subgenus, *Elytrobrachium*, is proposed to contain two species of *Anthaxia*: *A. blairi* (Obenberger) and *A. ventrale* (Kerremans), both comb. nov. Fourteen species are now placed in *Brachelytrium* (s. str.): the type species *B. transvalense* Obenberger, *B. minusculum* Obenberger, *B. africanum* (Pochon), *B. lesnei* (Théry) comb. nov. and 10 new species: *B. cavifrons*, *B. cordinotum*, *B. fissifrons*, *B. globicolle*, *B. holmi*, *B. namibiense*, *B. prolongum*, *B. straussae*, *B. tanzaniense*, and *B. waterbergensis*. Tables are presented to differentiate *Brachelytrium* from *Anthaxia* Eschscholtz and *Tetragonoschema* Thomson. Keys are included to separate the two subgenera and the species of both subgenera. Dorsal habitus photographs are given for all species, as well as line-drawings for key diagnostic features and for male genitalia of all species with known males.

Keywords: Coleoptera, Buprestidae, Anthaxiini, *Brachelytrium*, Revision, New subgenus, New species, Africa.

INTRODUCTION

The buprestid genus *Brachelytrium* was erected by Obenberger (1923) for a new species, *B. transvalense*, labelled only 'Transvaal'. A second species by Obenberger (1928), *B. minusculum*, also from 'Transvaal', was added subsequently. At the time of the generic description, Obenberger (1923) compared *Brachelytrium* to four Australian genera: *Anilara* Thomson (1879), *Notographus* Thomson (1879), *Anthaxoschema* Obenberger (1923), *Pseudanilara* Théry (1910), the Neotropical genus *Tetragonoschema* Thomson (1857) and the large, nearly cosmopolitan (except Australasia) genus *Anthaxia* Eschscholtz (1829).

In 1934, Théry described *Tetragonoschema lesnei* from Mozambique and later Pochon (1972) described *T. africanus* from Zululand. The latter species was transferred to *Brachelytrium* by Bílý (1996) and *T. lesnei* is transferred below. *Tetragonoschema* was previously revised by Théry (1944), where he also mentioned *T. lesnei*, and the genus is limited to the Neotropical Region. In the catalogue of Coleoptera from Mozambique, Ferreira (1963) listed *T. lesnei* again.

In the first part of his extensive revision of the *Anthaxia* (sensu lato) of the New World, Cobos (1956) regarded *Brachelytrium* as a subgenus of *Anthaxia*; a position that we cannot accept (see Table 2). The four Australian genera mentioned above belong to a separate lineage of Australian Buprestidae recently discussed by Bílý and Volkovitsh (1996). These genera differ from the

traditionally defined Anthaxiini in the form of the antennal sensory pores, aedeagal structure, pronotal sculpture and larval characters described for *Anilara* (see Volkovitsh and Hawkeswood 1993). *Brachelytrium* belongs to the African group of Anthaxiini with *Anthaxia*, *Brachanthaxia* Théry (1930) and *Chalcogenia* Saunders (1871); these genera can be differentiated as indicated in the recent key by Volkovitsh and Bílý (1997). The latter paper featured SEM photographs showing the structure and orientation of the antennal sensory pore and setae for those four genera.

During the course of this study, we discovered that two species of southern African *Anthaxia* require transfer to *Brachelytrium*: *A. blairi* Obenberger (1931) and *A. ventralis* Kerremans (1911).

The abbreviations for collections that serve as repositories and/or loaned specimens examined for this study are: The Natural History Museum, London (BMNH); G. Curletti collection, Carmagnola, Italy (CCIT); C. L. Bellamy collection, Pretoria (CLBC); Museum National d'Histoire Naturelle, Paris (MNHN); Musée Royal de l'Afrique Centrale, Tervuren (MRAC); National Museum, Prague (NMP); R. L. Westcott collection, Salem, Oregon, U.S.A. (RLWE); South African National Collection of Insects, Pretoria (SANC); State Museum, Windhoek, Namibia (SMWN); T. C. MacRae collection, Chesterfield, Missouri, U.S.A. (TCMC); Transvaal Museum, Pretoria (TMSA). Locality and host data are recorded exactly as labelled, despite a lack of consistency in some features, e.g., presen-

tation of geographical coordinates. Implied or additional data are given in square brackets.

Genus **BRACHELYTRIUM** Obenberger

Brachelytrium Obenberger, 1923: 24; 1930: 559; Bellamy, 1985: 421; Bellamy *et al.*, 1987: 219; Holyński, 1988: 51; Volkovitsh and Bílý, 1997: 262; Bílý, and Bellamy 1998: 96.

Anthaxia (*Brachelytrium*): Cobos 1956: 108.

Type species: *Brachelytrium transvalense* Obenberger (original designation).

DIAGNOSIS. Small or medium-sized, length 3.2–6.7 mm; usually dark bronze, rarely bicolorous, species resembling *Anthaxia* or *Tetragonoschema*; dorsal surface without pubescence; frons occasionally with short, white or off-white, pubescence; ventral surface with short, sparse, recumbent white pubescence; in newly emerged specimens, dorsal surface often covered with sparse, white tomentum, which is more condensed in laterobasal pronotal depressions and in shallow elytral depressions; abdominal pleurites, metasternum and metepimera often with patches of white tomentum.

DESCRIPTION. Head relatively small; eyes elliptical or reniform, not projecting beyond contour of head; frons flat, slightly concave or widely excavate, vertex about the same width as eye width or slightly narrower; clypeus slightly incurved anteriorly, rarely with straight anterior margin, usually somewhat forward protruding, giving mouthparts slightly prognathous appearance. Antennae short, barely reaching midlength of lateral pronotal margin; serrate from third antennomere, rarely from fourth; third antennomere shortest; fourth to tenth antennomeres widely triangular or trapezoid, slightly wider than long, distal antennomere ovoid or rhomboid. Pronotum rather convex, 1.4–1.8 times as wide as long, usually distinctly wider than elytra; widest at anterior one-third or just posterior to mid-point; laterobasal depressions well developed but small, rarely indistinct; sculpture consisting of rugose, homogenous polygonal cells with, or rarely without, central grain, or lateral area with oblique, elongate cells or elongate, oblique rugae. Elytra short, or very short, exposing pygidium and last three visible abdominal pleurites (Fig. 1); elytra only 1.3–1.6 times as long as wide, usually uneven, subparallel in anterior three-quarters very broadly rounded in apical quarter; humeral swellings well developed; epipleura reaching the elytral apices. Prosternal process flat, wide, slightly enlarged posteriad of procoxae; abdominal sterna very wide, each posterior margin straight but lateroposteriorly angles sharply projecting posteriad (Fig. 4); anal sternum feebly rounded, depressed medially; posterior

margin serrulate, equal in both sexes, except *B. fissifrons* spec. nov. Male genitalia (Figs 25–35): aedeagus somewhat flattened, parameres usually slightly widened near mid-point, then narrowing in distal half; median lobe acuminate apically, with or without lateral serration.

REMARKS. *Brachelytrium* resembles species of the Neotropical *Tetragonoschema* in general body shape but differs by the character states listed in Table 1. Some southern African species of *Anthaxia* (e.g., *A. miribella* Obenberger, 1938; *A. obesula* Obenberger, 1924) are very similar to *Brachelytrium* in general appearance. They differ from *Brachelytrium* by way of the incomplete epipleura, longer elytra covering the entire abdomen, the form of the last visible sternum and the other characters given in Table 2.

BIOLOGY. Very little is known about the biology of *Brachelytrium* species. Adults are not flower visitors and are usually collected by beating dead or decaying branches and twigs of various species of *Acacia*, *Dicrostachys*, *Rhus* and *Terminalia*. During the course of this study, we found tunnels under bark of several South African species of *Acacia*, *Dicrostachys cinerea*, and *Rhus pyroides*, but we failed to find larvae. Two species were reared and these data are recorded below under the respective taxa.

SYSTEMATICS

There are two principal species groups in *Brachelytrium*, which are treated below as separate subgenera.

**KEY TO THE SUBGENERA OF
BRACHELYTRIUM**

1. Pronotal sculpture homogenous, consisting of regularly rounded or polygonal cells, each usually with well-developed central grains (Fig. 6); entire body black or dark bronze, matt, occasionally with coppery lustre; antennae serrate from third antennomere; elytra shortened, disc uneven; ventral surface very often with patches of white tomentum
..... *Brachelytrium* (*s. str.*)
- Pronotal sculpture finer, consisting of polygonal cells with indistinct central grains on disc and oblique, elongate cells or rugae laterally (Figs 7, 8); body more lustrous, bicolorous (pronotum and elytra of different colours) or bronze, cupreous or violet-bronze with pronotum red or purple laterally; antennae serrate from fourth antennomere; elytra less shortened in proportion, regularly convex; only metepimera with white tomentum
..... *B. (Elytrobrachium)* subgen. nov.

Table 1
Character state differences between *Brachelytrium* and *Tetragonoschema*.

Character	<i>Brachelytrium</i>	<i>Tetragonoschema</i>
1. Width of vertex	1.5–2.0 times as wide as eye width	About the same as eye width
2. Lateral margin of frons	Only dorsal parts converging dorsally	Strongly converging dorsally
3. Clypeus	Divided from frons by deep groove or depression	Not divided from frons
4. Anterior pronotal margin	Slightly concave with very feeble median lobe	Deeply bisinuous with large median lobe
5. Elytra	Strongly uneven, each elytron with deep humeral and scutellar depressions	Slightly uneven, each elytron with complete transverse basal depression
6. Elytral sculpture	Fine, rugose	Consisting of fine polygonal cells (similar to those on pronotum) at least in the basal half
7. Epipleuron	Reaching elytral apex (Fig. 1)	Well developed but not reaching elytral apex (Fig. 2)
8. Prosternal process	Subparallel	Enlarged posteriad fore coxae
9. Hind coxae	Subparallel	Narrowed distally
10. Metatarsomere 5	Shorter than tarsomeres 2+3	As long as tarsomeres 2+3
11. Last visible sternum	Deeply emarginate	Slightly emarginate
12. Posterior margin of sterna	Finely serrate	Simple, entire

Subgenus *BRACHELYTRIUM* Obenberger

Type species: *Brachelytrium transvalense* Obenberger, 1923 (original designation).

DIAGNOSIS. Dark bronze or black species, sometimes with coppery lustre, very often with bright metallic frons (golden-green, green or purple); antennae serrate from third antennomere; regular and homogenous rugose pronotal sculpture consisting of polygonal cells usually with well-developed central grains; elytra flattened, yet more or less uneven; ventral surface usually with tomentose spots.

REMARKS. The following species are included in the nominate subgenus: *Brachelytrium transvalense* Obenberger, 1923; *B. minisculum* Obenberger, 1928; *B. lesnei* (Théry, 1934); *B. africanum* (Pochon, 1972), and ten new species described below: *B. cavifrons*, *B. cordinotum*, *B. fissifrons*, *B. globicolle*, *B. holmi*, *B. namibiense*, *B. prolongum*, *B. straussae*, *B. tanzaniense* and *B. waterbergense*. The species in *Brachelytrium* (*s. str.*) are very similar to each other in their general appearance and they differ only in combinations of the character states size, form, colouration of frons, presence or absence of frontal

Table 2
Character state differences between *Brachelytrium* and *Anthaxia*.

Character	<i>Brachelytrium</i>	<i>Anthaxia</i>
1. Body	Nearly quadrangular, flattened	Elongate ovoid, subcylindrical
2. Elytral proportions	Less than 1.8 times as long as wide, shortened, each elytron almost trapezoidal (e.g., Fig. 19), not covering entire abdomen	More than 1.8 times as wide as long, covering entire abdomen
3. Epipleura	Wide, reaching elytral apices (Fig. 1)	Narrowing posteriorly, not reaching elytral apex (except <i>A. cichorii</i> species-group) (Fig. 3)
4. Pygidium	Visible from above	Not visible from above
5. Posterior margin of sterna	Straight with lateroposterior angles sharply projecting posteriad (Fig. 4)	Normally arcuate, lateroposterior angles otherwise (Fig. 5)
6. Last visible sternum	Short, about four times as wide as long with rounded, wide medial depression (Fig. 4); sexually equivalent	Less than four times as wide as long without rounded depressions; often sexually dimorphic
7. Male meso-, metatibiae	Unmodified	Very often modified (e.g., flattened, serrate along inner margin, arcuate)

pubescence, pronotal sculpture, elytral length and structure of aedeagus. For brevity, the first new species is fully described below, but the subsequent taxa detail only diagnostic differences. The 14 species of *Brachelytrium* (s. str.) can be distinguished in the following key.

**KEY TO THE SPECIES OF
BRACHELYTRIUM (S. STR.)**

1. Slender, relatively elongate species; length 4,4–5,7 mm; pronotum only 1,4 times as wide as long, elytra 1,6 times as long as wide (Fig. 16); frontovertex in both sexes with two deep, vertical grooves for antennae in repose; anterior portion of frons between grooves with short, white pubescence; aedeagus as in Fig. 30. *B. fissifrons* spec. nov.
 - Shorter and more stout species; pronotum 1,5–1,8 times as wide as long, elytra 1,3–1,5 times as long as wide (Figs 14, 19, 22); head without grooves, frons with or without pubescence 2
2. Frons with distinct white, off-white or grey pubescence 3
 - Frons completely glabrous. 8
3. Frontal pubescence white; setae two to three times longer than diameter of frontal punctures; frons flat without basal microsculpture; male unknown; body length 5,6 mm *B. waterbergense* spec. nov.
 - Frontal pubescence off-white or grey; setae shorter, with length same as diameter of frontal punctures or shorter; frons flat or depressed with basal microsculpture 4
4. Smaller, slender species; elytra 1,5 times as long as wide; frons flat or with rather deep, rounded, medial depression; frontal cells always without central grains but with dense, basal microsculpture 5
 - Larger, more robust species; elytra 1,3–1,4 times as long as wide; frons flat or with wide, shallow, postclypeal depression; pronotal sculpture rugose, with sharp central grains; frontal cells with or without central grains . . . 6
5. Smaller, more flattened species; frons with small but deep, rounded depression; pronotal sculpture finer with very small central grains; lateroposterior depressions well developed; frontal cells shallow but complete, rounded; male unknown; 4,0 mm *B. prolongum* spec. nov.
 - Larger, more convex species; frons flat; pronotal sculpture more rugose with sharp central grains; pronotum very convex without lateroposterior depressions; frontal cells very shallow, incomplete, nearly semicircular, open posteriorly; aedeagus as in Fig. 33; 4,7 mm *B. globicolle*, spec. nov.
6. Frons anteriorly with wide, shallow depression; anterior margin of clypeus widely, arcuately emarginate; elytra only 1,3 times as long as wide; aedeagus as in Fig. 28; body length 4,1–6,1 mm . . . *B. straussae* spec. nov.
 - Frons flat; anterior margin of clypeus straight; elytra 1,4 times as long as wide; more convex species 7
7. Pronotum as wide as elytra; abdomen shorter, elytra extending as far as opposite posterior angles of penultimate tergite (Fig. 9); body length 5,1–5,3 mm *B. transvalense* Obenberger
 - Pronotum distinctly wider than elytra; abdomen longer, elytra extending as far as opposite posterior angles of third visible tergite (Fig. 20); body length 5,3–6,7 mm; aedeagus as in Fig. 32. *B. tanzaniense* spec. nov.
8. Frons deeply, widely excavated 9
 - Frons flat or slightly grooved or depressed medially 10
9. More robust species; pronotal sculpture on disc finer, with flat central grains; elytra 1,5 times as long as wide; frons of male green with large, dark violet medial spot, those of female dark purple with narrow golden-green vitta along inner margin of eyes; aedeagus as in Fig. 11; body length 5,3–5,4 mm *B. lesnei* (Théry)
 - Less robust species; pronotal sculpture on disc more rugose with small but sharp central grains; elytra 1,4 times as long as wide; frons of female bronze, male unknown; body length 4,8 mm *B. cavifrons* spec. nov.
10. Small, slender species; frons flat with small, deep, rounded, medial depression; entire body including frons black with slight coppery lustre; male unknown; body length 3,2 mm *B. minusculum* Obenberger
 - Larger, more robust species; frons flat, or slightly grooved medially, very rarely with small, rounded depression; colouration of frons purple or golden-green 11
11. Short, robust species with nearly cordiform pronotum; elytra only 1,3 times as long as wide; pronotum with deep lateroposterior depressions; body dark bronze, frons and antennae dark purple, posterior pronotal angles and elytral base feebly reddish; male unknown; body length 4,2–4,4 mm *B. cordinotum* spec. nov.
 - Relatively slender species; elytra 1,4 times as long as wide; pronotum widely rounded laterally, widest just posterior of mid-point but not cordiform; lateroposterior pronotal depressions small, shallow; body dark bronze

- or red-bronze, frons golden-green, purple or bronze with reddish tint 12
12. Frons slightly concave, bright purple in female, golden-green in male; body reddish bronze; pronotal sculpture with wide but flat central grains; aedeagus as in Fig. 17; body length 4,1–5,0 mm. *B. namibiense* spec. nov.
- Frons flat, bright purple or bronze with golden-green angles and clypeus in male, dark bronze with slight red tint in female; pronotal sculpture with small but sharp central grains 13
13. Frontal sculpture consisting of large, rounded and very dense cells, each separated by very narrow interstitial carina; frons of male bright purple, of female bronze; ventral surface black in male, bronze in female; aedeagus as in Fig. 27. *B. africanum* (Pochon)
- Frontal sculpture consisting of smaller, rounded cells, separating interstitial carina equal to half cell diameter; frons of male bronze with golden-green anterior angles and clypeus, of female bronze; ventral surface bronze in both sexes; aedeagus as in Fig. 15; body length 4,0–6,1 mm *B. holmi* spec. nov.

***Brachelytrium* (s. str.) *transvalense* Obenberger, Figs 1, 4, 6, 9, 25**

Brachelytrium transvalense Obenberger 1923: 25; 1930: 559.

The original description of this species is adequate and is not repeated here. The proportions of the holotype: 5,3 mm long; 2,3 mm wide. Aedeagus as in Fig. 25.

SPECIMENS EXAMINED. Holotype ♀ (NMPC 22847): 'Transvaal, Collection Dr. Obenberger'; 1♂, Transvaal, Nylsvley Nature Reserve, 24.39 S 28.42 E, 20.x.1982, R. G. Oberprieler; 1♀, Rustenberg, Transvaal; 1♀, Kruger National Park, Satara, ex. stomach of hornbill, Alan Kemp; 1♂, 1♀, Transvaal, Botshabello, 15 km N Middleburg, 18.x.1983, Bellamy, Louw, Scholtz. Specimens in CLBC, NMPC, SANC and TMSA.

***Brachelytrium* (s. str.) *minusculum* Obenberger, Fig. 10**

Brachelytrium minusculum Obenberger 1928: 277; 1930: 559.

The original description of this species is adequate and is not repeated here. The size of the holotype: length 3,2 mm, width 1,2 mm. Male unknown.

SPECIMENS EXAMINED. Holotype ♀ (NMPC 22846):

'Transvaal'; 1♂, C.P. Fort Beaufort, Nov. 1952, H. K. Munro; 1♀, Rhodesie, Sebakwe; 1♀, Basutoland, Mamaties, 4.xii.1947, C. Jacob Guillarmod.

***Brachelytrium* (s. str.) *lesnei* (Théry), comb. nov., Figs 11, 26**

Tetragonoschema lesnei Théry 1934: 13; 1944: 18; Ferreira, 1963: 412.

The original description of this species is adequate and is not repeated here. The size of the holotype: length 5,40 mm, width 2,25 mm. Aedeagus as in Fig. 26.

SPECIMENS EXAMINED. Holotype ♂ (MNHN): 'Moçambique, Komp'hala près Chemba'; 1♂, South Africa, Onder Sabie NKW, T. W. Drinkwater, 11.i.1972, Acx. 2786; 1♀, Transvaal, 500 m, Guernsey Farm, 15 km E Klaserie, 20.xii.1985, H. & A. Howden; 1♂, Natal, Ndumu Game Reserve, S 26.51 55 E 32.12–20, 5–8.xi.1984, 50–100 m, C. L. Bellamy, H. & A. Howden, R. G. Oberprieler & C. H. Scholtz. Specimens in CLBC, NMPC, SANC and TMSA.

***Brachelytrium* (s. str.) *africanum* (Pochon), Figs 12, 27**

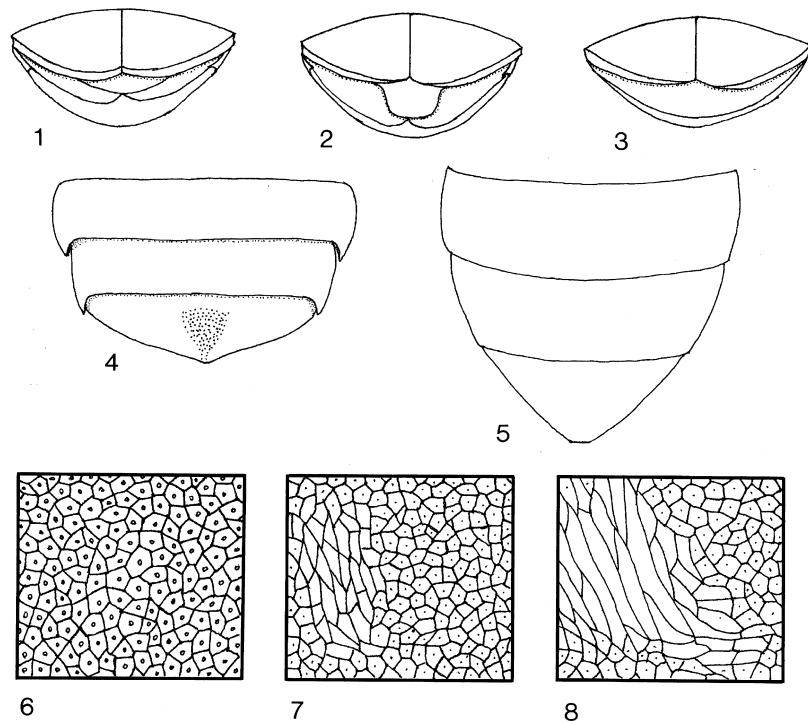
Tetragonoschema africana Pochon 1972: 367.
Brachelytrium africanum: Bílý 1996: 31.

The original description of this species is also sufficient for our understanding. The size of the holotype: length 4,8 mm, width 2,1 mm. Aedeagus as in Fig. 27.

SPECIMENS EXAMINED. Holotype ♂ (MRAC): South Africa 'Ubombo, Zululand'; 1♂, 1♀, Natal, Ndumu Game Reserve, S 26.51–55 E 32.12–20, 5–8.xi.1984, 50–100 m, C. L. Bellamy, H. & A. Howden, R. G. Oberprieler & C. H. Scholtz; 1 ex., S. Afr. Zululand, Hluhluwe Game Res., 28.05 S 32.04 E, 27.xi.1992, E-Y:2857, flowering *Acacia*, leg. Endrödy-Younga; 1♂, Transvaal, Skukuza, 24.xii.1971, E. Holm, malaise trap; 2♀, Kruger Nat. Pk., Skukuza 1 km N, 24.59S 31.36E, 23.i.1995, E-Y:3091, on vegetation, leg. C. L. Bellamy; 2♂, 5♀, vic. Skukuza, S 24.29 E 31.35, 8–10.xii.1997, Bellamy & Bílý, beating foliage of *Acacia grandicornuta*; 2 ex. (TMSA): emerged from *A. grandicornuta*, xi.1999, ex. wood collected 8–10.xii.1997, vic. Skukuza, Bellamy & Bílý. Specimens in CLBC, NMPC, SANC and TMSA.

***Brachelytrium* (s. str.) *straussae* spec. nov., Figs 13, 28**

DIAGNOSIS. Medium-sized, black or dark bronze species; dorsal surface without pubescence except frons with very short, white setae; length of hairs equal to diameter of frontal cells; ventral surface



Figs 1-8

1-3: Elytral apex and abdominal sterna, posterior view: 1: *Brachelytrium (s. str.) transvalense*; 2: *Tetragonoschema* sp.; 3: *Anthaxia* sp.; 4-5: abdominal sterna: 4: *Brachelytrium (s. str.) transvalense*; 5: *Anthaxia* sp.; 6-8: lateral portion of pronotal disc, surface sculpture: 6: *Brachelytrium (s. str.) transvalense*; 7: *B. (Elytrobrachium) blairi*; 8: *B. (E.) ventrale*.



Fig. 9

Dorsal habitus, *Brachelytrium (s. str.) transvalense*.



Fig. 10

Dorsal habitus, *Brachelytrium (s. str.) minusculum*.



Fig. 11

Dorsal habitus, *Brachelytrium* (s. str.) *lesnei*.

Fig. 12

Dorsal habitus, *Brachelytrium* (s. str.) *africanum*.

with numerous patches of white tomentum.

DESCRIPTION. Head relatively small, partially retracted into prothorax; frons nearly flat, with subtriangular, shallow postclypeal depression; vertex 1,1–1,2 times as wide as width of eye; eyes elliptical, not projecting beyond head contour; clypeus slightly concave anteriorly, somewhat projecting beyond lateral outline of frons; antennae very short, barely extending to anterior one-third of pronotal lateral margin; serrate from third antennomere; first nearly as long as two to four together, two short, pear-shaped, 1,5 times as long as wide; three very short, triangular; four to ten trapezoidal, distinctly wider than long; eleven rhomboid; sculpture of frons consisting of fine, dense microsculpture and rounded, shallow punctures. Pronotum very convex, usually slightly wider than elytra, 1,6–1,7 times as wide as long with posterior margin bisinuate; anterior margin deeply, arcuately emarginate with indistinct median lobe; lateral margins widely, nearly angulately rounded along anterior third, nearly straight in posterior third; lateroposterior depressions small, usually filled with fine white powder; sculpture of disc homogeneous, consisting of regular polygonal, rather rugose cells with small but sharp central grains. Scutellum subtriangular, convex, microsculptured, about 1,5 times as long as wide. Elytra very short, 1,3 times as long as wide, uneven, with shallow depressions filled with sparse, white powder; maximum width at

posterior third; humeral swellings and transverse basal depressions well developed; epipleura wide, extending to elytral apices; sculpture rugose, consisting of small grains, asperites and short rugae; elytral apices separately rounded. Ventral surface



Fig. 13

Dorsal habitus, *Brachelytrium* (s. str.) *straussae*.

rather rugosely ocellate; prosternal process flat, wide, enlarged posteriad procoxae; sculpture rugose, deeply punctate; abdominal sterna very short, lateroposterior angles sharply projecting posteriad; last visible sternum deeply excavate medially, feebly emarginate apically, lateral margin finely serrate. Legs short, relatively slender; male, female meso-, metatibiae not modified; claws slender, simply hooked. Aedeagus (Fig. 28): flattened dorsoventrally; parameres slightly enlarged near mid-point, thereafter attenuate to subparallel in distal half; median lobe obtusely acuminate, finely serrate laterally.

VARIATION. Size: length 4,1–6,1 mm (holotype 4,8 mm); width 1,6–2,7 mm (holotype 2,1 mm). Sexual dimorphism nearly undeveloped: female usually more robust, male sometimes with coppery tint.

SPECIMENS EXAMINED. Holotype ♂ (TMSA): South Africa, Northern Province, Waterberg, Geelhoutbos farm, 24.22 S 27.33 E, 2.x.1995, E-Y:3141, beating around camp, Endrödy & Bellamy [beating branches of *Dicrostachys cinerea*]; allotype ♀ (TMSA): same data as holotype; 38 paratypes: 16♂, 13♀, same data; 1♀ (TMSA): same data, except 16.xi.1997, C. L. Bellamy; 1♀ (TMSA): same data, except 29–30.xi.1998, C. L. Bellamy, beating foliage of *Acacia burkei*; 2♀, Transvaal, 17 km WSW Hoedspruit, S 24.25 E 30.48, 22.ix.1986, C. L. Bellamy & D. S. Verity; 1♂, same data as holotype except reared from *D. cinerea* branches collected 15–18.xi.1997, emerged 28.xi.1997, Bellamy & Bílý; 1♀ (TMSA): same data, except 30.xi.1999, C. L. Bellamy, beating dead *Acacia*; 3♀ (TCMC): 1, same data as holotype except 30.xi.1999, T. C. MacRae; 1, same data except 1.xii.1999; 1, same data except 2.xii.1999, beaten ex. *Grewia flava*; 1♀ (TMSA): Northwest Prov. Borakalalo Nat. Res., 25.07 S 27.47 E, 22–26.xi.1999, C. L. Bellamy, beating dead branches of *Zisypus*. Paratypes in BMNH, CLBC, NMPC, RLWE, SANC, TCMC and TMSA.

ETYMOLOGY. The specific epithet is chosen to honour Mrs Susan Strauss, owner of the Geelhoutbos farm, the type locality for this new species, in recognition of her hospitality and for allowing access to the habitats that produced this and other new species of Buprestidae.

REMARKS. This species' description will serve as the template for the subsequently discussed new species. *Brachelytrium straussi* can be separated from its congeners by characters used in the key and in the remarks following each successive diagnosis.

***Brachelytrium (s. str.) prolongum spec. nov.*,
Fig. 14**

DIAGNOSIS. Small, relatively slender; dark bronze; anterior portion of frons and clypeus red-bronze; dorsal surface glabrous, only frons with very short, white pubescence; ventral surface with short, sparse, white pubescence; lateroposterior pronotal depressions and shallow elytral depressions filled with sparse, white powder; lateral portion of pro-, mesosternum, hind coxal plates, entire metepisternum, lateral portion of abdominal sterna, last two visible pleurites and anterior half of last visible sternum with patches of dense white tomentum.

DESCRIPTION. Head small; frons flat with rather deep, rounded median depression; pronotum 1,6 times as wide as long, moderately convex with distinct, well-developed lateroposterior depressions; sculpture very fine cells with small central grains; elytra slightly uneven, 1,5 times as long as wide, rather lustrous. Male unknown. Length: 4,0 mm; width: 1,7 mm.

SPECIMENS EXAMINED. Holotype ♀ (TMSA): South Africa, Northern Province, Waterberg, Geelhoutbos farm, 24.22 S 27.33 E, 2.x.1995, E-Y:3141, beating around camp, Endrödy & Bellamy.



Fig. 14

Dorsal habitus, *Brachelytrium (s. str.) prolongum*.

ETYMOLOGY. The species name indicates the rather slender, prolonged condition.

REMARKS. *Brachelytrium prolongum* differs from the other species as indicated in the key. It comes nearest to *B. straussae* which it resembles in general shape and *B. fissifrons* but differs from the latter by the deep frontal depression and the absence of antennal grooves on the frontovertex.

***Brachelytrium (s. str.) holmi spec. nov.*, Figs 15, 29**

DIAGNOSIS. Medium-sized, elongate; dark bronze; legs, pleurites, lateroposterior angles of male pronotum and clypeus of female feebly red-bronze; clypeus and anterolateral portion of male frons golden-green.

DESCRIPTION. Frons flat, sculpture consists of small, rounded cells, interstitial carinae between cells about half diameter of each cell; pronotum widely rounded laterally, widest anterior of mid-point; sculpture with small but sharp central grains; lateroposterior depressions small, shallow; elytra 1,4 times as long as wide, disc feebly uneven; ventral surface black-bronze with small patches of off-white tomentum on metasternum, metepimera, metacoxal plates, and last three visible sterna. Aedeagus (Fig. 29) relatively short, parameres slightly enlarged at about mid-point, then abruptly narrowed and subparallel in distal half; median lobe acuminate apically, without lateral serration. Length: 4,0–6,1 mm (holotype 4,2 mm); width: 1,7–2,7 mm (holotype 1,7 mm).

SPECIMENS EXAMINED. Holotype ♂ (TMSA): South Africa, Transvaal, 18 km ESE Brits, S 25.42 E 27.53, 30.xi.–2.xii.1984, C. L. Bellamy, D. d'Hotman; allotype ♀ (TMSA): same data as holotype; 15 paratypes: 1♀, same data; 1♂, 80 km E of Vanzylrus, 8–9.xii.1971, E. Holm, *Acacia haematoxylon*; 3♀, Melodie, vic. Plot 56, S 25.44 E 27.51, 30.xi.1985, C. L. Bellamy, D. d'Hotman; 1♀, Nylsvley, Farm 'Sericea', S 24.29 E 28.42, 12/13.xii.1985, C. L. Bellamy, A. V. Evans; 1♀, same data except 15.xii.84, C. L. Bellamy, M. Edwardes; 1♀, vic. Schoemansville, 20.xi.1983, C. L. Bellamy, E. Holm, beating *Acacia*; 5♀, Northwest Prov., Silkaatsnek, S 25.40 E 27.55, 30.xi.1995, 1220 m., C. L. Bellamy & R. L. Westcott; 1♂, Northern Province, Waterberg, Geelhoutbos farm, 24.22 S 27.33 E, 15–18.xi.1997, S. Bílý; 1♂, Kruger Nat. Park, S 24.29 E 31.35, 8–10.xii.1997, Bellamy & Bílý, beating *Acacia erubescens*. 7♂, 13♀ (TMSA): Northwest Prov. Borakalalo Nat. Res., 25.07 S 27.47 E, 22–26.xi.1999, C. L. Bellamy, beating dead



Fig. 15

Dorsal habitus, *Brachelytrium (s. str.) holmi*.

branches of *Acacia karroo* and *A. tortilis*; 11♂, 9♀ (TCMC): same data except T. C. MacRae, beating *A. karroo*, *A. tortilis* and *Terminalia sericea*. Paratypes in BMNH, CLBC, NMPC, RLWE, SANC, TCMC and TMSA.

ETYMOLOGY. This species is dedicated to Prof. Erik Holm, formerly of the University of Pretoria, in appreciation of many favours extended to both authors over the years and to honour his numerous contributions to our understanding of African Buprestidae.

REMARKS. This new species is very similar to *B. africanum* but differs by its sparser frontal sculpture, different colouration of the frons and by the different structures of the respective male genitalia. Two specimens of this new species were collected at Geelhoutbos farm on 30.xi.1999 and have been preserved in 96 % ethanol for molecular systematics; these specimens are not paratypes.

***Brachelytrium (s. str.) fissifrons spec. nov.*, Figs 16, 30**

DIAGNOSIS. Medium-sized, elongate; dark bronze; ventral surface with coppery tint; frons of male dark golden-green, somewhat darkened between frontal grooves; of female dark bronze between grooves, blue-green laterally between



Fig. 16

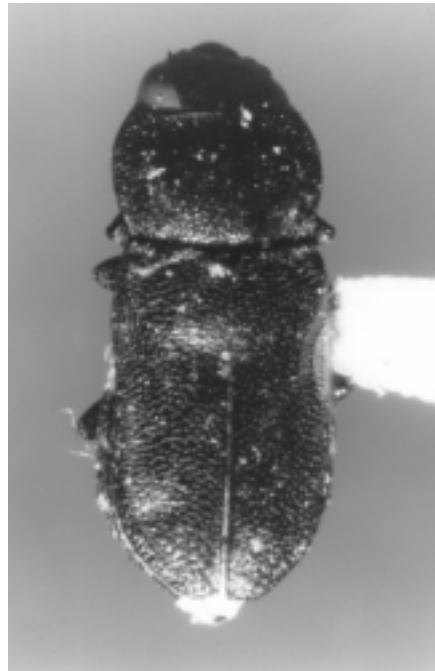
Dorsal habitus, *Brachelytrium (s. str.) fissifrons*.

Fig. 17

Dorsal habitus, *Brachelytrium (s. str.) namibiense*.

grooves and eyes; clypeus and anterolateral angles of frons purple; pronotal and elytral depressions with white tomentum; ventral surface, but not pleurites, with numerous patches of white tomentum.

DESCRIPTION. Frons flat with two deep, vertical grooves, slightly converging dorsally; eyes large, but not projecting beyond head contour; vertex 0.7 times as wide as width of eye; sculpture of frons consisting of ovoid cells without distinct central grains; pronotum rather convex, 1.4 times as wide as long, its sculpture consisting of small, but rather rugose polygonal cells with small, indistinct central grains; lateroposterior pronotal depressions small but distinct; pronotum sometimes with feeble median depression in posterior half; elytra rather vaulted, only slightly uneven, 1.6 times as long as wide; last visible abdominal sternum feebly truncate in female, with slight notch in male. Aedeagus (Fig. 30) rather short, flattened; dorsal surface of parameres distinctly sculptured in apical half; median lobe acuminate without lateral serration. Length: 4.4–5.7 mm (holotype 4.7 mm); width: 1.2–2.3 mm (holotype 1.7 mm).

SPECIMENS EXAMINED. Holotype ♂ (TMSA): South Africa, Transvaal, Sand River Mt, S24.32 E27.39, 8/9.xi.1985, C. L. Bellamy, A. V. Evans; allo-

type ♀ (NMPC): Northern Prov., Waterberg, Geelhoutbos farm, S 24.22 E 27.33, 15–18.xii.1997, S. Bily leg.; 13 paratypes: 3♂, same data as allotype except 3.x.1995, beating around camp, Endrödy & Bellamy; 2♂, 3♀, same data except 15–19.xii.1995, R. L. Westcott; 3♂, same data except 29–30.xi.1998, C. L. Bellamy, beating dead branches of *Rhus pyroides*; 1♂, NW Prov., Silkaatsnek, S 25.40 E 27.55, 30.xi.1995, 1220 m., C. L. Bellamy; 1♂, Hartebeespoort, xii.1968; 1♀, Zimbabwe, Matobo N. P., S of Bulawayo, 3–6.xii.1998, A. Kudrna leg. Paratypes in NMPC, CLBC, RLWE, SANC and TMSA.

ETYMOLOGY. The derivation of the specific epithet indicates the grooves (Latin *fissi*) on the frons.

REMARKS. *Brachelytrium fissifrons* differs from all congeners by several very unique characters: large eyes, narrow vertex, deep vertical grooves on frons and the sexual dimorphism in the shape of the last visible sternum.

***Brachelytrium (s. str.) namibiense spec. nov.*, Figs 17, 31**

DIAGNOSIS. Medium-sized, rather lustrous, bronze; frons of female, ventral surface and lateral portions of male pronotum with reddish tint; frons of

male golden-green; lateral portion of metasternum, metepisternum, abdominal sterna and pleurites with small patches of white or grey tomentum.

DESCRIPTION. Frons slightly depressed medially; sculpture consisting of dense, fine, basal microsculpture and ovoid, shallow cells without central grains on middle and upper portion of frons; clypeal area with sparse distinct, rounded punctures; pronotum widely rounded laterally with small, shallow lateroposterior depressions; pronotum widest just posterior to mid-point; sculpture consisting of fine, polygonal cells with flat central grains; elytra less shortened, 1,4 times as long as wide and covering entire abdomen except pygidium. Aedeagus (Fig. 31) very similar to that of *B. holmi* but longer in proportion; median lobe finely serrate laterally. Length: 4,1–5,0 mm (holotype 4,2 mm); width: 1,6–2,0 mm (holotype 1,7 mm).

SPECIMENS EXAMINED. Holotype ♂ (TMSA): S.W.A./Namibia, Höhenheim, SE 22 16 Cd, 15–16. i.1985, University of Pretoria, Dept. Entomology Tour '85; allotype ♀ (TMSA): same data as holotype; 9 paratypes: 2♂, 4♀, same data; 1♂, S.W.A. Duwisib, SE 25.16 Bc, 19.i.1985, University of Pretoria, Dept. Entomology Tour '85; 1♂, 1♀, Windhoek, 22.34S 17.05E, 22–30.xii.1983, R. Oberprieler. Paratypes in CLBC, NMPC, SMWN and TMSA.

ETYMOLOGY. The species name is for the country of origin.

REMARKS. This new species differs from other similar species (e.g., *B. africanum*, *B. holmi*) by its rather bright colouration, the slightly depressed frons with dense microsculpture and the fine pronotal sculpture.

***Brachelytrium (s. str.) cordinotum spec. nov.*,
Fig. 18**

DIAGNOSIS. Very short, stout species; dorsal surface dark bronze; lateroposterior pronotal angles, elytra base and legs with reddish lustre; frons dark purple; ventral surface black with very slight coppery tint; antennae bright red-bronze.

DESCRIPTION. Head rather small, partly covered by pronotum; frons with wide, rather deep postclypeal depression; sculpture of frons consisting of ovoid and polygonal cells which are small, indistinct on postclypeal depression; vertex slightly narrower than width of eye; pronotum 1,8 times as wide as long; widely arcuately enlarged in anterior one-third, nearly cordiform; lateroposterior depressions wide, deep; pronotal sculpture rugose with small, but



Fig. 18

Dorsal habitus, *Brachelytrium (s. str.) cordinotum*.

sharp central grooves; elytra short, uneven, only 1,3 times as long as wide; medial depression of last visible abdominal sternum very deep. Male unknown. Length: 4,2 and 4,4 (holotype) mm; width: 1,8 and 1,9 (holotype) mm.

SPECIMENS EXAMINED. Holotype ♀ (TMSA): Botswana, Serowe, SE 22.26 Bd, 16.x.1984, P. Forschammer; 1♀ paratype (NMPC): same data as holotype except 27.xi.1983.

ETYMOLOGY. The specific epithet was chosen to highlight the subcordiform shape of the pronotum.

REMARKS. This species, while generally typical in most character states, differs from its congeners by its short, stout body and almost cordiform pronotum.

***Brachelytrium (s. str.) waterbergense spec. nov.*, Fig. 19**

DIAGNOSIS. Large, subparallel, dark bronze; ventral surface and legs with fine coppery tint; frons with long white pubescence that is twice as long as diameter of frontal cells.

DESCRIPTION. Frons very slightly convex, nearly flat; vertex as wide as width of eye; clypeus deeply



Fig. 19

Dorsal habitus, *Brachelytrium* (s. str.) *waterbergense*.



Fig. 20

Dorsal habitus, *Brachelytrium* (s. str.) *tanzaniense*.

incurved anteriorly; pronotum wide, 1,7 times as wide as long with small, shallow lateroposterior depressions; pronotal sculpture dense, consisting of small, nearly rounded cells with well-developed, sharp central grains; elytra only slightly uneven, 1,5 times as long as wide, distinctly narrower than pronotum; lateral portion of both thoracic and abdominal sterna with numerous small patches of white tomentum. Male unknown. Length: 5,6 mm; width: 2,7 mm.

SPECIMENS EXAMINED. Holotype ♀ (TMSA): South Africa, Northern Province, Waterberg, Geelhoutbos farm, 24.22 S 27.33 E, 2.x.1995, E-Y:3141, beating around camp, Endrödy and Bellamy.

ETYMOLOGY. The species name is for the Waterberg range, Northern Province, South Africa. This range and surrounding habitats have yielded several species of *Brachelytrium*.

REMARKS. This new species is most similar to *B. tanzaniense* from which it differs, apart from distribution, by the long pubescence of the frons, widely incurved anterior margin of the clypeus, slightly convex frons and darker ventral surface colour with numerous small tomentose patches.

***Brachelytrium* (s. str.) *tanzaniense* spec. nov., Figs 20, 32**

DIAGNOSIS. Large, robust; dorsal surface dark bronze with somewhat reddish tint along elytral base in male or on lateroposterior pronotal angles in female; ventral surface red-bronze in female or dark bronze with slight coppery lustre in male; frons red-bronze in both sexes, with very short greyish pubescence.

DESCRIPTION. Head large, not partially concealed by pronotum; frons flat; vertex 1,0 (♂) to 1,2 (♀) times as wide as width of eye; sculpture of frontovertex consisting of fine microsculpture and large, ovoid cells with large, flat central grains; pronotum very wide, 1,8 times as wide as long, widely arcuate laterally, distinctly wider than elytra; pronotal sculpture dense, rugose with distinct, sharp central grains; elytra 1,4 times as long as wide, uneven, rather lustrous; abdomen long, last two tergites extending beyond elytral apices. Aedeagus (Fig. 32) slender; parameres slightly enlarged at mid-point; median lobe acuminate apically, without lateral serration. Length: 5,3 and 6,7 (holotype) mm; width: 2,4 and 2,9 (holotype) mm.

SPECIMENS EXAMINED. Holotype ♂ (TMSA):

Tanzania (Iringa), Igomaa, 20.i.1996, G. Curletti leg.; allotype ♀ (CCIT): same data as holotype; 4 paratypes: 1♂, 3♀ (2 CCIT, 2 NMPC) same locality, x.1998, ex larva: *Acacia* sp., G. Curletti leg.

ETYMOLOGY. This species is named for the country of origin.

REMARKS. *B. tanzaniense* resembles *B. waterbergense* by its body shape, but differs, apart from distribution, by its shorter frontal pubescence, completely flat frons, wider pronotum, less incurved anterior clypeal margin and by the extent of the abdominal tergites projecting beyond the elytral apex.

***Brachelytrium* (s. str.) *cavifrons* spec. nov.,**
Fig. 21

DIAGNOSIS. Medium-sized, dark bronze; ventral surface black, with small patches of white tomentum; frons glabrous.

DESCRIPTION. Frons deeply, widely excavate, sculpture consisting of dense, polygonal, rounded cells without central grains; pronotum widely rounded laterally with small, very shallow latero-posterior depressions; pronotal sculpture rugose



Fig. 21

Dorsal habitus, *Brachelytrium* (s. str.) *cavifrons*.

with small but sharp central grains; elytra 1,4 times as long as wide, slightly uneven. Male unknown. Length: 4,7 mm; width: 1,8 mm.

SPECIMENS EXAMINED. Holotype ♀ (TMSA): S. W. Africa, Windhoek, Municipal area, 22.34 S 17.06 E, 24.ix.1973, E-Y:141, beaten, leg. Endrödy-Younga.

ETYMOLOGY. The species epithet was selected to emphasize the concave frons.

REMARKS. This new species is very similar to *B. africanum*, but differs by the more rugose pronotal sculpture with sharp central grains, somewhat more slender and slightly different colouration in the female, i.e., frons, antennae and legs bronze, ventral surface black. By contrast, the female of *B. africanum* has a dark purple frons with narrow, golden-green vittae along inner margins of eyes, golden-green antennae and tarsi, and a bronze ventral surface.

***Brachelytrium* (s. str.) *globicolle* spec. nov.,**
Figs 22, 33

DIAGNOSIS. Medium-sized, black with slight bronze tint; frons and antennae golden-green, tibiae reddish bronze; ventral surface black-bronze; frons flat, with very short, white pubescence.

DESCRIPTION. Head sculpture consisting of dense, fine microsculpture and shallow, rounded cells without central grains; pronotum 1,7 times as wide as long, distinctly vaulted, without latero-posterior depressions; lateral margins of pronotum widely rounded, maximum width just posteriad of mid-point; sculpture consisting of dense, rather rugose, small polygonal cells with sharp central grains; elytra 1,5 times as long as wide, slightly uneven, rather lustrous, without patches of tomentum. Aedeagus (Fig. 33) rather short; parameres swollen near mid-point, thereafter parallel in apical one-third; median lobe serrate laterally. Length: 4,7 mm; width: 1,8 mm.

SPECIMENS EXAMINED. Holotype ♂ (SMWN): RSA, N. Cape Province, Coboopduine, 28.45 S 19.21 E, 16–25.iii.1988, Preserv. pitf. traps, J. Irish, E. Marais.

ETYMOLOGY. The species name highlights the rather globose pronotum.

REMARKS. *Brachelytrium globicolle* differs from all other species by the vaulted pronotum without lateroposterior depressions and by other characters given in the key.



Fig. 22
Dorsal habitus, *Brachelytrium* (*s. str.*) *globicolle*.

Subgenus *ELYTROBRACHIUM* subgen. nov.

Type species: *Anthaxia blairi* Obenberger, 1931 (new designation).

DIAGNOSIS. Body lustrous; elytra dark bronze or cupreous; pronotum with red or purple areas laterad or elytra blue, blue-green or violet, pronotum golden-green, orange or purple with large, inverted, nearly triangular black spot.

DESCRIPTION. Frons flat or widely depressed, without pubescence; sculpture consisting of very dense, rounded cells without central grains, usually with dense microsculpture; antennae short, serrate from fourth antennomere; reaching anterior one-third of lateral pronotal margin; antennomeres four to ten distinctly wider than long; pronotum rather convex and lustrous; pronotal sculpture consisting of polygonal cells with very indistinct central grains on disc and obliquely elongate cells or oblique rugae laterally; elytra rather vaulted without wide and shallow depressions; broadly rounded posteriorly, not as shortened as in *Brachelytrium s. str.*; sculpture finely rugose; rather lustrous; only metepimeron with patches of white tomentum.

ETYMOLOGY. The name of the new subgenus, neutral in gender, was created by inverting the roots of the nominate subgeneric epithet.

REMARKS. Only two species are included: *B. ventrale* (Kerremans, 1911) and *B. blairi* (Obenberger, 1931). These can be differentiated in the following couplet.

1. Smaller (length 3,1–4,5 mm), bicolorous species: elytra blue or blue-green, pronotum golden-orange or golden-red with large subtriangular black spot reaching almost to scutellum (Fig. 24); rarely entire body blue with very indistinct pronotal spot; frons widely, deeply impressed, golden-green in male or dark blue in female; ventral surface black, lateral portion of sterna golden (male) or purple (female); pronotum without latero-posterior depressions, the lateral portion with oblique, elongate cells; aedeagus as in Fig. 35. *B. (E.) blairi* (Obenberger)
- Larger (length 4,2–5,7 mm), more robust species; dorsal surface dark bronze, anterior pronotal angles and lateral portions with reddish lustre (male) or dark purple (female); frons bright (male) or dark (female) purple; ventral surface black, lateral portion of sterna bronze (male) or red (female); frons nearly flat; pronotum with well-developed latero-posterior depressions; lateral portion of pronotum with elongate, oblique rugae; aedeagus as in Fig. 34

***Brachelytrium (Elytrobrachium) ventrale* (Kerremans) comb. nov., Figs 23, 34**

Anthaxia ventralis Kerremans, 1911: 91; Bílý, 1997: 125.

This species was originally described for a single male and female from Transvaal. However, owing to the brevity of the original description and the need to emphasize character states in comparison to species in the new combination, a redescription is presented here.

DIAGNOSIS. Medium-sized (length 4,2–5,7 mm), robust and rather vaulted species; dorsal surface bronze or dark bronze; anterior margin and latero-posterior angles of pronotum red or dark purple; frons of male bright purple, of female dark purple; ventral surface black; lateral portion of abdominal sterna with aeneous lustre in male or bright purple in female; dorsal surface completely glabrous, ventral surface with very sparse, short, white, recumbent pubescence.

REDESCRIPTION. Head relatively small, vertex and eye of same width; eyes rather large, reniform but not projecting beyond contour of head; frons flat, its



Fig. 23

Dorsal habitus, *Brachelytrium (Elytrobachium) ventrale*.

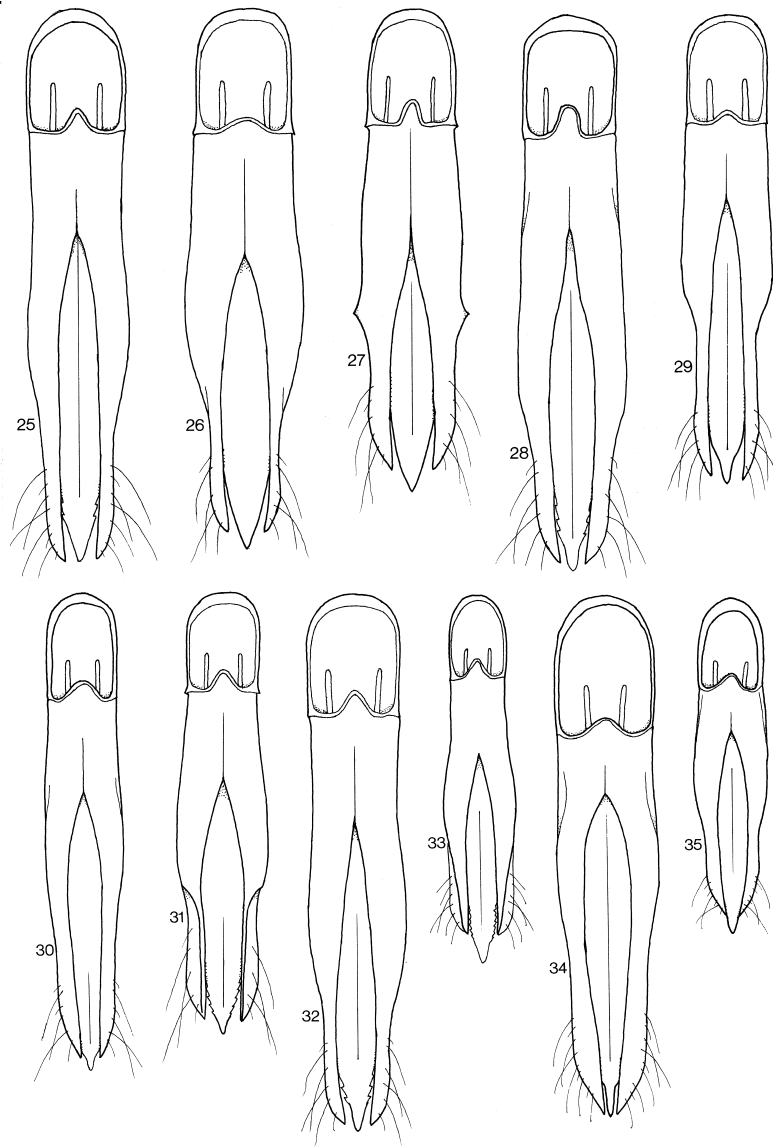
Fig. 24

Dorsal habitus, *Brachelytrium (Elytrobachium) blairi*.

sculpture consisting of regular, very dense polygonal cells without central grains; bottom of each cell with very fine, dense microsculpture imparting a silky lustre to frons; antennae very short, barely reaching anterior one-third of pronotal lateral margin; serrate from fourth antennomere; third short, subtriangular; four to ten trapezoid, slightly wider than long; eleven rhomboid. Pronotum convex, 1.6 times as wide as long, widest at anterior one-third; with small, sometimes indistinct laterobasal depressions; anterior margin feebly bisinuate; posterior margin nearly straight; lateral margins widely arcuate in anterior two-thirds, nearly straight in posterior one-third; sculpture consisting of network of regular, polygonal cells (Fig. 7) with nearly indistinct central grains; cells on lateral and anterolateral portions oblique, elongate rugae. Scutellum subtriangular, microsculptured, slightly longer than wide. Elytra very convex, 1.5–1.6 times as long as wide; very widely rounded in apical one-quarter; basal transverse depression well developed; humeral swellings small but distinct; epipleura wide, depressed between two carinae, extending to apex; sculpture of disc very fine, consisting of small, smooth grains and microsculpture. Ventral surface finely reticulate; prosternal process with rather dense, rounded, shallow punctures; last visible sternum of both sexes deeply impressed medially, finely shagreened, with posterior margin very finely serrate. Legs short, slender, unmodified;

claws simply hooked. Aedeagus (Fig. 34) rather robust, parameres slightly enlarged in basal half and parallel distally; median lobe acuminate. Sexual dimorphism: the sexes differ only in the colouration of the frons.

SPECIMENS EXAMINED. Holotype, male (MRAC): Transvaal 'Waterberg'; 3♂ 8♀, SOUTH AFRICA, Transvaal, Saartjiesnek, 4000', S 25.46 E 27.54, 12–17.xi.1983, C. L. Bellamy and E. Holm; 1♀, same data except 18–20.xi.1983; 1♀, same data except 30.xi.–1.xii.1985, C. L. Bellamy and D. d'Hotman; 1♀, same data except 24.xi.1986, C. L. Bellamy; 1♀, vic. Schoemansville, 20.xi.1983, C. L. Bellamy and E. Holm, beating *Acacia*; 1♀, 18 km ESE Brits, S 25.42 E 27.53, 30.xi.–2.xii.1984, C. L. Bellamy and D. d'Hotman; 1♀, Transvaal, Rustenburg; 1♂, 1♀, Hammanskraal, 25.24 S 28.19 E, 13.xi.1985, E-Y:2263, on vegetation, leg. Endrödy-Younga; 1♀, S. Afr. Waterberg, Geelhoutbos farm, 24.22 S 27.33 E, 3.x.1995, E-Y:3141, beating around camp, Endrödy and Bellamy, beating *Acacia*; 1♀, same data except 15–18.xi.1997, C. L. Bellamy; 1♂, 1♀, same data except emerged from *Acacia erubescens*, Bellamy and Bílý; 1♂, same data, except 29–30.xi.1998, C. L. Bellamy, beating dead branches of *Rhus pyroides*; 1♀: same data, except beating foliage of *Acacia burkei*; 1♂, 2♀, Northwest Prov., Kommandonek, S25.45 E27.47, 1.xii.1995, R. L. Westcott; 2♀, Natal, Ndumu Game Reserve,



Figs 25–35

Male genitalia, dorsal view; 25: *Brachelytrium transvalense*; 26: *B. lesnei*; 27: *B. africanum*; 28: *B. straussae*; 29: *B. holmi*; 30: *B. fissifrons*; 31: *B. namibiense*; 32: *B. tanzaniense*; 33: *B. globicolle*; 34: *B. (E.) ventrale*; 35: *B. (E.) blairi*.

S 26.51 55 E 32.12–20, 5–8.xi.1984, 50–100 m, C. L. Bellamy, H. and A. Howden, R. G. Oberprieler and C. H. Scholtz; 1♂, 1♀, NAMIBIA, vic. Grootfontein, ex. *Acacia mellifera*, emrg. xi.1986–ii. 1987. These specimens are from TMSA, CLBC, RLWE and SMWN.

REMARKS. *Brachelytrium ventrale* and *B. blairi* may be distinguished as indicated in the above couplet to the species.

***Brachelytrium (Elytrobrachium) blairi* (Obenberger) comb. nov.**, Figs 24, 35

Anthaxia blairi Obenberger, 1931: 98; Bílý, 1997: 53.

Anthaxia blairi var. *eleuthera* Obenberger, 1931: 99; Bílý, 1997: 67. **Syn. nov.**

Anthaxia blairi var. *arbustorum* Obenberger, 1938: 245; Bílý, 1997: 47. **Syn. nov.**

This species was adequately described from the original type series of specimens from Namibia and

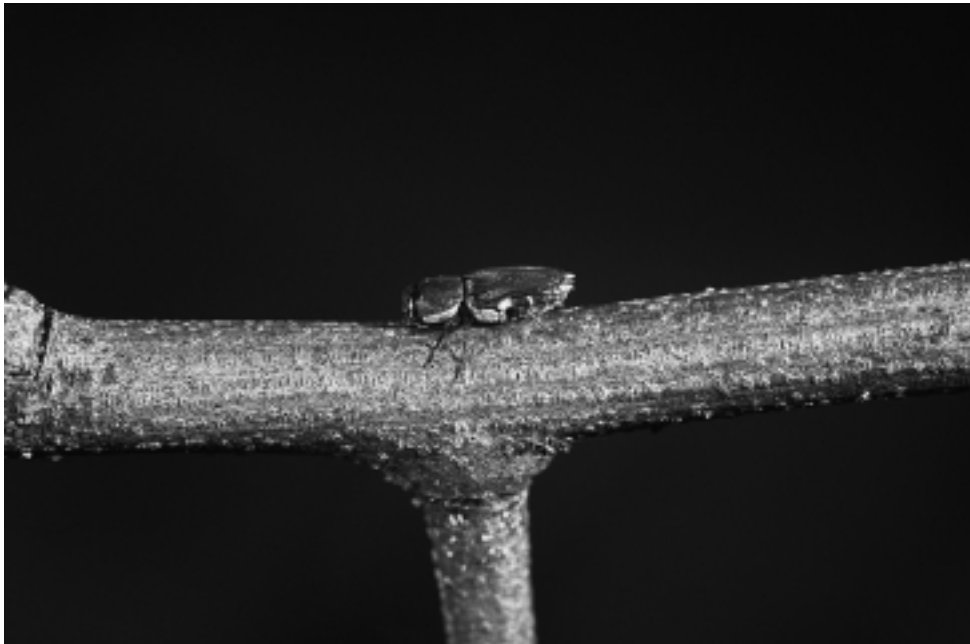


Fig. 36

Brachelytrium (*s. str.*) *straussae* at rest on dead branch, at type locality.

South Africa, Natal. The aedeagus is illustrated in Fig. 35. In the original description, Obenberger (1931) commented on the similarity of this species to the genus *Brachelytrium*.

SPECIMENS EXAMINED. Lectotype ♂ of *blairi* (new designation) (BMNH): S. W. Africa, R. E. Turner, Brit. Mus. 1930–113, Aus. Dec. 1929; 14 paralectotypes (2♂ 7♀ BMNH; 3♀ NMPC; 1♂, 1♀ TMSA): same data as lectotype; holotype ♀ of *arbustorum* (NMPC); holotype ♂ of *eleuthera* (NMPC); 4 ex., South Africa: Transvaal, 18 km ESE Brits, S 25.42 E 27.53, 30.xi.–2.xii.1984, C. L. Bellamy and D. d'Hotman; 3 ex., Melodie, S 25.44 E 27.51, ex. *Acacia tortilis*, emrg. xi.1986–ii.1987, C. L. Bellamy; 2 ex., Nylsvley, Farm 'Sericea', S 24.29 E 28.42, 12/13.xii.1985, C. L. Bellamy, A. V. Evans; 21 ex., Sand River Mt., S 24.32 E 27.39, 8/9.xi.1985, C. L. Bellamy, A. V. Evans; 4 ex., No. Prov., Waterberg, Geelhoutbos farm, 24.22 S 27.33 E, 3.x.1995, E-Y:3141, beating around camp, Endrödy and Bellamy; 1♂ same data except 18–15.xi.1997, C. L. Bellamy; 1♀ (TMSA): same data except 29–30.xi.1998, C. L. Bellamy; 20 ex. (TMSA): N. W. Prov., Borakalalo Nat. Res., 25.07 S 27.47 E, 22–26.xi.1999, C. L. Bellamy, beating *Acacia karroo* and *A. tortilis*; 23 ex. (TCMC): same data except T. C. MacRae, beating *A. karroo*, *A. tortilis* and *Terminalia sericea*; 1 ex., Natal, Ndumu Game Reserve, S 26.51 55 E 32.12–20, 5–8.xi.1984, 50–100 m, C. L. Bellamy, H. and A. Howden, R. G.

Oberprieler and C. H. Scholtz; 1♀, Botswana, Serowe farm, xii.1991, Forschhammer. These specimens are from BMNH, CLBC, NMPC, TCMC and TMSA.

REMARKS. The variety *arbustorum* Obenberger (1938) was described from a single female and is only a rather large and dark-coloured specimen of the typical *blairi*. The variety *eleuthera* Obenberger (1931), also described from a single specimen, is only a small male of *blairi*. Both names, being infrasubspecific, are technically unavailable, but their synonymy is confirmed here nonetheless.

SUMMARY

The genus *Brachelytrium* is distinct from African *Anthaxia*, *Brachanthaxia* and the Neotropical *Tetragonoschema*. With the number of new species described herein and with the majority of the specimens collected during the last 15 years, mostly from decadent branches of *Acacia* species, it seems plausible to predict a great potential for further new species awaiting discovery in the great expanse of thornveld and dry savanna in southern and eastern Africa that has not yet been adequately sampled.

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