NEW SYNONYMY, DISTRIBUTIONAL AND ADULT AND LARVAL HOST RECORDS FOR SOME SOUTHERN AFRICAN BUPRESTIDAE (COLEOPTERA)

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ABSTRACT

Belionota sphenopteroides Péringuey is proposed as a new junior synonym of Chrysobothris fatalis Harold. New adult host and distribution records or new larval host records are presented for 58 species of southern African Buprestidae belonging to the genera: Julodis, Neojulodis, Acmaeodera, Nothomorpha, Catoxantha, Steraspis, Evides, Chalcopha, Oedistera, Psiloptera, Chalcogenia, Anthaxia, Anadora, Phlocteis, Pseudophlocteis, Alassoderus, Asymades, Meliboeus, Pseudokamosia, Kamosiella, Kamosia, Pseudagrilus, Agrilomorpha, Agrilus, Sjoestedtius and Trachys. Changes in botanical nomenclature for three previously recorded host plant/buprestid associations are mentioned for Sphenoptera (Tropeopeltis) loranthiphaga, Cupriscobina loranthae and Galbella (Xenogalbella) hantamensis.

The large buprestid fauna of southern Africa has received a number of recent revisionary works (e.g., Bellamy 1986; Bellamy and Holm 1986; Holm 1976, 1978, 1979a, b) and descriptions of new taxa (Bellamy and Holm 1985a, b; Holm 1986). When possible in these works, adult and larval hosts were recorded, but many were not then known. Collecting since September 1983 by one of us (CLB) and recent joint collecting trips (Jan/Feb 1986 CLB & RLW; Sept 1985 CLB & DSV) have resulted in the accumulation of a number of interesting new adult host records. In addition, a survey of the buprestid collections of the Transvaal Museum, Pretoria (TMPS); Nasionale Museum, Bloemfontein (NMBS); National Collection of Insects, Pretoria (SANC); and South Africa Museum, Cape Town (SAMS) has yielded data on the larval hosts of some species. This information is presented with the hope that future students of the family working in southern Africa will be able to add to their study material and make some conclusions about relationships based on the cumulative host information. Unless otherwise annotated, all records represent new adult host records.

Our names are abbreviated CLB, DSV and RLW with the names of two colleagues who were present during some of the field time, A. V. Evans and D. d’Hotman, Department of Entomology, University of Pretoria, listed as AVE and DDH. The material recorded herein is deposited in our respective research collections: CLBC, DSVC and RLWE with duplicate material placed in SANC and TMPS. The Republic of South Africa is abbreviated as R.S.A. Geographic coordinates are provided using either a decimal point to separate degrees from minutes or in a “quarter degree” system and are listed only at the first record of a specific locality. Further locality information is listed in

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parentheses, such as the road or highway number, e.g., (A9) = Highway A9 in Zimbabwe.

The taxa are listed in the order of subfamilies presented in Bellamy (1985). Plant identifications were done with the aid of Coates-Palgrave (1983), Dyer (1975) and le Roux and Schelpe (1981), as well as determinations by H. Glen, Botanical Research Institute, Pretoria; E. van Jaarsveld, Kirstenbosch, Cape Town; C. H. Scholtz, Department of Entomology, University of Pretoria and R. G. Oberprieler (SANC).

**Chrysobothris fatalis** Harold


Examination of the type of Péringuey’s species (SAMS 1405) by one of us (CLB) shows it to be conspecific with this widespread southern African species of *Chrysobothris* Eschscholtz. In his revision of *Belionota* Eschscholtz, Théry (1929) listed *B. sphenopteroides* under “incertae sedis,” briefly discussed it in comparison with *B. canaliculatus* F. and stated that he was not certain if it actually belonged in *Belionota*.

New host and distributional records are as follows.

**JULODINAE**

*Julodis amoena* Péringuey. This species was collected from the foliage of *Passerina glomerata* Thunb. R.S.A.: Cape Prov., 31 km E Clanwilliam, S32.06, E19.05, 450 m; and 40 km E Clanwilliam, S32.02, E19.13, 250 m, 6, 9, 10.IX.1986, CLB, DSV and AVE.

*Julodis cirrhosa* Schönherr. This attractive species has been collected flying to or at rest on foliage of *Lebeckia sericea* Thunb. R.S.A.: Cape Prov., 2 km E Springbok, S29.38, E17.54, 17.IX.1983, CLB.

*Julodis hirsuta* Herbst. This large species was collected abundantly, sitting and feeding on foliage of *Lebeckia* sp. R.S.A.: Cape Prov., Olyfheuwel, S31.37, E18.23, 100 m, 23.IX.1985, CLB and AVE; same locality, 5.IX.1986, CLB, AVE and DSV; 1 km NE Koingnaas, S30.11, E17.19, 3.IX.1986, CLB, AVE and DSV; Green River Mouth, S30.51, E17.34, 3/4.IX.1986, CLB and DSV.

*Julodis mira* Obenberger. This attractive species has been collected from the foliage and flying to *Phylica axillaris* Lam. var. *microphylla* (Eckl. & Zeyh.) Pillans. R.S.A.: Cape Prov., 31 km E Clanwilliam and 40 km E Clanwilliam, 6, 9, 10.IX.1986, CLB, DSV and AVE.

*Julodis sulcicollis* Laporte & Gory. A large series (+200) was collected flying about, mating and feeding on *Lebeckia* sp. R.S.A.: Cape Prov., Spektakelpas, S29.40, E17.37, 200 m, 27.IX.1985, CLB and AVE.

*Julodis viridipes* Laporte. This species was collected flying to and feeding on foliage of *Didelta spinosa* (L.f.) Ait. R.S.A.: Cape Prov., 3.5 km W Clanwilliam, S32.11, E18.52, 9.IX.1986, CLB, DSV and AVE.

*Neojuolodis* (s. str.) *picta* Thunberg. This attractive species has been locally abundant in the following localities flying to and resting on the foliage of *Euryops tenuissimus* (L.) DC. R.S.A.: Cape Prov.: 31 km E Clanwilliam and 40 km E Clanwilliam, 6, 9, 10.IX.1986, CLB, DSV and AVE.

*Neojuolodis* (Protojuolodis) *vittipennis* (Fåhraeus). This species (Fig. 1) is common throughout southeastern Africa (Holm 1979b), but little is known about
Fig. 1. Neojulodis (Protojulodis) vittipennis (Fåhraeus) on foliage of Lippia sp. Fig. 2. Catoxantha (Chrysochroa) lepida (Gory) on foliage of Grewia flavescens.
its biology. Adults were collected flying about, mating and feeding on foliage of *Lippia* sp. ZIM: 35 km E Masvingo, 24.I.1986, RLW and CLB. R.S.A.: Transvaal (Bophuthatswana), 3.0 km N Hammanskraal, S25.23, E28.17, 10, 22.II.1986, 19.I.1987, CLB.

**Acmaeoderinae**

**Acmaeoderini**


*Acmaeodera (Rugacmaeodera)stellata* Marseul. Holm (1978) lists several adult hosts for this attractive species. Two specimens were collected by beating flowering *Rhus pyroides* Burch. R.S.A.: Transvaal: Nylsvley, Farm Sericea, S24.39, E28.42, 12/13.XII.1986, CLB.

*Acmaeodera (Rugacmaeodera)subprasina subprasina* Marseul. This widely distributed southeastern African subspecies was collected sitting along the leaf axils and flying to flowers of *Lippia* sp. R.S.A.: Transvaal: 13 km W Ofcolaco, S24.09, E30.18, 800 m, 27.II.1985, AVE. ZIMBABWE: 35 km E Masvingo (A9), 24.1.1986, RLW and CLB. Also on yellow asteraceous flowers: Inyanga Dist., Inyangombe Falls, S18.16, E32.40, 1750 m, 29.1.1986, CLB and RLW.

*Acmaeodera (Paracmaeodera) albovillosa* FAhraeus. Two of us (CLB and RLW) have collected a number of individuals at several localities in Zimbabwe and the Transvaal by beating foliage of *Acacia tortilus* (Forsk.) Hayne.


*Acmaeodera (Paracmaeodera) posticalis* Laporte & Gory. One specimen of this attractive species was cut (V. 1987) from its pupal cell in a small branch of *Acacia tortilus*. R.S.A.: Transvaal, Melodie. New larval host.

*Acameodera (Ptychomus) foudrasi surcoufi* (Théry). This common southern African subspecies has been collected by CLB and/or RLW at a number of localities in Malawi, South Africa and Zimbabwe by beating foliage of *Acacia tortilus*.

**Nothomorphini**

*Nothomorpha minima* Kerremans, *N. pauperata* Thomson and *N. verrucosa* (Laporte & Gory). These three species were collected together. R.S.A.: Cape Prov., Eselslfontein, S29.42, E17.42, 500 m, 16–18.IX.1985, CLB on the yellow disk flower, *Pentzia* sp.

**Catoxanthini**

*Catoxantha (Chrysochroa) lepida* (Gory). This attractive species (Fig. 2) is widespread throughout the savanna of eastern Africa, but there are no records of its habits. R.S.A.: Transvaal: Sand River Mt., S24.32, E27.39, 5–7.II.1986, CLB, one at rest on a leaf and one beaten from the foliage of *Grewia* sp. near

*Steraspis ambigua* Fåhraeus. This large, attractive species (Fig. 3) was collected at rest, mating and feeding on the leaves of *Combretum molle* R. Br. ex G. Don. (regrowth from cut trees) and *Terminalia sericea*. R.S.A.: Transvaal: 3.0 km N Hammanskraal, 10.II.1986, RLW, CLB and AVE; same locality, 14, 22.II.1986 and several dates I, II.1987, CLB; and on foliage of *Combretum apiculatum* Sonder, Sand River Mt., 1/2.IV.1986, CLB.

Chalcophorini

*Evides gambiensis* (Laporte & Gory), *E. interstitialis* Obenberger and *E. pubiventris* (Laporte & Gory). Examination of male genitalia and the characters used by Ferreira and Veiga-Ferreira (1958) to separate these species leaves no doubt that they are good species. All three of the southern African species listed by Ferreira and Veiga-Ferreira (1958) were collected together sitting on the leaves and flying to *Lannea discolor* (Sonder) Engl. R.S.A.: Transvaal: Sand River Mt. at several dates, XI, XII, 1985, CLB and AVE; 5–7.I.1986, RLW; 1/2.IV.1986, CLB. *Evides pubiventris* was also collected from the same host: Lapalala Wilderness Reserve, S23.51, E28.17, 21–23.I.1987, CLB.

*Chalcoplia nigritula* Kerremans. This species was collected on the foliage of *Ruschia utile* L. Bol. R.S.A.: Cape Prov., Kommandokraal, S31.31, E18.13, 100 m, 23.IX.1985, CLB and AVE.

Psilopterini

*Oedisterna bisulcata* (Laporte & Gory). One specimen was beaten from foliage of *Acacia* sp. growing along river. South West Africa: Orange River opposite Vioolsdrift (R.S.A.), S28.46, E17.38, 14.X.1984, CLB.

*Oedisterna limbata* Peringuey. One specimen was collected on the stem of *Euphorbia* sp. R.S.A.: Cape Prov., Botterkloof Pass, 400 m, S31.53, E19.15, 15.IX.1983, CLB.

*Oedisterna livida* Peringuey. This species was collected on foliage of *Ruschia utile*. R.S.A.: Cape Prov., Kommandokraal, 23.IX.1985, CLB and AVE.

*Psiloptera (Damasila) foveicollis* (Gory). This species has been abundant on the foliage of *Grewia flava* DC. R.S.A.: Transvaal: 8.5 km S Pienaar rivier, S25.17, E28.27, various dates I and II, 1986 and 1987, RLW and CLB.

*Psiloptera (Damasila) gregorii* Fåhraeus. This species is quite common and widely abundant in the vicinity of Pretoria in the late summer (January–March). It has been collected by beating foliage of *Ozoroa paniculosa* (Sonder) R. & A. Fernandes and *Combretum molle*.

*Psiloptera (Damasila) tristis* (Linnaeus). This widespread species was recorded from the southeastern Cape, Natal and Transvaal by Veiga-Ferreira (1959). A series of this species was collected from the foliage of *Hypericum revolutum* Vahl after a rain shower at ZIMBABWE: 10 km SE Juliasdale, S18.26, E32.44, 25-29.I.1986, CLB, RLW and DDH. New country record.

**Buprestinae**

Melanophilini

*Chalcogena sulcipennis* (Gory). This species has been collected at several localities in the Transvaal by beating foliage of *Acacia erioloba* E. Meyer and
Fig. 3. *Steraspis ambigu* Fähraeus on foliage of *Combretum molle*. Fig. 4. *Asymades transvalensis* Kerremans on foliage of *Boscia albitrunca*. 
A. tortilus. The association with Acacia seems to indicate a probable generic host preference as one of us (CLB) has collected at least three additional species of Chalcogenia in various parts South Africa, all on various Acacia spp.

Anthaxiini

Anthaxia (s. str.) obesula Obenberger. This species has been recorded only from the Transvaal. Recent collecting has extended the range as follows. R.S.A.: Cape, 4.3 km W Komaggas, 250 m, S29.47 E17.26, 17.IX.1983, CLB and J. v.d. Berg, beating Acacia sp. SOUTH WEST AFRICA: Orange River, opposite Vioolsdrift (R.S.A.), S28.46 E17.38, CLB and W. Wittmer, beating Acacia spp.

Anthaxia (s. str.) pseudohilaris Obenberger. This beautiful species has been recorded from the Kalahari. The following are new records. R.S.A.: Transvaal: Saartjiesnek, S25.46, E27.54, 2–6.XI.1983, CLB, on flowers of Grewia flava; vic. Schoemansville, 20.XI.1983, CLB, beating foliage of Dombeya rotundifolia (Hochst.) Planchon.

Anthaxia (Haplanthaxia) cuprivittis Obenberger. This species has been recorded only from Zimbabwe. The following is a new record. R.S.A.: Transvaal: Saartjiesnek, 12–17.XI.1983, CLB, beating Acacia caffra (Thunb.) Willd.

Anthaxia (Haplanthaxia) obtectans Kerremans. This widespread species has been recorded from Mozambique, South Africa, Zaire and Zimbabwe. The following is the first larval host record. R.S.A.: Transvaal: Nylosvley, Naboomspruit, SE 24 28 Da, 1,100 m, X.1977, bred from Lannea discolor (TMPS). New larval host.

Anthaxia (Haplanthaxia) praecellens Kerremans. This beautiful, sexually dichromatic species has been recorded from the same four countries as the previous species. New host information is as follows. R.S.A.: Transvaal: Nylosvley, Naboomspruit, X.1977, bred from Terminalia sericea (TMPS). New larval host. In addition, one of us (CLB) has collected this species by beating T. sericea at several localities in the Transvaal.

Anthaxia (Haplanthaxia) rhodesiae Obenberger. This species has been recorded from Natal and Zimbabwe without any biological data. The following is a new record. MALAWI: Nazombe, Fort Lister/Mt. Mulanje, SE 15 35 Dc, 1,100 m, 2–4.XII.1983, CLB, E. Holm, J. v.d. Berg on yellow asteraceous flowers. New country record.

Anthaxia (Haplanthaxia) vittipennis Kerremans. This widespread species has been recorded from Kenya, Mozambique, South Africa and Zaire. It has been collected on flowers of or by beating foliage of Grewia flava. R.S.A.: Transvaal: Saartjiesnek and Silkaatsnek, various dates, XI, XII 1983–1985.

Agrilinae

Coroebini

Anadora pavo (Gestro). This species was recently studied (Bellamy 1986) and recorded only from Ethiopia and Eritrea. It seems, therefore, noteworthy to record four specimens subsequently examined from Naturhistorisches Museum, Wein, Austria, simply labelled as from Somalia. New country record.

Anadora silvatica Bellamy. This species was described (Bellamy 1986) with no record of its habits. Specimens were subsequently collected from the flowers of Syzygium guineense (Willld.) DC. R.S.A.: Natal: Sordwana Bay, S27.32, E32.41, 9–13.XI.1986, AVE. This record is especially interesting considering the relationship between the plant family (Myrtaceae) and that of the host A. cupriventris Obenberger, Terminalia sericea (Combretaceae).
**Phlocteis exasperata** (Swartz). This species was recently discussed (Bellamy 1986) as apparently using several unidentified spp. of *Rhus* as its hosts. It has been collected mating, feeding and at rest on the leaves of *R. pyroides*. R.S.A.: Transvaal: Saartjiesnek and Melodie, various dates in XI.1985, CLB.

**Pseudophlocteis vidua** (Färhraeus). This uncommon species was recently studied (Bellamy 1986), but with no biological information recorded. It has been collected subsequently by beating foliage of several species of *Euclea*, including *E. crispata* (Thunb.) Guerke, at various localities. R.S.A.: Transvaal: Saartjiesnek, 24.XI.1986, CLB.

**Alissoderus albiventris** (Laporte & Gory). This attractive species has been collected resting in the foliage of *Passerina glomerata*. R.S.A.: Cape Prov., 31 km E Clanwilliam, and 40 km E Clanwilliam, 10.IX.1986, CLB, DSV and AVE.

**Asymades transvalensis** Kerremans. This attractive and previously uncommon species (Fig. 4) has been abundantly collected at rest on and by beating *Bosia albitrunca* (Burch.) Gilg & Ben. R.S.A.: Transvaal: 14.7 km S Pienaarsrivier, S25.20, E28.17, 21.I.1986, RLW; same locality, 11.I.1987, CLB; 8.5 km S Pienaarsrivier, 7.II.1986, CLB; 10.II.1986, CLB and RLW; 14.II.1986, CLB; 22.II.1986, CLB; several dates, I, 11.I.1987, CLB.

**Meliboeus gilli** Obenberger. This species has been collected from the foliage of *Euryops tenuissimus*. R.S.A.: Cape Prov., 2 km E Springbok, 16.IX.1984, CLB and W. Wittmer; 31 km E Clanwilliam, 10.IX.1986, CLB.


**Kamosiella dermestoides** (Thomson). This species has been collected (XI. 1984) in several localities near Pretoria by beating foliage of *Rhus lancea* L.f. (CLBC, SANC).

**Kamosia indigacea** Obenberger. This species has been collected at two widely separated localities on the yellow flowers of several unidentified asteraceous perennials. MALAWAI: Nazombe, Fort Lister/Mt. Mulanje, 2–4.XII.1983, CLB, E. Holm, J. v.d. Berg. ZIMBABWE: Inyanga Dist., Inyangombe Falls, 29.I.1986, DDH, CLB and RLW.

**Kamosia tenebricosa** (Peringuey). This small attractive buprestid has been collected resting on leaves and by beating *Combretum molle*. R.S.A.: Transvaal: Saartjiesnek, several dates XI.1983, CLB and 24.XI.1986, CLB and AVE.

**Pseudagrilus subfasciatus** Kerremans and **P. variabilis** Théry. These two species, and perhaps another, have been collected sitting and mating on the leaves of *Solanum* spp. at several disturbed roadside habitats. MALAWAI: Mabuka, Mulanje, SE 16 35 Ba, 600 m, 2.XII.1983, CLB, E. Holm; 7 km W Golomoti, SE 14 34 Be, 9/10.XII.1983, CLB, E. Holm and J. v.d. Berg; 5 km W Golomoti, S14.25, E34.33, 22/23.I.1985, 650 m, CLB. ZIMBABWE: road to Kyle Nat. Park, S20.07, E31.07, 23.I.1986, RLW and CLB; 31 km W Birchenough Bridge, 24.I.1986, CLB and RLW. The association with a disturbed habitat “host” plant can perhaps explain the wide range that certain species of *Pseudagrilus* seemingly have in Africa.

Agrilini

**Agrilomorpha venosa** (Gory & Laporte). This widespread species (see Cobos 1962 as *A. rothschildi* Théry) is not common and no information of its habits is recorded. It has been collected as would appear to be two subspecies as follows. *A. venosa schowtedeni* Obenberger—R.S.A.: Transvaal: Saartjiesnek,

*Agrilus cupriventris* Gory & Laporte. This attractive species was collected by beating foliage of *Acacia tortilis*. R.S.A.: Transvaal: Nyilsley, Farm Sericea, 15.II.1984, CLB and more recently several adults were dug from the hyphal-bark interface of *A. tortilis* and the bracket fungus, *Ganoderma lucidum*; Melodie, VIII.1985, CLB. This is the first record we know of for any, albeit distant, buprestid/fungus relationship.


*Agrilus nero* Obenberger. This species is similar in appearance to *A. grandis* and is poorly represented in collections. It has been recorded only from Zimbabwe and nothing is known of its biology. One specimen was collected recently. R.S.A.: Transvaal: Sand River Mt., 8/9.XI.1985, CLB. ZIMBABWE: 10.2 km N Hot Springs (A9), 2,000', 30.I.1986, DDH, CLB and RLW and 31 km (rd) SE Birchenough Bridge (A16), 2,300', 31.I.1986, CLB.

*Sjoestedtius egregius* (Boheman). This small, cryptically-colored species has been collected by beating foliage of *Acacia tortilis*. R.S.A.: Transvaal; Nyilsley, Farm Sericea, 15.II.1985, CLB. ZIMBABWE: 10.2 km N Hot Springs (A9), 2,000', 30.I.1986, DDH, CLB and RLW and 31 km (rd) SE Birchenough Bridge (A16), 2,300', 31.I.1986, CLB.

*Trachyini*

*Trachys ziziphusii* Cobos and *Trachys* sp. Series of two species were collected at various dates in late July and August 1985. R.S.A: Transvaal: vic. Melodie, CLB and DDH by beating foliage of *Ziziphus mucronata* Willd. *Trachys ziziphusii* was described from Hartbeespoot Dam, which is very close to where we collected, and was taken on *Z. mucronata*. It is known only from the type specimen (TMPS).

**PLANT ASSOCIATE NAME CHANGES**

*Sphenoptera* (Tropeopeltis) *loranthiphaga* Bellamy and *Cupriscobina loranthae* Bellamy and Holm. At the time of respective descriptions (Bellamy and Scholtz 1986; Bellamy and Holm, 1985a) we were unaware that the name of the host plant had been changed; it is now known as *Tapinanthus natalitius* (Meisn.) Danser subsp. *seyheri* (Harv.) Wiens.
**Galbella (Xenogalbella) hantamensis** Bellamy. At the time of description (Bellamy and Holm 1986), we were unaware that the generic name of the putative host plant was *Protoasparagus*; we listed it as *Asparagus*.

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