not find any other members of the *An. gambiae* complex. They reported salinities of up to 63 \% seawater in the pools from which they sampled larvae. At that time it was the first record of *An. merus*, assumed to be a coastal species, breeding inland.

The results presented here are the first record of *An. merus* breeding in the same habitat as both *An. arabiensis* and *An. quadriannulatus*, and confirms that the species is capable of using freshwater as well as saltwater habitats. All the other anopheline species recorded from both the larval and night-

REFERENCES


Accepted 20 June 1995

New host and distribution records for some southern African Buprestidae (Coleoptera)

C.L. Bellamy\(^1\) & R.L. Westcott\(^2\)

\(^1\)Coleoptera Department, Transvaal Museum, P.O. Box 413, Pretoria, 0001 South Africa
\(^2\)Plant Division, Oregon Department of Agriculture, 635 Capitol St. NE, Salem, OR 97310-0110, U.S.A.

This is the second contribution documenting the distribution and plant associations of the Buprestidae of southern Africa, the first being by Bellamy et al. (1988). These records are largely the result of recent collecting by the authors. Many of the species are from groups that have recently been revised, and these new data are significant additions to our knowledge of the distribution and host plants of these species.

One reason to accumulate and record host and distribution data is their value in confirming or refuting earlier taxonomic decisions. Previous revisions based exclusively on adult external morphology may prove to be inadequate with respect to species or subspecies definitions. In several taxa recorded below, our observations on either the distribution or the adult host suggest that a reappraisal of taxonomic placement may be warranted and could contribute to a re-evaluation of their subspecific status. However, it would be premature to propose taxonomic changes here, as they would be based mostly on single records or unique observations. Further collecting and records of hosts over wider areas will provide more comprehensive data to support the required taxonomic re-evaluations.
Recent publications that have revised the nomenclature should also be mentioned here to enlighten readers on taxonomic developments in this field. Kurosawa (1993) reorganized the names used within Psiloptera Soher (sensu latu) (Psilopterini), with the major modification affecting African taxa being that species formerly placed in Psiloptera (Damarisila) Thomson were transferred to Lampetis (s. str.) Spinola. Curletti (1993) has initiated a revision of the sub-Saharan African fauna of the large genus Agrilus Dahl by dividing it into nine subgenera, with five proposed as new. Holyški (1993) rearranged the higher classification of the Buprestidae into a reduced system of subfamilies and tribes, but with a greater number of subtribes. Despite some misgivings about certain taxa and their placement, we have followed Holyški's (1993) arrangement here.

Plants were identified by P. Zietsman, Botany Department, National Museum, Bloemfontein, the National Botanical Institute, Pretoria, and by us with the aid of the following works: Le Roux & Schelpe (1984), Onderstall (1984), Coates Palgrave (1983) and Van Wyk (1984). Buprestidae were identified by ourselves and Acmaeodera Eschscholtz species were verified or determined by E. Holm.

Specimens are deposited in the Coleoptera Department, Transvaal Museum, Pretoria (TMSA) or in the collection of the second author (RLWE). All specimens were collected in South Africa. The following abbreviations are used: NC = Northern Cape; WC = Western Cape; ET = Eastern Transvaal; NP = Northern Province; KNP = Kruger National Park and our names CLB or RLW respectively. Unless otherwise indicated, we both collected the same taxa at the same localities and name abbreviations are not repeated for each record. The provincial abbreviation and the latitude and longitude are given for the first listing of each locality.

Subfamily Julodinae Lacordaire
Tribe Julodini Lacordaire
Subtribe Julodina Lacordaire

Stenoceraina (Buquet). NT, 8.5 km S. Pienaarsrivier, 25.17S 28.27E, 31.xii.1994, feeding on foliage of Acacia tortilis (Forssk.) Hayne (Fabaceae); NT, KNP, sandveld, north of Punda Maria, 27.i.1995, feeding and resting on foliage of Terminalia sericea Burch. ex DC. (Combretaceae); ET, KNP, 5 km E Skukuza, 24.59S 31.38E, 23.i.1995, feeding, mating and at rest on foliage of Acacia nigrescens Oliv., all CLB. This large and variable species (Holm & Gussmann 1992) has localized adult host preferences. In each case several individuals were observed or collected in these associations. New adult hosts.


Neolulodis (s. str.) picta vantonderae Holm. WC, Botterkoof Pass, 400m, 31.53S 19.15E, 15.ix.1983, CLB; Pakhuis Farm, 32.06S 19.05E, 450 m, 21.ix.1985, CLB; 8 km N Botterkoof Pass, 15.ix.1995. All flying about or resting on foliage of Euryops tenuissimus (L.) DC. (Asteraceae). This subspecies has been collected at the same localities and flying around the same adult hosts as the nominate subspecies. The sympatric occurrence of two subspecies with the same adult host suggests that a status change and re-evaluation of these taxa is necessary. New adult host.


Subfamily Buprestinae Leach
Tribe Thrinocopygini LeConte
Subtribe Nothomorphina Cobos


Subfamily Buprestinae Leach
Tribe Thrinocopygini LeConte
Subtribe Nothomorphina Cobos

Nothomorpha pauperata Thomson. This diminutive species was taken at WC, Dermenbergsdraai Farm, 30.47S 17.43E, 18/19.ix.1994, feeding on petals and stamens (pollen) of Grielum grandiflorum (L.) Druce and G. humifusum Thunb. (Neuradaceae); Rooidam Farm, 20.ix.1994, on flowers of N. biennis. New adult hosts.
Nothomorpha rugosa (Thunberg). Rooidam Farm, 20.ix.1994, on flowers of Osteospernum oppositifolium (Ait.) T. Norl. (Asteraceae); WC, 3.5 km W Clanwilliam, 32.11S 18.52E, 24.ix.1994, on flowers of B. fruticosa. New adult hosts.

Tribe Acmaeoderini Kerremans
Subtribe Acmaeoderina Kerremans

Acmaeodera bistrigivittata Gory. WC, Wiedouw Farm, 31.43S 18.43E, 25.ix.1994. A short series was collected as specimens emerged from branches of Acacia karroo Hayne that were being burnt. New larval host.

Acmaeodera caeruleonigra Obenberger. 3.5 km W Clanwilliam, 24.ix.1994. This diminutive species was taken on flowers of B. fruticosa. New adult host.

Acmaeodera capicola atratula Obenberger. This northern subspecies was collected at Dermbergsdraai Farm, 18/19.ix.1994, on flowers of Arctotis decurrens Jacq. (Asteraceae); Rooidam Farm, 20.ix.1994, on flowers of N. biennis; base of Vannlyn’s Pass, 36 km E Vannhynsdorp, 25.ix.1994, CLB, on flowers of H. alienatum. New adult hosts.

Acmaeodera conspersa conspersa (Thunberg). This widespread and variable subspecies was collected at Dermbergsdraai Farm, 18/19.ix.1994, flying around and on flowers of Hiermannia scordifolia Jacq. and H. trifurca L. (Sterculiaceae); Rooidam Farm, 20.ix.1994, on flowers of N. biennis; base of Vannlyn’s Pass, 36 km E Vannhynsdorp, 25.ix.1994, CLB, on flowers of H. alienatum. In addition, a morph of different appearance, larger and with most of the elytra brick-red rather than the typical form of mottled yellow on a black background, was collected only at Dermbergsdraai on flowers of A. decurrens. This apparent host partitioning and difference in adult size and appearance requires further study. New adult hosts.


Acmaeodera hessei Holm. Dermbergsdraai Farm, 18/19.ix.1994. Many specimens of this widespread, variable species were collected on flowers of A. decurrens; Rooidam Farm, 20.ix.1994, on flowers of N. biennis. New adult hosts.


Acmaeodera ngamensis Obenberger. NT, KNP, Nyandu, 22.38S 31.22E, 18.xi.1994, CLB. A large series of this diminutive species was collected by beating foliage of Boscia angustifolia var. corymbosa (Gilg) Dewolf (Capparaceae). New adult host.

Acmaeodera puberula Solier. Rooidam Farm, 20.ix.1994, CLB. Two specimens were collected on flowers of N. biennis. New adult host.

Acmaeodera (Rugacmaeodera) krugeri Holm. ET, KNP, Nwaswitshaka Camp near Skukuza, 24.59S 31.02E, 22.xi.1994, CLB. One specimen of this attractive species was cut from its pupal cell in a branch of Pumbe, 24.13S 31.56E, 22.xi.1994, CLB. Because of the rarity of this species, this recent collection of a long series is significant. A series of 40 specimens was collected on flowers of small specimens of A. karroo, planted as ornamentals.

Tribe Buprestini
Subtribe Chrysochroina Laporte

Agelis peteli Gory. ET, 5 km E Skukuza, 23.i.1995, CLB. This meloid-mimicking species was collected while flying, feeding, mating and resting on foliage of Grewia sp. (Tiliaceae) and Acacia sp. New adult hosts.

Subtribe Evidina Toyama

Evides gambiensis Laporte & Gory. NT, KNP, Punbe, 24.13S 31.56E, 22.xi.1994, CLB. One specimen of this attractive species was cut from its pupal cell in a branch of Sclerocarya birrea subsp. caffra (Sond.) Kokwaro (Anacardiaceae). New larval host.

Subtribe Anthaxina Gory & Laporte

Anthaxia (s. str.) hilaris Gory. Vannlyn’s Pass, 25.ix.1994, a series was collected from flowers of L. gnaphalodes; 3.5 km W Clanwilliam, 24.ix.1994,
on flowers of *B. fruticosa*. New adult hosts.

*Anthaxia* (s. str.) *obesula* Obenberger. Dermbergsdraai Farm, 18/19.ix.1994. A few specimens of this small species were collected by beating foliage of *A. karroo*. New adult host.


Subfamily *Agrilinae* Laporte

**Tribe Agrilini Laporte**

* Agrilus (Personatus) *guercyi* Obenberger. 8.5 km S Pienaarssrivier, 31.xii.1994, CLB. This apparent lygaeid-mimicking species was collected by beating *Dichrostachys cinerea* (L.) Wight & Arn. (Fabaceae). New adult host.

* Agrilus (Personatus) *sexguttatus* (Thunberg). 8.5 km S Pienaarssrivier, 26.xii.1994. Another lygaeid-mimicking species was collected by beating foliage of *A. karroo*. ET, KNP, 5 km E Skukuza, 23.i.1995, CLB. Another specimen was collected from foliage of *Ziziphus mucronata* Willd. (Rhamnaceae). New adult hosts.

* Agrilus (s. str.) *braunsi* Obenberger. Dermbergsdraai Farm, 18/19.ix.1994; Wildeperdehoekpas, 27.ix.1994. This species was originally described from Bothaville, Orange Free State. It was collected by beating foliage of *A. karroo*. New adult host.

Subtribe *Coroebina* Bedel

*Promelioeus namaqausis* Bellamy. Rooidam Farm, 20.ix.1994, on flowers of *O. oppositifolium*.

This species was described from three specimens collected west of Springbok, a range extension to the southwest and the first adult host record are thus significant. New adult host.

*Promelioeus strand* Obenberger. 8 km N Botterkloof Pass, 15 & 25.ix.1994, on flowers of *H. alenatum*; 3.5 km W Clanwilliam, 24.ix.1994, on flowers of *B. fruticosa*. This is the common species prevalent at higher altitudes in the Western Cape Province. New adult hosts.

**Tribe Trachydina Laporte**

Subtribe *Galbellina* Cobos

*Galbella* (*Xenogalbella*) *hantamensis* Bellamy. WC, Clanwilliam, 32.09S 18.53E, 29.VIII.1989, Endrody & Klimaszewski; 2.5 km W Kommandokraal, 31.29S 18.11E, 23.ix.1994, RLW; Wiedouw Farm, 26.ix.1994, RLW. This small, attractive species was known only from Calvinia and the Hantamsberge in the Great Karoo (Bellamy & Holm 1986; Bellamy et al. 1988). Recent collecting revealed a wider distribution. The specimen from Kommandokraal was beaten from foliage of *Lycium* sp. (Solanaeae) with intertwined *Protoasparagus* sp. (Liliaceae), while the specimen from Wiedouw was beaten from *Rhus undulata* Jacq. (Anacardiaceae) growing next to a *Protoasparagus* sp. Although still unidentified, this *Protoasparagus* sp. is the same species from which the type series was collected in the Hantamsberge.

We thank S. Endrody-Younga and R. Müller (TMSA) for their hospitality and assistance; E. Holm for confirming or providing identifications and P. Zietsman for identifying many of the plants recorded.

REFERENCES


Accepted 25 July 1995