New and forgotten species of Tenebrionidae collected by J. A. Wahlberg (1810-1856) preserved in the Swedish Museum of Natural History, Stockholm (Coleoptera, Tenebrionidae)

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A new representative member of the tribe Opatrini, Neocaedius wahlbergi n. sp., collected by J. A. Wahlberg in South Africa, Namibia, at Kuiseb R. in 1854 is described and illustrated. Its systematic position and affinities with the closely related species Neocaedius scabrosus (Gerstaecker) and Neocaedius halli Kaszab are discussed and a key is provided for distinguishing these species. The poorly known monotypic genus Syggona Fåhraeus 1870, originally placed in the family Lagriidae, later transferred by Gebien (1941) to the Tenebrionidae as a genus incertae sedis, is found to be a junior synonym of the genus Luprops Hope 1833 (tribe Lupropini). The new combination Luprops concinnus (Fåhraeus) is proposed. A lectotype for Syggona concinna Fåhraeus is designated.

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Introduction

The Swedish engineer and naturalist, Johan August Wahlberg (1810-1856), explored the Cape region and adjoining regions of South Africa at two expeditions during the period 1839-1856, collecting insects and other animals. An unidentified specimen of Tenebrionidae collected by him in present Namibia and agreeing with the genus Neocaedius Pierre, 1972 was discovered by me under Neocaedius scabrosus (Gerstaecker, 1873) in the collection of Tenebrionidae of the Swedish Museum of Natural History (Naturhistoriska riksmuseet), Stockholm. N. scabrosus was described from West Africa, Tanzania, Zanzibar I. The Wahlberg specimen was identified by me as an undescribed species, clearly separate from all known species of the genus. A description of the new species is given here. Results from a reexamination of type material of Syggona concinna Fåhraeus collected by Wahlberg in present Botswana are given also, resulting in a synonymization of the monotypic genus Syggona Fåhraeus.


Description of a new species

Neocaedius wahlbergi n. sp.

Type material. Holotype, male: Namibia, Kuiseb R. ("Kuisip"), J. Wahlberg leg.; NHRS. Note: The specimen was evidently collected in 1854, according to published data from the itineraries of Wahlberg (Brinck 1955).

Diagnosis. General shape of body similar to N. scabrosus (Gerstaecker), but readily distinguished by the broader protibiae with internal apex right-
angled (Fig. 9) and the shape of the aedeagus with sides slightly sinuate (Figs. 7 and 8). Habitus Fig. 13.

Description. Length: 9 mm. Maximum of width: 5.5 mm. Winged.

Body reddish to blackish brown, the legs, antennae and trophi testaceous, reddish brown. Integument moderately shiny. Head and upper surface densely covered with coarse, confluent, round, irregular, shiny granules.

Eyes small, separated dorsally by a distance equal to 11 times the breadth of an eye. Clypeo-genal line of head strongly sinuate, each anterogenous portion as broadly obtuse as the epistomal excision. Antennae shorter than breadth of head, the third joint about twice as long as broad, joint 4 only slightly longer than broad, 5-6 as broad as long, 7-8 slightly broader than long, 8-11 progressively transverse, 9 nearly twice as broad as long, 10 twice as broad as long, 11 as broad as long, as the precedent but truncate apically and sinuose.

Pronotum broadest at the middle, here twice as broad as long, very densely and uniformly covered with round, coarse and shiny granules that emerge from a fine reticulation of half circles which surround each granule. The space between granules smaller than the diameter of granules and bearing short, yellowish and reclining setae. Anterior margin broadly emarginate, enclosing the head up to the eyes, not margined, except at the sides. Anterior angles roundly obtuse. Sides with fine lateral edge, without margin, furnished with long yellowish, livide and prominent setae, posterior angles almost right, sides rounded and narrowed towards the anterior angles, almost sub-parallel basally. The latter extremely finely marginated laterally, arcuate, shortly and densely, golden setose.

Elytra a little broader than pronotum, broadest at the middle, where one third longer than broad, sides slightly rounded and humeral angles obtuse. Base shallowly emarginate, less wide than pronotal base, sides with long and dense, livide yellowish, prominent setae, feeblly and minutely denticulate. Apical declivity feebly pronounced, forming an angle of about 45° with the horizontal axis of the body. Striae finely impressed, forming longitudinal lines. Intervals even, densely covered with round, coarse, moderately shiny granules and numerous microgranules in between. Pubescence formed by very short, yellowish setae, projecting from each granule which are arranged in 3-5 longitudinal rows on each interval, setae as long as the diameter of the granules.

Underside shiny, episternum slightly concave, deeply and confluently rugose. Prosternal process broadly deflected and apically becoming pointed between coxae. Abdominal sternites densely punctate, rugose, covered with yellowish pubescence, a little longer than that covering the dorsal surface.

Protibiae large, apex right-angled, distal margin with 3 large and rounded teeth, as indicated in Fig. 9. Meso- and metatibiae simple. Tarsi normal, not compressed.

Aedeagus: shaped as in Figs. 7 and 8.


Derivation of name. Named after the collector, Johan August Walhberg, who was tragically killed by an elephant while on an expedition to Lake Ngami, Botswana in 1856.

Systematic position. The new species occupies an intermediate position between N. scabrosus (Gerstaecker) and N. kochi Pierre. It can be separated from these species as follows. See also the key published by Pierre (1972).

Key to selected species of Neocaedius

1 Length 9-11 mm. Legs normally shaped, metatarsi simple, not compressed............... 2
   – Less than 9 mm, or metatarsi compressed......
      ........................................... kochi Pierre and other species

2 Protibiae interiorly arcuate, apically largely dilated (Figs. 10 and 12)............................... 3
   – Protibiae almost rightangled internally (Fig. 9). Aedeagus constricted, sinuate, and pointed (Figs. 7 and 8). South Africa... wahlbergi n.sp.

3 Protibiae as in Fig. 10. Aedeagus simple, apically pointed (Figs. 3 and 4). East Africa...
   ............................................ scabrosus Gerstaecker
   – Protibiae as in Fig. 12. Aedeagus clearly dilated and apically truncate (Figs. 5 and 6). West Africa ................................................... halli Kaszab

Remarks:

Pierre (1972:968) figured the aedeagi of N. scabrosus (Gerstaecker) and N. halli Kaszab, but obviously the figure legends were transposed. The figure with the text "N. halli" in reality represents the aedeagus of N. scabrosus and vice-versa. I was
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I examined a paratype of *N. halli* Kaszab from Sierra Leone, Njala, 28.V.1926, leg. E. Hargreaves (HNHM). The aedeagus and protibia are figured here (Figs. 5, 6 and 12).

**Synonymy of the genus *Syggona* Fåhraeus**

Fåhraeus (1870:330) established the monotypic genus *Syggona* for a species named *concinna* by him and collected by Wahlberg in "Caffraria" (East Cape Province). He regarded this species as a member of Lagridae. Gebien (1941:552) transferred *Syggona* to the family Tenebrionidae, placing it as a genus incertae sedis in an isolated position after the tribe Strongylini. Examination of type material of *Syggona concinna* (female syntypes in NHRS) and additional material of the species from other localities (below) proved that *Syggona* is a junior synonym of *Luprops* Hope, 1833 (= *Lyprops* auct.). The latter genus belongs in the subtribe *Lupropina* (sensu Ardoin 1961) (= *Heterotarsini* sensu Gebien [1941:817 (672)] of the tribe *Lupropini* (Tenebrionidae: Lagrinae sensu Doyen et al. 1989).

**Luprops concinnus** (Fåhraeus) comb. nov.

*Syggona concinna* Fåhraeus, 1870: 330

**Designation of lectotype.** There are three specimens under *Syggona concinna* Fåhraeus in the collection of NHRS qualifying as syntypes, all females labelled "Caffraria/J. Wahlb.". One specimen was chosen as lectotype with the addition of my own labels: "Lectotype *Syggona concinna* Fåhraeus, J. Ferrer 1994" and "*Luprops concinnus* (Fåhraeus) comb. nov., J. Ferrer det., 1994". The other two specimens are designated as paralectotypes (females) and labelled accordingly by me.

Habitus of the female lectotype, the weakly chitinized valves exhibiting characteristic styli of the female genitalia, the strongly dimorphic male with extremely large eyes, longer antennae and shorter pronotum, and the aedeagus are shown in Figs. 14-17.

**Additional material examined.** 1 female, "Ngami" (old Bechuanaland, in Botswana: 20.30°S - 22.46°E), J. Wahlb. leg (NHRS); 1 male, 1 female, South Africa, Transvaal, N Pretoria, 6.VI.1954, G. Rudebeck leg (ZMUL).
Figs. 14-17. — *Luprops concinnus* (Fåhraeus). — 14, habitus, female (lectotype), 15, female genitalia, 16, male aedeagus, 17, head and pronotum of male. Scale lines = 1mm.


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