Description of a new species of the genus *Rosenbergia* from New Guinea in the Natural History Museum, London (Coleoptera: Cerambycidae)

Carlo Arrigo Casadio

Via Coraglia 9, 40026 Imola (BO), Italy. E.mail: babboachab@fastwebnet.it


Ikhtisar: Satu spesies baru Genus Rosenbergia Ritsema, 1881 (Coleoptera, Cerambycidae) dari New Guinea diletakkan dengan nama *Rosenbergia darwini* spec. nov.

Key-words: Lamiinae, Batocerini, Indonesia, (West) Papua, Papua New Guinea.

Introduction

In 1934 W. Stüber collected samples of flora and fauna from the Humboldt Bay area (Teluk Yos Sudarso) and the inland of Hollandia (Jayapura). In 1937 part of this material was sold to the British Museum of Natural History, London. This material also contains a *Rosenbergia*-species, belonging to the group of *R. vetusta* Ritsema, 1881, but looking very different at first glance. The discovery of a new species of the genus *Rosenbergia* Ritsema, 1881 in a great and well-known collection like the one of the Natural History Museum in London proves how little is known of this genus; the information about their biology and the host plant is only poorly known. Some species are very common and it is possible to study those in large series, such as *Rosenbergia mandibularis*, *R. weiskei*, *R. rufolineata*, *R. vetusta*, *R. xenium* and *R. lactiflua*. Others are rare, only known from a few or a single specimen. Most of them occur in the highlands of New Guinea and because today still many mountainous areas, especially in the Indonesian part of New Guinea, are unexplored, very likely new species are to be discovered in the future.
Abbreviations used in this paper

BMNH - Natural History Museum, London (former British Museum of Natural History)
CUN - Private collection of Mr. Ulf Nylander, Sweden
CCAC - Private collection of author, Imola, Italy
CRM - Private collection Mr. Robert Minetti, France
KEP - Kelompok Entomologii Papua (Entomological Group Papua) in Jayapura, Indonesia
PNG - Papua New Guinea

Checklist of Rosenbergia spec. from Papua, Indonesia

*Rosenbergia chaminadei* Rigout, 2004
*R. dankersi* Rigout, 2004
*R. darwini* spec. nov.
*R. diannae ssp. valentinae* Rigout, 2004
*R. drumonti* Walin & Nylander, 2007
*R. gilmouri* Rigout, 1982
*R. humeralis* Gilmour, 1966
*R. mandibularis* Ritsema, 1881
*R. porioni* Rigout, 2004
*R. rubra* Gilmour, 1966
*R. rufolineata* Breuning, 1948
*R. Schmatti* Rigout, 1980
*R. Straussi* Gestro, 1876
*R. vestusta* Ritsema, 1881
*R. weiskei* Heller, 1902

Results

*Rosenbergia darwini* spec. nov.
Description.
**Male:** length 36 mm, width 13 mm
**Female:** length 32.9 mm, width 11.6 mm.
Head dark grey with a slight yellow pubescence at the margin of the eyes; antennae covered with dark grey pubescence to about the middle of the fourth antennomere, then covered with dark brown pubescence.

Pronotum dark grey on the dorsal and ventral side, white-greyish on the lateral side
with a fringe of white pubescence on the anterior margin, one yellow transversal band before the anterior margin, one whitish band at the posterior margin and two yellow-whitish spots at the base of the lateral spines. Scutellum grey with a yellow spot on the apical half. Elytra covered with short white-greyish pubescence with a grey marginal band and three yellow narrow longitudinal strips on each elytron; distinctly spined at the humeral angles and with small but distinct sutural and marginal spines at apex; black granulation small and limited at the humeral angles and at the basal fourth of the elytra. Ventral side white-greyish on the thorax and dark grey on the abdomen with the thoracic segments and abdominal sternites narrowly bordered with yellow pubescence. **Holotype,** ♀, Dutch New Guinea, Humboldt Bay District, 1937, W. St,ber Igt, BMNH. **Paratype,** ♂, Papua New Guinea, Maprik, East Sepik Province, 8 January 1997, CRM. This specimen once was indicated as a paratype of *Rosenbergia hudsoni* Nylander, 2004. In accordance with Ulf Nylander we replace in *Rosenbergia darwini* sp. nov. **Etymology.** This new species is dedicated to the great English naturalist Charles Robert Darwin. **Discussion.** *Rosenbergia darwini* spec. nov. is a small species that seems to be closely related to *R. hudsoni* Nylander, 2004 from which it can be separated by the three following features. *R. darwini* is smaller than *R. hudsoni* (33-36 mm rather than 42-49 mm); in *Rosenbergia hudsoni* the elytral granulation is more extended and denser than in *R. darwini*; in the new species the granulation extended only on the basal fourth of the elytra.  

![New Guinea](image)

Distribution map of *Rosenbergia darwini* spec. nov.
**Fig. 1.** *Rosenbergia darwini* sp. nov. Holotype

**Fig. 2.** *Rosenbergia darwini* sp. nov. ventral view.

**Fig. 3.** *Rosenbergia darwini* sp. nov. lateral view
In *Rosenbergia hudsoni* the elytral humeral spines are missing and the underside is covered by a uniform grey pubescence.

*Rosenbergia hudsoni* occurs in the highlands of PNG, while *R. darwini* is recorded at the northern coastal ridge of the Cyclops Mts, Bewani Mts, Torricelli Mts and Prince Alexander Mts, that run from Jayapura (N. E. border of Papua, Indonesia), to Wewak (at the northern coast of Papua New Guinea). These mountain ridges belong to the ecoregion of Northern New Guinea Mountain Rain Forest (Conservation Science Program WWF-US).

*Rosenbergia darwini* is also distinguished from *R. porioni* Rigout, 2004 by the colour and in the extension of the elytral granulation and from *R. vetusta* Ritsema, 1881 by the size and the presence of yellow pubescence.

Comparison between *Rosenbergia darwini* with other *Rosenbergia* species in CCAC like *R. mandibularis* Ritsema (PNG and West Papua), *R. xenium* Gilmour (PNG), *R. samuelsoni* Rigout (PNG), *R. weiskei* Heller (PNG and West Papua), *R. drumonti* Nylander & Wallin (PNG and West Papua), *R. humeralis* Gilmour (West Papua), *R. clarki* Rigout (PNG) and the type specimens of *R. exigua* Gahan in BMNH, lead to the conclusion that *R. darwini* is evidently different from all these *Rosenbergia* species.

**Material examined**


*Rosenbergia porioni* Rigout, 2004; 1 ♂: l. 41.6 mm, w. 15 mm., Dutch New Guinea, Bewani Mts., Humboldt Bay District 1937. IX. 1 ♀: length 51 mm, width 17.7 mm, Dutch New Guinea, Mimika river 1911, A.F.R. Wollaston leg. BMNH; 1 ♀: length 43.7 mm, width 16.3 mm., West Papua, Fak Fak Mts, Bomberai Peninsula, Fak Fak District 2004, CCAC.

*Rosenbergia exigua* Gahan, 1888; holotype, ♀, length 31.9 mm, width 12.3 mm., New Guinea, BMNH.

*Rosenbergia xenium* Gilmour, 1959; holotype, ♂, New Guinea, Owgarra. In the collection of Dr. Ulrich Danckers. 2 ♀♀ (holotype and paratypes and paratype of "Mimorosenbergia meeki" Breuning, 1980, synonym of *Rosenbergia xenium*), length 58 and 57 mm, British New Guinea, Owgarra, 1952, A.S. Meek leg. Both in the collection of the MNHN.
Acknowledgements

First of all I have to thank Dr. Sharon L. Shute (BMNH) for the loan of the specimens and Dr. Thierry Deuve (MNHN) who gave me the opportunity to study the collection of the museum. Thanks also to Robert Minetti for the loan of the paratype of the new species from his collection, to Dr. Ulf Nylander who sent to me the photographs of the holotype and paratype of *Rosenbergia hudsoni* and to Dr. Ulrich Danckers who sent to me the photographs of some of the type specimens of the Gilmour collection. Many thanks I express to Dr. Bruce M. Beehler of Conservation International, who was so kind to send to me a copy of the two parts of his book “The Ecology of Papua” and to Mr. Michael Hudson, who sent to me some very interesting Rosenbergia species from PNG. Special thanks to Dr. Francesco Vitali and his wife Ottilia for their support and help with the translation to English and to Brother Henk van Mastrixt (KEP) who give to me the opportunity to publish this study.

Relative literature


