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and *B. signatus* Broun (Coleoptera: Cleridae: Clerinae)

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Balcus violaceus (Fabricius), senior synonym of *Balcus niger* Sharp and *B. signatus* Broun (Coleoptera: Cleridae: Clerinae)

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Abstract. The elytra of *Balcus signatus* Broun (Coleoptera: Cleridae: Clerinae) from New Zealand have pale markings. Such markings, most prominently found in females, represent intraspecific variations of *Balcus violaceus* (Fabricius). Accordingly, *Balcus signatus* Broun is synonymized with *Notoxus violaceus* Fabricius, **new synonymy**. Four habitus figures of *Balcus violaceus* (Fabricius) are presented to display the range of elytral color variation in the species.

Discussion

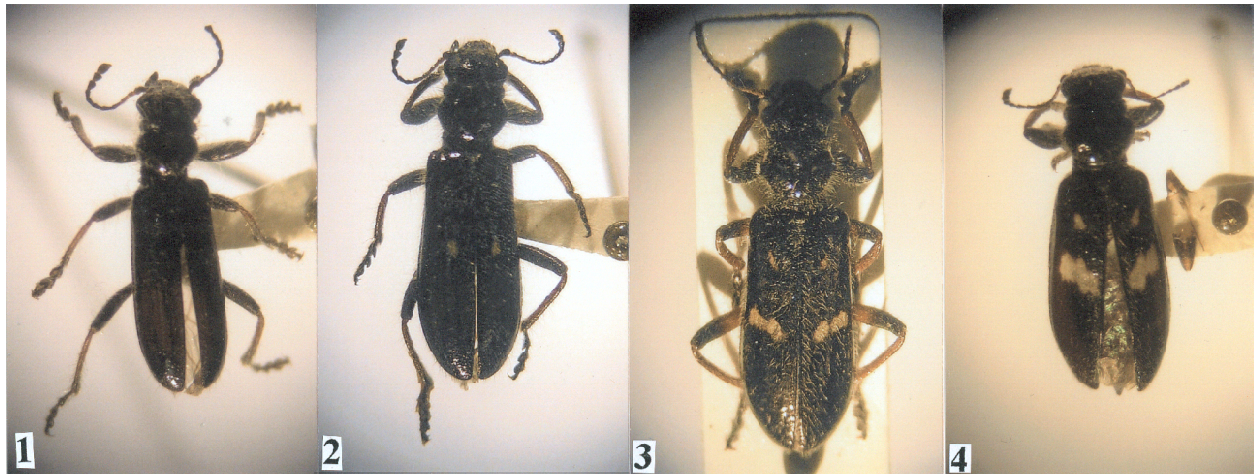
Radford (1981) enumerated the Fabrician Australian and New Zealand coleopteran types in the Banks collection of the British Museum of Natural History (Opitz 2009: 86). Moreover, in that work Radford (1981: 194) synonymized *Balcus niger* Sharp with *Notoxus violaceus* Fabricius. Also, Radford stated that "... this species (*B. niger* Sharp) varies considerably in size, colour and markings on the elytra, which may be three pale spots, two, one or none at all". Apparently, Radford was not aware that specimens of *Balcus* Sharp (Coleoptera: Cleridae: Clerinae) with pale elytral markings were heretofore assigned to *Balcus signatus* Broun (1880: 333). I have examined an extensive series of the beetles in question and find no characters that would indicate they are distinct species. I herein place *Balcus signatus* Broun into synonymy with *Notoxus violaceus* Fabricius 1787: 127), **new synonymy**, now *Balcus violaceus* (Fabricius) (Fig. 1-4). For the most part, the pale markings on the elytra are found in female specimens. Elytral coloration does not involve geographical variation. The habitus illustrations are provided to indicate the extent of elytral color variation within the species.

Balcus violaceus (Fabricius 1787: 127) [*Notoxus*]
= *Balcus niger* Sharp 1877: 7.
= *Balcus signatus* Broun 1880: 333, **new synonymy**.

Literature Cited

- Broun, T. 1880.** Family-Cleridae Manual of the New Zealand Coleoptera. Part 1. James Huhes; Wellington. 651 p.
- Fabricius, J. C. 1787.** Mantissa Insectorum sistens eorum bspecies nuperdetectas adjectis characteribus genericis, differentiis specificis, emendationibus, observationibus. Impensis Christ. Gottl. Proft ; Copenhagen. Tome 1: xx, 348 p.; Tome. 2, [2]: 382 p.
- Opitz, W. 2009.** Classification and evolution of the genus *Phymatophaea* Pascoe from New Zealand and New Caledonia (Coleoptera: Cleridae: Enopliinae). Journal of the Royal Society of New Zealand 39(4): 85-138.
- Radford, W. P. K. 1981.** The Fabrician types of the Australian and New Zealand Coleoptera in the Banks collection of the British Museum (Natural History). Records of the South Australian Museum 18 (8): 155-197.
- Sharp, D. 1877.** Descriptions of some new species and indications of new genera of Coleoptera from New Zealand. The Entomologist's Monthly Magazine 14: 7-10.

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Figures 1-4. Habitus of *Balcus violaceus* (Linnaeus). 1) Male. 2) Female. 3) Female. 4) Female.