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NOTIOPHILUS QUADRIPUNCTATUS DEJEAN, 1826 (COLEOPERA, CARABIDAE) NEW TO MACARONESIA

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With 1 figure

RESUMO. O autor na presente nota regista pela primeira vez o carabídeo *Notiophilus quadripunctatus* Dejean, 1826 para a Macaronésia. É dada para o arquipélago dos Açores e tem sido confundida com *Notiophilus geminatus* Dejean, 1831 na Madeira.

ABSTRACT. The author records a new carabid beetle (*Notiophilus quadripunctatus* Dejean, 1826) for Macaronesia. This species is new to the Azores and had been mistaken for *Notiophilus geminatus* Dejean, 1831 in the archipelago of Madeira.

The carabid beetle *Notiophilus geminatus* Dejean was recorded from Madeira and Deserta Grande by WOLLASTON (1854). Two quotations from the text, on page 18 of "Insecta Maderensia", read as follows: "A somewhat rare insect in Madeira, where I have only taken it sparingly, and at an altitude from about 3000 to 4000 feet...". Regarding the Deserta Grande populations of this species he makes the following observation: "... the specimens attain a larger size, it is far more abundant, occurring in tolerable profusion beneath the small cluster of fir-trees which have been planted, in the red volcanic soil, ...". WOLLASTON (*op. cit.*) stated that it has also been recorded from the Canary islands.

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Surprisingly LUNDBLAD (1958) recorded *N. geminatus* Dejean from Madeira proper only. Studying the carabid beetles collected during the Lindberg expeditions of 1957 and 1959, COLAS (1963) recorded *N. geminatus* Dejean from Queimadas (860 m.), Pico Ruivo (1700 m.) and Paul da Serra (1400 m.) in Madeira. SERRANO (1987) also referred one female found in Madeira on Chão do Areeiro (1580 m.) to this species.

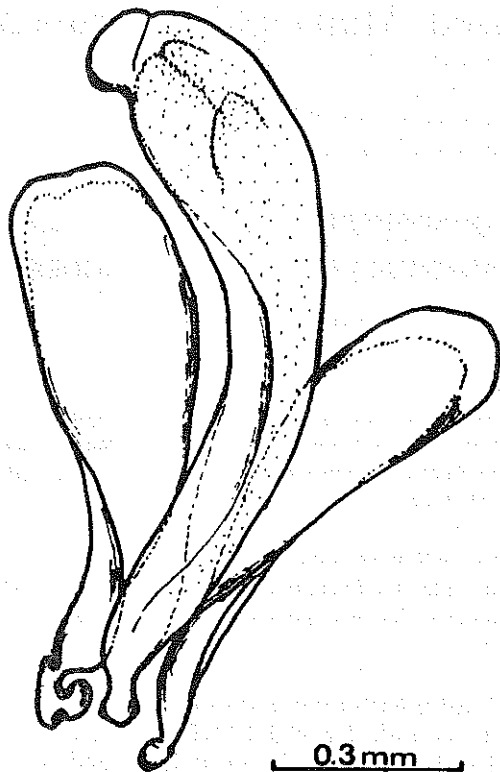


Fig. 1 — Genitalia of *Notiophilus quadripunctatus* Dejean (dorsal view).

Some months ago, we were given by M. DALBERTO POMBO some beetles from the Azores for identification. Among others we found a Carabid belonging to a genus never recorded from this archipelago (*Notiophilus* Dumeril). Fortunately we had with us most of the Carabid beetles of the Lindberg expeditions. On comparing the *Notiophilus* sp. from S. Miguel (Azores) with the specimens of *N. geminatus* Dejean from the Lindberg expeditions we concluded that it belonged to the same species. However, when comparing all specimens with *N. geminatus* Dejean from Portugal,

we discovered that they were distinctly different. On examining all the specimens (from Madeira and the Azores) again, we came to the conclusion that *N. geminatus* Dejean had always been mistaken for *N. quadripunctatus* Dejean. The genitalia of this species are presented in Fig. 1 of a specimen from Pico Ruivo (Lindberg expedition). It is very similar to that presented in JEANNEL (1941).

In conclusion we are able to assert at this moment that the *Notiophilus* specimens taken during all expeditions, Lindberg (1957 and 1959), Faculty of Sciences (University of Lisbon) and Museu Bocage (1980), including an expedition to the Azores (1980), belong to *N. quadripunctatus* Dejean. It is likely that this species has been mistaken for *N. geminatus* Dejean since the WOLLASTON (1854) records. It will be interesting to find out whether the specimens of *N. geminatus* Dejean from the Canary Islands really belong to this species.

N. quadripunctatus Dejean is a wide-spread species throughout western Europe and North Africa.

STUDIED MATERIAL

MADEIRA: Queimadas, 26.VI.1957, 3 exs., Pico Ruivo, 29.VI.1957, 3 exs., Lindberg expedition; Chão do Areeiro, 3.V.1980, 1 ex., Faculty of Sciences (University of Lisbon) and Museu Bocage expedition. Azores — S. Miguel: Ponta Delgada, 15.X.1988, coll. D. Pombo.

KEY TO DISTINGUISH THE TWO SPECIES FROM ONE ANOTHER

1 — Apex of elytra with well defined pale spot sometimes prolonged to slightly before middle. Fourth elytral stria broader than adjacent ones, almost constantly with two (exceptionally three or one) large punctures often asymmetrical in position. Pronotum with sides only faintly sinuate posteriorly. (5.0 - 5.5 mm) *N. quadripunctatus* Dejean

— Elytra dark at base, striae 3-7 and apex with greenish brassy lustre (dense microreticulation). Fourth elytral stria equal to third and only slightly broader than fifth, almost constantly with a single, less foveate puncture. Pronotum strongly sinuate posteriorly. (5.5 - 6.5 mm) *N. geminatus* Dejean

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