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A SOUTHERN DISTRIBUTION FOR THE INTRODUCED DUNG BEETLE APHODIUS (OTOPHORUS) HAEMORRHOIDALIS (L., 1758)

Aphodius haemorrhoidalis is a bovine dung specialist species which frequently occurs in north and south European grasslands (Dellacasa, 1983; Hanski, 1991; Lumaret and Kirk, 1991). It is one among many other European species accidentally introduced in North America (Blume, 1985). In this continent it is commonly found in the field in dense populations (Kessler and Balsbaugh, 1972; Merrit, 1974; Mohr, 1943).

In 1915 Schaeffer reported A. haemorrhoidalis for the first time in New Jersey, United States (in Woodruff, 1973). About 1940 this species enlarged its geographical range to New York, Nova Scotia, New Brunswick, Quebec, North Carolina, South Carolina and Illinois. In 1960 it was collected in Kentucky and Massachusetts; and in British Columbia and Florida in 1967. This last record is the southernmost and it possibly represents the initial dispersal of this beetle southward (Woodruff, op. cit). According to Brown (1967) who reported it from British Columbia, A. haemorrhoidalis had already spread to the northwest. Recently it has also been reported from Nebraska (Ratcliffe, 1991).

On September 29, 1993 we have caught two specimens of this species trapping with cow dung in pasturelands at the state of Durango (Mexico): El Tapado (Biosphere

Reserve of Mapimí, 40 km NE from Ceballos). This is the first known record south of Rio Bravo, and the southern known boundary of the species range. In addition to A. haemorrhoidalis, we found in the Mapimí grasslands three other species introduced in North America: Digitonthophagus gazella (Fabricius), Euoniticellus intermedius (Reiche) and Aphodius lividus (Olivier); another probably introduced, Aphodius nigrita Fabricius; and only one native dung beetle, Canthon (Boreocanthon) puncticollis LeConte.—Jorge M. Lobo, Museo Nacional de Ciencias Naturales (C.S.I.C.), Dept. Biodiversidad, c/ José Gutiérrez Abascal, 2. 28006, Madrid, Spain.

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