

## **First Occurrence of *Stenopelmus rufinasus* Gyllenhal, 1835 (Coleoptera: Eirirhinidae) in Portugal**

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SCIENTIFIC NOTE

FIRST OCCURRENCE OF *STENOPELMUS RUFINASUS* GYLLENHAL, 1835  
(COLEOPTERA: ERIRHINIDAE) IN PORTUGAL

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*Stenopelmus rufinusus* Gyllenhal is a small, semiaquatic weevil which lives and feeds on floating aquatic pteridophytes of the genus *Azolla* Lam. (Azollaceae), and was described for the first time in Schönherr (1835). This beetle is indigenous to southern and western U.S.A., being present also in Argentina and Paraguay as well as in Europe, where it was introduced accidentally with *Azolla* (Janson 1921; Richerson and Grigarick 1967; Hill

1998). In 1995, South Africa imported *S. rufinusus* from Florida for biological control of the non-native *Azolla filiculoides* Lamarck, and released it later from quarantine (Hill 1998).

The first reference to this weevil in Europe (France) dates from 1901 (Bedel 1901; Hill 1998), although it is likely to have been introduced to the old continent at the same time as *Azolla*, when this fern was imported as an ornamental plant in the mid-19<sup>th</sup> century

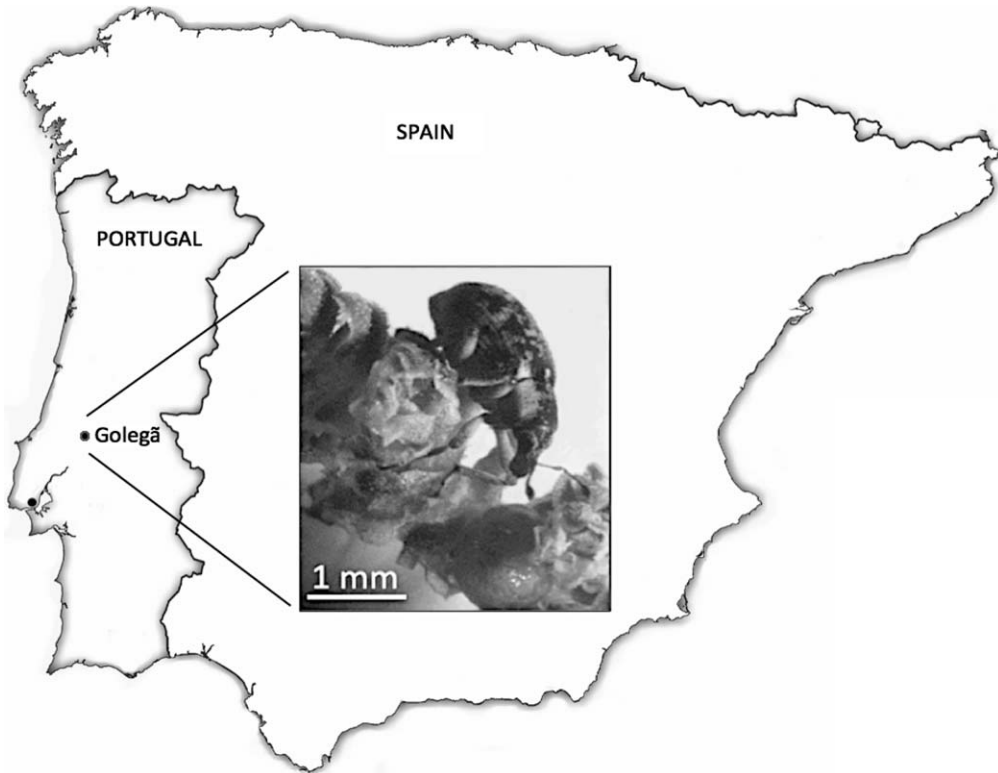


Fig. 1. Location of Golegã where the first specimens of *Stenopelmus rufinusus* were collected in Portugal.

(Carrapiço 2011). *Stenopelmus rufinus* has been reported from several European countries since the beginning of the 20<sup>th</sup> century (Caldara 2004), but it was not collected on the Iberian Peninsula (Provincia de Ciudad Real, Spain) before 2002 (Fernández Carrillo *et al.* 2005). In 2003, the weevil was found in the vicinity of Parque Nacional de Doñana (Provincia de Andalucía, Spain), on mats of *A. filiculoides* (Dana and Viva 2006).

Although *Azolla* was first reported in Portugal in 1920 (Carrapiço 2011), only now (April–May 2011) have we collected *S. rufinus* as a **new country record**, in Alverca lagoon near Golegã (39°24' N, 8°30' W) (Fig. 1). This lagoon, which was probably, in an early stage, a branch of the Tagus River, is now isolated from it, although in critical periods an artificial device pumps in water from the river. At present, the lagoon has very high levels of nitrogen and phosphorus, and macrophytes occur permanently throughout the year. The main species present in this community are *A. filiculoides*, *Ceratophyllum demersum* L. (Ceratophyllaceae), *Lemna minor* L., and *Lemna gibba* L. (Lemnaceae).

As noted previously, *S. rufinus* was found mainly on *Azolla*, but we have also collected some specimens from *Lemna* L. This observation needs further clarification, since the weevil is said to be host-specific on *Azolla* (Dana and Viva 2006).

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