

## NOTA / NOTE

**Polytoxus Spinola, 1850 (Hemiptera: Reduviidae: Saicinae), new genus for Portugal, with records of *Polytoxus sanguineus* (A. Costa, 1842) and *Polytoxus siculus* (A. Costa, 1842)**

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**Abstract:** The two European species of the saicine assassin bug genus *Polytoxus* Spinola, 1850 (Hemiptera: Reduviidae: Saicinae), *Polytoxus sanguineus* (A. Costa, 1842) and *Polytoxus siculus* (A. Costa, 1842), are reported from Portugal for the first time, greatly extending the known distribution range of both in the Iberian Peninsula. The global and the Iberian (Portuguese districts and Spanish provinces) distribution of both species is reviewed and updated.

**Key words:** Hemiptera, Reduviidae, *Polytoxus*, *Polytoxus sanguineus*, *Polytoxus siculus*, first records, Portugal.

**Resumen:** *Polytoxus Spinola, 1850 (Hemiptera: Reduviidae: Saicinae), nuevo género para Portugal, con registros de Polytoxus sanguineus (A. Costa, 1842) y Polytoxus siculus (A. Costa, 1842).* Se citan las dos especies europeas del género *Polytoxus* Spinola, 1850 (Hemiptera: Reduviidae: Saicinae), *Polytoxus sanguineus* (A. Costa, 1842) y *Polytoxus siculus* (A. Costa, 1842), por primera vez de Portugal, ampliando considerablemente su distribución conocida en la Península Ibérica. Se revisan y actualizan las distribuciones global e ibérica (distritos portugueses y provincias españolas) de las dos especies.

**Palabras clave:** Hemiptera, Reduviidae, *Polytoxus*, *Polytoxus sanguineus*, *Polytoxus siculus*, primeros registros, Portugal.

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## Introduction

The genus *Polytoxus* Spinola, 1850 (Hemiptera: Reduviidae: Saicinae) includes around 80 species distributed in the Afrotropical, Oriental and Australian Regions, as well as in some areas of the Palaearctic Region (namely southern Europe, the Middle East, and East Asia) (RÉDEI & TSAI, 2010). In Europe, the genus is represented by *Polytoxus sanguineus* (A. Costa, 1842) and *Polytoxus siculus* (A. Costa, 1842), while a third species (*Polytoxus jeanneli* Villiers, 1942, only recorded once from Spain by RIBES, 1974), was considered not established by PUTSHKOV & MOULET (2009).

In this study, we present the first Portuguese records of both European species of *Polytoxus*, a genus previously unrecorded from Portugal, based on specimens deposited in the collection of MHNC-UP (Museu de História Natural e da Ciência da Universidade do Porto, Portugal) and photographs uploaded to the citizen science online platform iNaturalist.org.

### ***Polytoxus sanguineus* (A. Costa, 1842)**

*Polytoxus sanguineus* was considered a very rare species by PUTSHKOV & MOULET (2009). Its distribution includes Europe [France (mainland and Corsica), Italy (mainland, Sardinia, and Sicily), and Spain] and Africa (Algeria and Ethiopia) (PUTSHKOV & PUTSHKOV, 1996; PUTSHKOV & MOULET, 2009).

Up to now, the Iberian known distribution (Map 1) was limited to the Spanish provinces of Alicante (RIBES & SAULEDA, 1979) and Barcelona (RIBES, 1990). New species for Portugal with two records from the southernmost Portuguese district of Faro (Map 1).

#### **Material examined:**

##### **Faro district:**

- Lagoa municipality: Arrozal da Nossa Senhora do Rosário - Estômbar (37.167222, -8.488333; MGRS: 29SNB4513), 09/09/2021, 1 specimen photographed by Thijs Valkenburg during the night next to a reedbed [*Phragmites australis* (Cav.) Trin ex.Steud.]: <https://www.inaturalist.org/observations/94259619>.
- Loulé municipality: Vilamoura marshes (37.088758, -8.134745; MGRS: 29SNB7605), 08/01/2023, 2 ♂♂, Thijs Valkenburg leg. (MHNCUP-ART-41099 and MHNCUP-ART-41100). The specimens were detected using a beating tray along reedbeds [*Phragmites australis* (Cav.) Trin ex.Steud.] and photographed by Thijs Valkenburg: <https://www.inaturalist.org/observations/146143304> and <https://www.inaturalist.org/observations/146143310>. Fig. 1 shows the specimen MHNCUP-ART-41099.

### ***Polytoxus siculus* (A. Costa, 1842)**

*Polytoxus siculus* is known from Europe [Croatia, France (Corsica only), Greece, Italy, and Spain] and from northern Africa (Egypt) (PUTSHKOV & PUTSHKOV, 1996; PUTSHKOV & MOULET, 2009; DUHAZÉ et al., 2021).

The known Iberian distribution of *P. siculus* is restricted to the Spanish province of Barcelona (RIBES, 1961) (Map 2). The threat status of this species in the Iberian Peninsula was evaluated by GOULA et al. (2011) as "Data Deficient", revising the "Vulnerable" status previously attributed by RIBES (2005). New species for Portugal based on a photographic record (Fig. 2) from central Portugal (Map 2).

#### **Material examined:**

##### **Lisboa district:**

- Cadaval municipality: Cercal (39.210453, -8.996995; 29SND0040), 03/10/2011, 1 ♂ photographed by Francisco Barros: <https://www.inaturalist.org/observations/14817230>.

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**Fig. 1.** - Male specimen of *Polytoxus sanguineus* (A. Costa, 1842) collected in the Vilamoura marshes (Loulé, Portugal) on 08/01/2023 (MHNCUP-ART-41099). Photo: Thijs Valkenburg.



**Fig. 2.** - Specimen of *Polytoxus siculus* (A. Costa, 1842) photographed in Cercal (Cadaval, Portugal) on 03/10/2011. Photo: Francisco Barros.



**Map 1.**- Iberian distribution of *Polytoxus sanguineus* (A. Costa, 1842) (grey: previously known Spanish provinces; green: new Portuguese district; orange: new Portuguese MGRS 100 km<sup>2</sup> squares).



**Map 2.**- Iberian distribution of *Polytoxus siculus* (A. Costa, 1842) (grey: previously known Spanish province; green: new Portuguese district; orange: new Portuguese MGRS 100 km<sup>2</sup> square).