

## *Muscari matritensis* (Scilloideae, Asparagaceae), an addition to the Portuguese vascular flora

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### Abstract

*Muscari matritensis* is here reported as new to the flora of Portugal. A small population was detected in Mata Nacional do Escaroupim (Ribatejo), growing in a Mediterranean stone pine (*Pinus pinea*) plantation on sandy soils. This is the new lowest altitudinal limit for the species.

**Key words:** Iberian flora, geophyte, *Leopoldia*, new country record, Salvaterra de Magos.

### Resumen

*Muscari matritensis* (Scilloideae, Asparagaceae), una adición a la flora vascular portuguesa

*Muscari matritensis* se reporta aquí como nuevo para la flora de Portugal. Se detectó una pequeña población en Mata Nacional do Escaroupim (Ribatejo), creciendo en una plantación de pino piñonero (*Pinus pinea*) sobre suelos arenosos. Esta cita es el nuevo límite altitudinal más bajo para la especie.

**Palabras clave:** Flora ibérica, geófito, *Leopoldia*, novedad corológica, Salvaterra de Magos

*Muscari matritensis* Ruíz Rejón, Pascual, C. Ruíz Rejón, Valdés & J.L. Oliv. is one of the 29 currently accepted species of *Muscari* subgen. *Leopoldia* (Parl.) Peterm. (Böhnert *et al.*, 2023). This facultatively autogamous and late-blooming species (Ruíz-Rejón *et al.*; 1985, Valdés & Lifante, 1992) can be separated from the closely-allied *Muscari comosum* (L.) Mill. by the typically narrower leaves, the mauve fertile flowers, turning ochre when mature with yellow teeth (vs. purple turning brown with cream teeth), subcylindrical (vs. obconical) in shape, and the narrower perianth aperture with the stamens not reaching the mouth of the flower (vs. perianth aperture exceeding 2 mm with stamens reaching the mouth of the flower), all these traits being difficultly assessed in dried specimens (Suárez-Santiago & Blanca, 2013). Therefore, the distribution of *M. matritensis* remains poorly known.

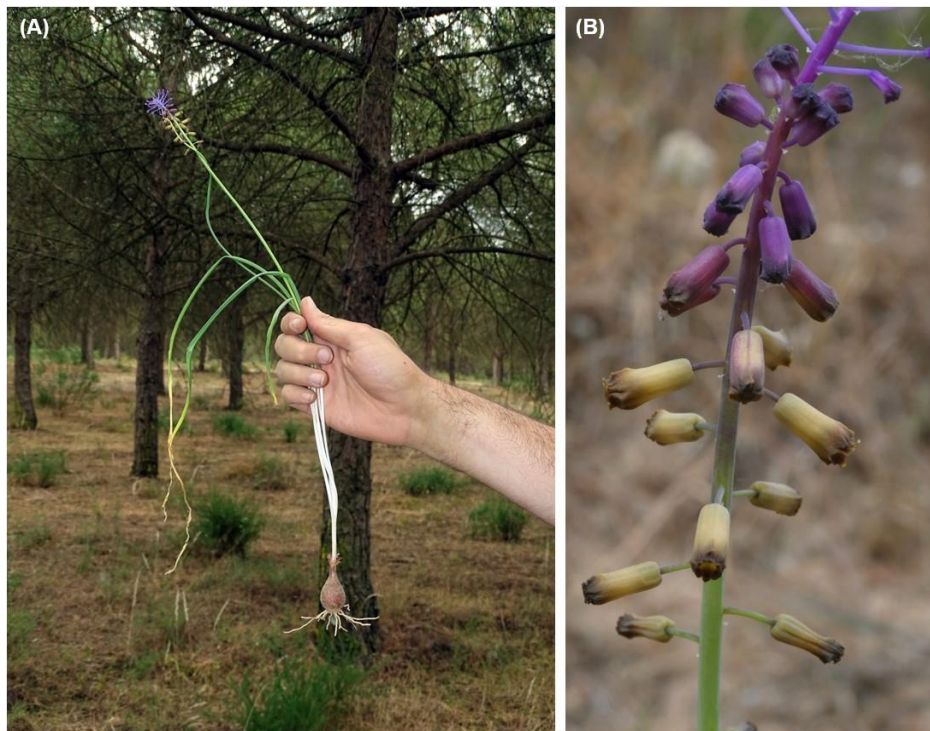
*Muscari matritensis* occurs in Mediterranean scrub, mostly on acidic sandy substrates, but also on dolomitic and serpentine soils (Suárez-Santiago & Blanca, 2013). To date, it has only been reported from southern, south-central, central and eastern Spain (Suárez-Santiago & Blanca, 2013; Aymerich & Sáez, 2018; Gestí & Vilar, 2020), and from southern France (Tison *et al.*, 2014), being considered rare throughout its range.

On 21<sup>st</sup> May 2022, in Mata Nacional do Escaroupim, Ribatejo, Portugal, the second author photographed plants, which were later tentatively ascribed to *M. matritensis* in the 'Biodiversidad Virtual' platform (<https://www.biodiversidadvirtual.org>). Fieldwork, in May 2023, allowed us to confirm this identification (Figure 1) and collect voucher specimens to document this new record to the Portuguese flora, which represents a significant westward expansion of its known range, at the lowest altitude where this species has been encountered.

A total of 10 flowering individuals were detected in a *Pinus pinea* L. plantation, over disturbed sandy scrubland. The sparse understorey is dominated by *Ulex australis* subsp. *welwitschianus* (Planch.) Esp. Santo, Cubas, Lousã, C. Pardo & J.C. Costa. Invasion by *Robinia pseudoacacia* L., which was detected at the vicinity of some plants, can be a potential threat to this population of *M. matritensis*.

***Muscari matritensis*** Ruíz Rejón, Pascual, C. Ruíz Rejón, Valdés & J.L. Oliv.

**PORTUGAL, Ribatejo** (R), Mata Nacional do Escaroupim, 39.078274 — 39.078384 Latitude, -8.741576 — -8.741600 Longitude, 6 m Altitude, plantação de *Pinus pinea* com subcoberto de *Ulex australis* subsp. *welwitschianus*, 20-V-2023, João



**Figure 1.** *Muscari matritensis*, Mata Nacional do Escaroupim, 20-V-2023. (A) Habit (LISU). (B) Detail of inflorescence showing fertile flowers (COI00105870). Photographs by Fernando Pires (A) and João Farminhão (B).

**Figura 1.** *Muscari matritensis*, Mata Nacional do Escaroupim, 20-V-2023. (A) Hábito (LISU). (B) Detalle de inflorescencia mostrando flores fértiles (COI00105870). Fotografías de Fernando Pires (A) y João Farminhão (B).

Farminhão & Fernando Pires 325, (COI 00105870, LISU).

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