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***Asphodelus ayardii*, the correct name for *A. cirerae*
(*Asphodelaceae*)**

Abstract

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The study of the type material of *Asphodelus ayardii* Jahand. & Maire (*Asphodelaceae*) indicates that this is the correct name for *A. cirerae* Sennen, one of the three species of *A. sect. Verinea*.

Introduction

In a recent study based on morphological, palynological, karyological and ecogeographical characters, Díaz Lifante (1991) demonstrated that *Asphodelus* sect. *Verinea* (Pomel) Boiss. is formed by three clearly distinct groups, two diploid and one tetraploid, that must be separated at the specific level. She applied the names *A. fistulosus* L. to the tetraploid and *A. tenuifolius* Cav. and *A. cirerae* Sennen to the diploids.

Asphodelus cirerae was described from "Lérida: sites arides de Gardeny, 21.IV, Crisógono & Teodoro, 1930, Pl. d'Esp., F. Sennen, exsicc. n° 7492" (Sennen, 1936: 103). The study of the material kept at BC, BCF, MA and MPU demonstrated that this name was applied by Sennen to a group of plants closely related to *A. fistulosus*, with which the taxon was identified by most authors. The taxon consists of perennial plants with short rhizomes, scape bases smooth, leaves semicylindrical, smooth except for slightly scabrous margins and occasionally nerves, flowers almost pure white with rather large perianth segments (12-18 x 4-8 mm), filaments rather long, with above the geniculate base, anthers yellowish orange, and style long, with stigma rather distant from the anthers. Plants with these characters occur in an area extending from SW Morocco eastward to Italy and Tunisia. They were named *Asphodelus fistulosus* var. *grandiflorus* by Grenier & Godron (1855: 223), *A. fistulosus* subsp. *approximatus* by Richter (1890: 193), and *A. fistulosus* var. *atlanticus* by Jahandiez & al. (in Jahandiez & Maire 1931: 118).

***A. ayardii* Jahand. & Maire**

Jahandiez & Maire (1925: 69) described a new species of *Asphodelus* L. based on material collected by Jahandiez in "pascuis subalpinis Atlantis Medii prope oppidum Bekrit, solo basaltico, ad alt. 1750-1850 m". It was named *A. ayardii* and described as a rhizomatose species, with an elongate and oblique rhizome with fibrous roots, and leaves narrowly linear, flat and with scarious and scabrous margins. They considered this species

as related to *A. sect. Asphodelus* on account of its flattened, non-fistulose leaves, which within *Asphodelus* they only occur in this section, the presence of a rhizome, and short fruit pedicels. However, all species of *A. sect. Asphodelus* have swollen roots and keeled leaves, contrary to *A. ayardii*, which is why Maire & Weiller (in Maire 1958: 33) described a new section, *A. sect. Leptogamon*, to accommodate this species.

During a taxonomic revision of *Asphodelus* in the W Mediterranean area, the type material of *A. ayardii* kept at P, MPU and RAB, and several other sheets identified by Jahandiez & Maire as *A. ayardii*, were studied. This material agrees with that of *A. sect. Verinea* identified by Díaz Lifante (1991) with *A. cirerae*. The plants of the Atlas show the same characters as those of *A. cirerae* from C and SE Spain, S France and NW Africa: the stamen filaments are fusiform and shorter than styles, the leaves are not flat but semicylindrical, with scarios and scabrid margins; a short rhizome is also present, as in many other specimens of *A. cirerae*.

However, in the plants from the Atlas the rhizome is longer than usual, the scape is simple or little branched while it is fairly well branched in most other specimens, and the flowers are smaller, with tepals sometimes only 10 mm long. Just these differences may be a consequence of the altitude of the localities (between 1750 and 3200 m), where the plants were collected (Jahandiez & Maire 1925: 69, Maire 1958: 33) and do not justify recognition of a separate taxon.

Typification

Asphodelus ayardii Jahand. & Maire in Bull. Soc. Hist. Nat. Afrique N. 16: 69 (1925).- Ind. loc.: "Hab. in pascuis subalpinis Atlantis Medii prope oppidum Bekrit, solo basaltico, ad alt. 1750-1850 m., junio florens. Typus in Herb. Univers. Algeriensis, in Herb. Inst. Imper. Scient. Rabatensis, et in Herb. Jahandiez".- Type: "Moyen Atlas: Bekrit, bords des champs sur basalte, 1800 m, 12.6.1924, E. Jahandiez, Plantes Marocaines n° 601 (P, specimen on the left, lectotype; MPU-Maire, isolectotypes). "Moyen Atlas: Bekrit, lieux pierreux incultes, alt. 1850 m, 12 juin 1924, collecteur E. Jahandiez" (RAB 27269, paralectotype).

Part of the type material was collected on the "bords des champs sur basalte, 1800 m", as n° 601. In Paris (P) there is a sheet of this collection from Maire's herbarium, identified by him as "*Asphodelus ayardii* n. sp." and marked as "Type". It bears two plants. The plant on the left has a short and thick rhizome, several fibrous, somewhat thickened roots, a rosette with several semicylindrical leaves up to 26 cm x 5.5 mm, with scabrid margins and with a widened membranous base, two scapes, one of them broken and the other with the main axis also broken, and two well developed branches with lax inflorescences, a terminal flower with tepals of 12 mm and two fruits of 5-6 x 3-5 mm, obovoid, on pedicels of 6-8 mm articulated below the middle.

In RAB there is another specimen of *Asphodelus ayardii* marked as "Type" (RAB 27269). Its label does not fully agree with the indications of the lectotype gathering, although the collector's number (601) is the same. Since the label does not include the substrate indication ("sur basalte") mentioned in the protologue ("solo basaltico"), the RAB specimen should have been a less suitable lectotype.

Asphodelus cirerae Sennen, Diagn. Nouv. Exsicc.: 103 (1936).- Ind. loc.: Lérida: Sites arides autour de Gardeny, Leg. Hnos. Crisógono et Teodoro".- Type: "Lérida, sites arides de Gardeny, 21.IV, Leg.: Hnos. Crisógono et Teodoro, 1930, Pl. d'Esp., F. Sennen, exsicc. n° 7492" (BC-Sennen, specimen with flowers, lectotype; BC-Sennen, BCF 4313, MA 20255, MPU, isolectotypes).

In the herbarium of Sennen (BC-Sennen) there are two sheets with plants used by the author to describe *Asphodelus cirerae*. One of these sheets, bearing a plant with flowers, is design as lectotype. The plant has some roots, leaves up to 4 mm wide, two scapes, one very young and the other with two branches, and flowers with tepals of 15-17 mm. The lectotype sheet also bears a fragment of an inflorescence with fruits of c. 5 mm on pedicels of c. 7.5 mm.

Conspectus of the section

Asphodelus sect. *Verinea* (Pomel) Boiss., Fl. Orient. 5: 314. 1882.- Type: *A. fistulosus* L.

= *A.* sect. *Leptogamon* Maire & Weiller in Maire, Fl. Afrique N. 5: 33. 1958.- Type: *A. ayardii* Jahand. & Maire.

A. fistulosus L., Sp. Pl: 309. 1753.

= *A. intermedius* Hornem., Hort. Hafn. Suppl.: 131. 1819.

= *A. davei* Sennen in Ann. Soc. Linn. Lyon 1922: 109. 1922.

A. ayardii Jahand. & Maire in Bull. Soc. Hist. Nat. Afrique N. 16: 69. 1925.

= *A. cirerae* Sennen, Diagn. Nouv. Exsicc.: 103. 1936.

= *A. fistulosus* var. *grandiflorus* Gren. & Godron, Fl. France 3: 223. 1856.

= *A. fistulosus* subsp. *approximatus* Gren. & Godron ex Richter, Pl. Eur. 1: 193. 1890.

= *A. fistulosus* var. *atlanticus* Jahand. & al. in Jahand. & Maire, Cat. Pl. Maroc 1: 18. 1931.

A. tenuifolius Cav. in Anales Ci. Nat. 3: 46, tab. 27, fig. 2. 1801.

= *A. maroccanus* Gandoger in Bull. Soc. Bot. France 55: 565. 1908.

= *A. serrulatifolius* Sennen, Diagn. Nouv. Exsicc.: 213. 1936.

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