



## A taxonomic revision of the genus *Xerodraba* (Eudemeae, Brassicaceae)

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### Abstract

*Xerodraba* is a South American genus distributed exclusively in the Andean-Patagonian region of southern Argentina and Chile. It is characterized by forming cushions with imbricate, scalelike leaves and solitary, terminal flowers. An updated taxonomic revision of the genus based on morphological analyses using both qualitative and quantitative characters is presented here. *Xerodraba* currently includes five species distributed in Argentina, of which two also grow in Chile. *Xerodraba pectinata* is reduced to synonymy of *X. lycopodioides*, and *X. pycnophylloides* is treated as a subspecies of *X. patagonica*. The new combination *X. patagonica* subsp. *pycnophylloides* is proposed. Descriptions, keys to all taxa, updated geographical distributions, maps, and illustrations are provided.

### Resumen

*Xerodraba* es un género Sudamericano distribuido exclusivamente en la región Andino-Patagónica del sur de Argentina y Chile, caracterizado por formar cojines de hojas imbricadas y flores solitarias. Sobre la base de análisis morfológicos, usando tanto caracteres cualitativos como cuantitativos, se presenta una revisión taxonómica actualizada del género. *Xerodraba* incluye actualmente cinco especies distribuidas en la Argentina, estando dos de ellas también presentes en Chile. *Xerodraba pectinata* fue incluida bajo la sinonimia de *X. lycopodioides* y *X. pycnophylloides* fue incluida como subespecie de *X. patagonica*. Descripciones y claves para todos los taxones son provistas, la distribución actualizada de los taxones con sus mapas correspondientes son presentados y varias especies son ilustradas.

**Key words:** Andes, Argentina, Chile, Cruciferae, Patagonia, taxonomy

### Introduction

*Xerodraba* Skottsberg (1916: 234) is a genus of Brassicaceae (Cruciferae) restricted to southern Patagonian Argentina, with two species also present in southern Chile (Al-Shehbaz, 2012a). The genus is principally differentiated from the remaining South American Brassicaceae by having woody, dense cushions, solitary flowers terminating individual stems, imbricate scale-like leaves, and latiseptate silicles (Boelcke & Romanczuk 1984, Al-Shehbaz, 2012a). *Xerodraba* is morphologically similar to other cushion-forming South American species of *Delpinophytum* Spegazzini (1903: 9), *Lithodraba* Boelcke (1951: 349), and *Dactylocardamum* Al-Shehbaz (1989: 519). However *Xerodraba* is distinguished from *Delpinophytum* and *Dactylocardamum* by having latiseptate and dehiscent, 2–6-seeded silicles [vs. angustiseptate (*Delpinophytum*) or subterete (*Dactylocardamum*) and indehiscent, 1–2-seeded silicles]. By contrast, *Lithodraba* differs from *Xerodraba* by having long non-imbricate leaves, (1–)3–5-flowered racemes, four stamens, and angustiseptate, 2-seeded silicles.

*Xerodraba*, together with *Eudema* and *Brayopsis* Gilg & Muschler (1909: 482), was included by Warwick *et al.* (2010) in tribe Eudemeae on the basis of an ITS phylogeny that recovered a well-supported clade including *Brayopsis colombiana* Al-Shehbaz (1990: 97), *Eudema nubigena* Bonpl. in Humboldt & Bonpland (1809: 136), and *X. pectinata* (Spegazzini 1902: 225) Skottsberg (1916: 235). Latter, Al-Shehbaz (2012b) expanded this tribe to also include *Aschersoniodoxa* Gilg & Muschler (1909: 469), *Dactylocardamum*, *Delpinophytum*, and *Onuris* Philippi