



A taxonomic revision of the *Capparis spinosa* group (Capparaceae) from eastern Africa to Oceania

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Abstract

The variability, autecology and distribution of the *Capparis spinosa* group have been studied in eastern Africa, Madagascar, southern Asia, Australia and Oceania. In these areas the taxonomic treatment of the group, also represented in holarctic Regions of the Old World, is still critical. The forms widespread in the study area are here referred to four subspecies of *C. spinosa*. The recognized subspecies mostly show geographical vicariance, except in some contact areas of the Middle East and western Himalaya. Two nomenclatural novelties, i. e. *C. spinosa* subsp. *cordifolia* comb. et stat. nov. and *C. spinosa* subsp. *himalayensis* stat. nov., are proposed. Among the recognized taxa, *C. spinosa* subsp. *cartilaginea* shows a wide distribution range including eastern Africa, Madagascar, south-western Asia to Pakistan and India, *C. spinosa* subsp. *cordifolia* is widespread in the Pacific from Indonesia eastwards to Pitcairn Islands and Hawaii, *C. spinosa* subsp. *nummularia* is recorded from western, central and northern Australia, *C. spinosa* subsp. *himalayensis* is known from Pakistan, India and Nepal.

Key words: *Capparis* sect. *Capparis*, chorology, ecology, intraspecific variability, Paleotropical Kingdom

Introduction

The taxonomic treatment of the *Capparis spinosa* Linnaeus (1753: 503) group, widespread in holarctic and tropical Regions of the Old World, is still critical in eastern Africa, Madagascar, southern Asia, Australia and Oceania. Its representatives, showing plesiomorphic features for the whole genus *Capparis* Linnaeus (1753: 503), were treated in the past or as separate species (Lamarck 1785, Jacquin 1797, Candolle 1824, Decaisne 1835, Fresenius 1836, Bojer 1843, Edgeworth 1847, Baillon 1885, Jafri 1956, St. John 1965) or at intraspecific rank within the single *C. spinosa* (Hooker & Thomson 1872, Bailey 1883, Schumann 1887, Hadj-Moustapha 1965, Maire 1965, Jacobs 1965, Pedley 1981, Hnatiuk 1990, Hewson 1982, Wheeler 1992, Fici 2003). Following a former revision of the group from the Mediterranean to Central Asia (Fici 2014), the present paper deals with the forms widespread in the Paleotropis, Australia and in a few extratropical areas of north-eastern Africa and southern Asia. It is therefore aimed at completing the taxonomic treatment of the *C. spinosa* group in its whole distribution range. The research was carried out through investigations on the collections at B, BISH, BM, E, FI, FT, G, K, MA, MEL, NSW, NT, P, PAL, PE and TI, and field researches in eastern Africa, Middle East and Australia.

Taxonomic treatment

Capparis spinosa Linnaeus (1753: 503).

Lectotype (designated by Burt & Lewis 1949): “Habitat in Europae australis arenosis, ruderatis” Herb. Clifford: 203, *Capparis* I (BM).

Prostrate, erect or pendulous shrubs, with branches unramified to multiramified, up to 4 m long; young twigs glabrous, pubescent or white-tomentose. Stipules thorny or setaceous, straight or recurved, up to 6 mm long, yellowish or orange, in some cases wanting or caducous. Leaves alternate with blade orbicular, suborbicular, ovate, obovate, lanceolate or elliptic, glabrous or pubescent, up to 8 cm long and 7 cm wide, chartaceous to coriaceous or succulent, rounded,

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