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Karyological data of two Sicilian endemic *Centaurea* species

Abstract

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Chromosome numbers are given for 2 *Centaurea* species endemic to Sicily. For both studied taxa, *Centaurea valdemonensis* and *C. virescens*, the somatic chromosome number, found on material from their *loci classici*, is diploid (2*n* = 18).

Keywords: Chromosome number, endemism, Sicily.

Introduction

The taxonomy of the genus *Centaurea* in the Mediterranean is still much debated, so much so that the treatment in collective groups of species has been proposed instead of the classic subdivision into sections (Hilpold & al. 2011, 2014). In Sicily *Centaurea* includes 37 species (Bartolucci & al. 2018; Domina & al. 2021; Domina & al. 2022). Among these the largest groups are that of *Centuarea busambarensis* Guss. and that of *C. parlatoris* Heldr. These groups have been recently reviewed (Domina & al. 2016, 2017 and 2021) and some taxa have been better taxonomically circumscribed. Recently on statistical analysis of morphometric characters a new species, *C. valdemonensis* Domina, Di Grist. & Barone, has been described in the group of *C. busambarensis* (Domina & al. 2022) and *C. virescens* (Guss.) Domina & Raimondo has been proposed at the specific rank in the group of *C. parlatoris* (Domina & al. 2021).

The aim of this study was to assess the chromosome number of the Sicilian endemics *Centaurea virescens* and *C. valdemonensis* whose value was still unknown.

2012. *Centaurea valdemonensis* Domina, Di Grist. & Barone **—** 2*n* = 2x = 18.

Si: Nebrodi Mountains, Rocche del Crasto, crevices of limestone, rocks, 38.013182° N 14.737629° E (WGS84), 1280 m a.s.l., 24 June 2022, G. *Domina & E. Di Gristina s.n.* (PAL109753, SAF100085).

Centaurea valdemonensis occurs in a single population northeast Sicily, on the Nebrodi Mountains between 1200 and 1300 m a.s.l.

It is distinguished from the most related species, *C. busambarensis* Guss. by the 1-2 pinnatisect rosette leaves, and by the shorter appendage of the median capitula bracts with shorter fimbriae.

The chromosome number of 2*n* = 18 found here from the locus classicus of the species corresponds with the one reported for the other species of the *C. busambarensis* group (Tornadore & al. 1974; Cela Renzoni & Viegi 1982; Raimondo & Bancheva 2004; Astuti & al. 2021).

2013. *Centaurea virescens* (Guss.) Domina & Raimondo **—** 2*n* = 2x = 18.

Si: Palermo Mts, Monte Occhio, N slope, rocky pastures, 38.095853°N 13.191859°E (WGS84), 500 m a.s.l., 10 Jul 2020, leg. *G. Domina & G. Barone s.n.* (PAL, SAF100105).

Centaurea virescens is a Sicilian endemic species distributed in the mountains around Palermo (Domina & al. 2021) between 500 and 1200 m a.s.l.

This taxon differs from *C. parlatoris* s. s. by a different shape of the rosette and lower cauline leaves, and a longer pappus.

The chromosome number of 2*n* = 18 found here from the locus classicus of the species corresponds with the one reported for the other species of the *C. parlatoris* group (De Santis & al. 1976; Colombo & Trapani 1989; Raimondo & Spadaro 2006, 2008).

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