

A NEW COMBINATION AND CHANGE IN RANK FOR A MOROCCAN HYBRID IN *CENTAUREA* (ASTERACEAE)

P. Pablo FERRER-GALLEGO¹, Hugo MERLE², María FERRIOL³
& Alfonso GARMENDIA³

¹Servicio de Vida Silvestre. CIEF, Generalitat Valenciana. Avda. Comarques del País Valencià 114. 46930 Quart de Poblet, Valencia. flora.cief@gva.es

²Departamento de Ecosistemas Agroforestales e ³Instituto Agroforestal Mediterráneo, Universitat Politècnica de València. Camino de Vera s/n. 46022-Valencia

ABSTRACT: A new combination and change in rank for the Moroccan hybrid described as *Centaurea* × *subdecurrens* nothosubsp. *paucispina* ["*paucispinus*?"] [= *C. aspera* subsp. *gentilii* × *C. seridis* var. *auriculata*] (Asteraceae) are proposed. **Keywords:** *Centaurea*, hybrid, new combination, new rank, nomenclature, Morocco.

RESUMEN: Una nueva combinación y cambio de rango para un híbrido marroquí en *Centaurea* (Asteraceae). Se propone una nueva combinación y cambio de rango para el híbrido marroquí descrito como *Centaurea* × *subdecurrens* nothosubsp. *paucispina* ["*paucispinus*?"] [= *C. aspera* subsp. *gentilii* × *C. seridis* var. *auriculata*] (Asteraceae). **Palabras clave:** *Centaurea*, híbrido, combinación nueva, rango nuevo, nomenclatura, Marruecos.

INTRODUCTION

The genus *Centaurea* L. (LINNAEUS, 1753: 909) (Asteraceae Bercht. & J.Presl) comprises a large number of taxa mainly occurring in the Mediterranean region and southwest Asia (HELLWIG, 2004; SUSANNA & GARCÍA-JACAS, 2007, 2009). In the work published by GARMENDIA & al. (2015) is described *C. ×subdecurrens* nothosubsp. *paucispina* M. Ferriol, H. Merle & A. Garmendia ["*paucispinus*?"], a tetraploid hybrid found in Morocco between *C. aspera* subsp. *gentilii* (Braun-Blanq. & Maire) Dobignard and *C. seridis* var. *auriculata* (Balb.) Ball.

Centaurea seridis L. (LINNAEUS, 1753: 915) is distributed from south Europe (Spain incl. Balearic Islands, Italy incl. Sicily, France, Albania and Greece) to northwest Africa (Algeria, Morocco and Tunisia) (DOS-

TÁL, 1976; INVERNÓN & DEVESA, 2013; DEVESA & al., 2015, FERRER-GALLEGO & al., 2014b, 2017). In Morocco, at least six varieties have been described: var. *auriculata* (Bald.) Ball, var. *epapposa* Caballero, var. *calva* Maire & Sauvage, var. *subferox* Pau & Font Quer, var. *pterochaulos* (Pomel) Maire, and var. *oligocentra* Maire (see BALL, 1878; CABALLERO, 1917; JAHANDIEZ & MAIRE, 1934; EMBERGER & MAIRE, 1941; GONZÁLEZ-BUENO, 1988).

Centaurea aspera L. (LINNAEUS, 1753: 916) is a complex and highly polymorphic taxon which is distributed from south and southwest Europe, northwest Africa (Morocco and Algeria) and also introduced in the Canary Islands, Australia, North America and several European countries (Belgium, Ireland, United Kingdom, Germany, Sweden, Norway, Republic of Belarus; cf. RANDALL, 2012; INVERNÓN & DEVESA,

2013). Four subspecies [or five, incl. subsp. *pseudosphaerocephala* (Shuttlew. ex Rouy) Gugler; see GREUTER, 2006] have been recognized (DEVESA & al., 2015; GARMENDIA & al., 2015; DEVESA, 2016): subsp. *aspera* is a diploid plant ($2n=2x=22$) (INVERNÓN & DEVESA, 2013; INVERNÓN & al., 2013) distributed in the Mediterranean basin, subsp. *stenophylla* (Dufour) Nyman (1879: 432) [= *C. stenophylla* Dufour (1831: 162)], a diploid plant ($2n=2x=22$) endemic to eastern-southeastern Iberian Peninsula (INVERNÓN & DEVESA, 2013; INVERNÓN & al., 2013), subsp. *scorpiurifolia* (Dufour) Nyman (1879: 432) [= *C. stenophylla* Dufour (1831: 163)], also a diploid plant ($2n=2x=22$) endemic to southeastern Iberian Peninsula and northwestern Africa (INVERNÓN & DEVESA, 2013; INVERNÓN & al., 2013), and subsp. *gentilii* (Braun-Blanquet & Maire) Dobignard (2007: 140) [= *C. gentilii* Braun-Blanquet & Maire (1922: 188)], a tetraploid plant ($2n=4x=44$) and distributed in southwestern Morocco (JAHANDIEZ & MAIRE, 1934; VOGT & OBERPRIELER, 2008; EL OUALIDI & al., 2012; GARMENDIA & al., 2015) and the Canary Islands, specifically in Gran Canaria (DOBIGNARD in GREUTER & RAAB-STRAUBE, 2007).

Centaurea aspera (especially subsp. *stenophylla*) and *C. gentilii* are very closely related taxa (GREUTER, 2006; DOBIGNARD in GREUTER & RAAB-STRAUBE, 2007; GARMENDIA & al., 2015; FERRER-GALLEGO & al., 2014a, 2018). However these two species can be distinguished morphologically, and are largely reproductively isolated (including the geographical and ecological isolation), in consequence the diploid *C. aspera* and the tetraploid *C. gentilii* represent distinct evolutionary lineages, and we therefore suggest that they should be considered distinct species (see SOLTIS & al., 2007).

Accordingly, a new nomenclatural combination and change in rank are proposed for the name *Centaurea* × *subdecurrens* nothosubsp. *paucispina*.

RESULTS

Centaurea × *paucispina* (Ferriol, Merle & Garmendia) P.P. Ferrer, Ferriol, Merle & Garmendia, **comb. & stat. nov.** [= *C. gentilii* × *C. seridis* var. *auriculata*]

Centaurea × *subdecurrens* nothosubsp. *paucispina* M. Ferriol, H. Merle & A. Garmendia, *Plant Biology* 17(3): 755 (2015) [*“paucispinus”*] [basionym] [sub *C. aspera* subsp. *gentilii* × *C. seridis* var. *auriculata*]

Holotypus: Drier (Morocco): Zaouiat el Kou-rati, near the road between Essaouira to Safi (R301), N31 42.837 W9 38.402, 63 m, semi-fixed coastal dune, inter parentes, 24-VI-2011, H. Merle, M. Ferriol & A. Garmendia s.n., VALA 9519. **Isotypus:** VAL 237288.

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