

New combinations in the *Klasea integrifolia* group (Asteraceae)

Paloma Cantó

Departamento de Biología Vegetal II, Universidad Complutense, E-28040 Madrid, Spain (e-mail: cantora@farm.ucm.es)

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The current taxonomic concept of the *Klasea integrifolia* group (Asteraceae) is explicated, and the new combinations *Klasea integrifolia* (Vahl) Greuter subsp. *monardii* (Dufour) Cantó and *Klasea algarbiensis* (Cantó) Cantó are proposed. Photographs of the type material are provided.

Key words: *Klasea*, new combinations, nomenclature, taxonomy

Since Cassini (1825: p. 173) described the genus *Klasea*, and De Candolle (1838: p. 668) granted it the rank of section within *Serratula*, there have been diverse interpretations regarding *Serratula s. lato*. Based on data on the chromosome numbers (Löve & Löve 1961, Cantó 1982a, 1986, Garcia-Jacas & Susanna 1998), pollen morphology (Wagenitz 1955, Dittrich 1977, Cantó 1987) and ETS and ITS DNA sequences (Susanna *et al.* 1995, Häffner & Hellwig 1999, Garcia-Jacas *et al.* 2001, Martins & Hellwig 2005, Martins 2006, Hidalgo *et al.* 2006), currently the most widely-accepted taxonomic notion recognizes the two genera, and thus transfers most of the *Serratula* species to *Klasea*.

One of the collective species which has posed great taxonomic and nomenclatural problems is an endemic group of the Iberian Peninsula, traditionally known as *Serratula monardii* Dufour. This name was completely clarified when the lectotype was chosen in the BORD herbarium (Cantó 1982b: p. 349, photo 350); *S.*

pinnatifida var. *glabrata* Pérez Lara is the same taxon, as established by Font Quer (1941) and subsequently confirmed by myself (Cantó 1985: p. 55). Other names assigned to *S. monardii* by other authors are *S. paueana* Iljin, described from plants from the Sierra de Guadalupe mountains in Cáceres province, and *S. abulensis* Pau (Fig. 1) from the Tiétar valley in Ávila province, near the boundary with Cáceres province. However, my study of the type specimens (K, MA) and of material from nearby areas indicated that those two names correspond to the same taxon [*S. abulensis* Pau (= *S. paueana* Iljin)]. It should be treated as a single taxon in its own right, but not as a species, as proposed by Talavera (1987), but rather as an infraspecific **taxon** within the *S. monardii* group, owing to the fact that there are transitional forms, in which both the morphological and karyological characters vary (Cantó 1985: p. 54).

Recently Greuter (2005: p. 235) demonstrated, based on the “excluded taxa” from the



Fig. 1. *Serratula abulensis* (lectotype).



Fig. 2. *Cynara integrifolia* (holotype).



Fig. 3. *Serratula monardii* var. *algarbiensis* (holotype).

monograph on *Cynara* by Wiklund (1992), that *C. integrifolia* Vahl (Fig. 2), described from the Toledo mountain area, is in fact *Serratula*

monardii. I agree that Vahl's type represents the group *Serratula monardii* s. lato.; however, it should be attributed to *S. abulensis*, and not to *S. monardii* s. stricto.

Additionally the limits of variability that I have confirmed from the description of *Serratula monardii* var. *algarbiensis* Cantó (Fig. 3) in the plants from the Algarve remains so firmly established that I propose the status of species for this taxon. I conclude that the current taxonomic concept of the group should be as follows:

Klasea integrifolia* (Vahl) Greuter subsp. *integrifolia

Willdenowia 35: 235. 2005. — *Cynara integrifolia* Vahl, Symb. Bot. 1: 68. 1790. — TYPE (Greuter 2005: p. 235): Spain. “habit. in Montib. versus Toledo, Barnades” (holotype C!).

Serratula abulensis Pau, Bol. Soc. Esp. Hist. Nat. 21: 150. 1921. — *S. pinnatifida* (Cav.) Poir. subsp. *abulensis* (Pau) Lainz, Bol. Soc. Brot. (ser. 2) 30: 44. 1956. — *Klasea abulensis* (Pau) Holub, Folia Geobot. Phytotax. 12: 305. 1977. — TYPE (Cantó 1985: 56): Spain. “Poyales del Hoyo (Ávila), 30.VI.1917. Leg. J. Cuesta” (lectotype MA133716!; isotypes MA133717!, MA133718!).

Serratula paueana Iljin, Feddes Repert. 35: 354. 1934. — *Klasea. paueana* (Iljin) Holub, Folia Geobot. Phytotax., 12: 305. 1977. — TYPE (Cantó 1985: p. 56): Spain. “Extremadura, Sierra de Guadalupe, *supra* Mirabel, 27.VI.1927, leg. Wilmott” (holotype K!; possible type MA133719!).

Klasea integrifolia* (Vahl) Greuter subsp. *monardii* (Dufour) Cantó, *comb. nova

Serratula monardii Dufour, Ann. Sci. Nat., (Paris) 23: 155. 1831. — *Jurinea monardii* (Dufour) DC., Prodr. 6: 677. 1838. — *Klasea monardii* (Dufour) Holub, Folia Geobot. Phytotax. 18: 204. 1983. — TYPE (Cantó 1982b: p. 349): Spain. “*Hab. in incultis Gaditensibus*, MM. Monard” (lectotype and isotype BORD!).

S. pinnatifida var. *glabrata* Pérez Lara, Anales. Soc. Esp. Hist. Nat. 16: 342. 1887. — *K. integrifolia* subsp. *algarbiensis* (Cantó) Greuter, Willdenowia 35: 235. 2005. — TYPE (Cantó 1985: p. 55): Spain. “*Hab. in pinetis prope Chiclana*, 19.V.1983, Pérez Lara” (lectotype and isotypes MAF14902!).

Klasea algarbiensis* (Cantó) Cantó, *comb. nova

Serratula monardii var. *algarbiensis* Cantó, Lazaroa 6: 60. 1985. — *Klasea monardii* subsp. *algarbiensis* (Cantó) Greuter & Wagenitz, Willdenowia 33: 59. 2003. — *K. integrifolia* subsp. *algarbiensis* (Cantó) Greuter, Willdenowia 35: 235. 2005. — TYPE (Cantó 1985: p. 60): Portugal. “Algarve: Faro, Monte Negro, suelo arenoso, 27.V.1981, P. Cantó & M. Romero” (holotype MAF108705!; isotype MAF108707!).

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