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A NEW COMBINATION IN BALEARIC *RUBIA* (RUBIACEAE)

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SUMMARY: Populations of *Rubia balearica* var. *caespitosa* Marcos from Cabrera (Balearic Islands) differ from the typical variety by the habit and several vegetative features, a different chromosome number (2n=44) and ploidy level (4x), and several point mutations in the ribosomal nuclear ITS sequences. Accordingly, a new combination at the specific rank is proposed for this plant as *Rubia caespitosa* (Marcos) Rosselló.

RESUMEN: Las poblaciones de *Rubia balearica* presentes en la isla de Cabrera (var. *caespitosa* Marcos) se distinguen de la variedad típica por su hábito, diversos caracteres morfológicos en hojas y tallos, un número de cromosomas (2n=44) y un nivel de ploidia (4x) diferentes, así como por diversas mutaciones nucleotídicas en las secuencias nucleares ribosomales ITS. La evaluación de tales diferencias aconseja el tratamiento de la planta de Cabrera a nivel específico como *Rubia caespitosa* (Marcos) Rosselló.

Rubia balearica (Willk.) Porta is a Balearic endemic plant first described from Mallorca (ROSSELLÓ & SÁEZ, 2001), and also distributed in Cabrera (MARCOS, 1936; PALAU 1976) and Ibiza islands (TORRES, com. pers.). Some coastal populations of *R. balearica* from Cabrera were described as a new variety (var. *caespitosa*; MARCOS, 1936) on the basis of their glaucous appearance and small habit. These discriminating features were confirmed by CARDONA (1984), who also noted that plants from var. *casepitosa* show a different pattern of prickles on stems and leaves. Later on several authors, on the basis of these differences, recognized the plants from Cabrera at the subspecific level (ROSSELLÓ & al. 1993 and 1997).

Recently, a new chromosome number (2n=44) has been reported for plants of *R. balearica* var. *caespitosa* from the type locality (CASTRO & al. 2006) that it is in conflict with the earlier counts of CARDONA (1984), reporting the hexaploid level (2n=66) for plants endemic to Cabrera island. This is intriguing since both counts have been determined from accessions originating from the same population (L'Anciola). Although it is possible that two separate cytotypes may be present, it should be pointed out that the L'Anciola population is composed by few individuals, most of which showed asexual reproduction by rhizomes. Further, populations of the related *R. balearica* var. *balearica* have uniformly shown the presence of a single cytotype (2n=66), both within and between populations

(CASTRO & ROSSELLÓ, 2005; and references therein).

Sequences from nuclear ribosomal spacers (ITS) have shown that plants from var. *balearica* and var. *caespitosa* differ by the presence of three point mutations at the ITS-1 region (ROSSELLÓ, unpublished data).

Available evidence obtained from morphology, karyology, and molecular markers suggest that var. *caespitosa* and var. *balearica* are two specific entities. Further, no intermediate specimens between the two varieties have been recorded. A new nomenclatural combination is here validated:

Rubia caespitosa (Font Quer & Marcos) Rosselló, comb. nov.

≡ *Rubia angustifolia* var. caespitosa Font Quer & Marcos in Cavanillesia 8: 46 (1936)

≡ *R. angustifolia* subsp. *caespitosa* (Font Quer & Marcos) Rosselló, Mus, N. Torres & Gradaille in Candollea 48: 599 (1993) ≡ *R. angustifolia* subsp. *caespitosa* (Font Quer & Marcos) Romo, Fl. Silvestr. Baleares: 284 (1994), comb. superfl.

≡ *R. balearica* subsp. *caespitosa* (Font Quer & Marcos) Rosselló, L. Sáez & Mus in Anales Jard. Bot. Madrid 55: 479 (1997)

Ind. loc.: "In saxosis rupestribusque calcareis loco L'Anciola, in Insula Capraria, d. 10 junii, A. MARCOS legit"

Type material: Cabrera: Anciola i Avaradero d'es Cap Roig, 10-VI-1939 [1936], A. Marcos (BC 631874). Lectotype designated by ROSSELLÓ & SÁEZ (2001).

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