

RHAMNUS X BERMEJOI*, A NEW WILD HYBRID BETWEEN *R. ALATERNUS* AND *R. LUDOVICI-SALVATORIS

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SUMMARY: *Rhamnus x bermejoi*, a new wild hybrid between the Mediterranean *R. alaternus* L. and the Balearic endemic *R. ludovici-salvatoris* Chodat is described from Minorca (Balearic Islands). **Key words:** *Rhamnus*. Balearic Islands. Spain.

RESUMEN: Se describe un nuevo híbrido de Menorca (Islas Baleares), *Rhamnus x bermejoi*, procedente del cruce entre *R. alaternus* L. y el endemismo balear *R. ludovici-salvatoris* Chodat. **Palabras clave:** *Rhamnus*. Islas Baleares.

Rhamnus alaternus L. and *R. ludovici-salvatoris* Chodat are two species from section *Alaternus* (Miller) DC. growing in the Balearic Islands. The former is a widespread Mediterranean species whereas the later is an endemic shrub restricted to the eastern Balearic Islands (ALOMAR & al., 1997). Despite earlier claims (KNO-CHE, 1921), the two species are closely related on morphological grounds but differs by the distinct leaf anatomy, domatia structure, leaf shape and denticulation, and blade hairiness (ROSSELLÓ & MUS, 1988).

The putative hybrid between both species (*R. x jacobi-salvadori* O. Bolòs & Vigo) was described from a single herbarium specimen collected at Mallorca (BOLÒS & VIGO, 1974). However, the ana-

lysis of the type specimen from a morphological, anatomical and phytochemical approach clearly revealed that it was not intermediate between its presumed parental species (ROSSELLÓ & MUS, 1988). In fact, the holotype could not be distinguished from *R. alaternus*, and it was considered as a mere variation of this species (ROSSELLÓ & MUS, 1988).

Intermediate individuals between *R. ludovici-salvatoris* and *R. alaternus* have been claimed to be present in Minorca, at the single locality (Tirant) where the two species are present (LLORENS, 1979). However, the herbarium specimens supporting these views were not available for study to ROSSELLÓ & MUS (1988), and it was concluded that hybridization pro-

cesses between both species should be viewed with great caution.

During field work devoted to evaluate the conservation status of the single, declining population of *R. ludovici-salvatoris* in Tirant (FRAGA & BERMEJO, 2008) a high number of individual plants showing mixed diagnostic features between *R. ludovici-salvatoris* and *R. alaternus* were found. Molecular data (ribosomal nuclear ITS sequences) supported the view that a complex pattern of hybridization between both species occurred in Minorca.

The putative F₁ hybrid between both species (showing additive ITS sequences diagnostic of each progenitor) is here described as *R. x bermejo*. It is named after Andrés Bermejo, a Minorcan botanist, for his outstanding contributions to the knowledge of the Balearic flora.

Rhamnus x bermejo P. Fraga & Rosselló, nothospec. nov. (*R. alaternus* x *R. ludovici-salvatoris*)

DIAGNOSIS: Frutex ad 1.5 m altus, folia similis *R. ludovici-salvatoris* sed laminae foliorum glabra, dentibus marginae oblique et perpendicularis, apex subobtusum et cum conspicuuus dentibus ad apicem, et fructi glabri differt.

HOLOTYPE: Minorca: Tirant, coastal scrub, 23-08-2008, P. Fraga (VAL 189259).

The hybrid individual (Figure 1) is somewhat intermediate between both parents concerning height and branching patterns, and shows a noticeable variation in leaf size and, to a lesser extent, shape. The leaves are elliptical and resemble those of *R. ludovici-salvatoris*, but are

glabrous and the marginal denticulation shows a mixture of oblique and perpendicular teeth. The apex is sub-obtuse and the apical tooth is conspicuous.

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Figure 1. Habit and leaf features of *R. x bermejoi* (Balearic Islands, Minorca, Tirant)