

**NOTHOBARTSIA SPICATA (RAMOND) BOLLIGER & MOLAU  
(SCROPHULARIACEAE): A PYRENEAN AND CANTABRIAN MOUNTAIN  
ENDEMIC OF POORLY KNOWN DISTRIBUTION**

by

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**Resumen**

PEDROL, J. & C. AEDO (1996). *Nothobartsia spicata* (Ramond) Bolliger & Molau (Scrophulariaceae): un endemismo pirenaico-cantábrico de distribución mal conocida. *Anales Jard. Bot. Madrid* 54: 308-311 (en inglés).

Se propone un mapa de distribución de *Nothobartsia spicata* (Ramond) Bolliger & Molau, con las localidades de la Cordillera Cantábrica y los Pirineos (Francia y España), sobre la base del material de herbario y de referencias bibliográficas. Se hacen algunas precisiones sobre su nomenclatura, hábitat y morfología.

Palabras clave: *Spermatophyta*, *Scrophulariaceae*, *Nothobartsia*, *Bartsia*, Península Ibérica, distribución.

**Abstract**

PEDROL, J. & C. AEDO (1996). *Nothobartsia spicata* (Ramond) Bolliger & Molau (Scrophulariaceae): a Pyrenean and Cantabrian Mountain endemic of poorly known distribution. *Anales Jard. Bot. Madrid* 54: 308-311.

After examining herbarium material and bibliographic references, a whole distribution map of *Nothobartsia spicata* (Ramond) Bolliger & Molau is provided, including many localities from the Cantabrian Mountains and the Pyrenees (France and Spain). Furthermore, we comment on nomenclature, habitat and morphological features of this species.

Key words: *Spermatophyta*, *Scrophulariaceae*, *Nothobartsia*, *Bartsia*, Iberian Peninsula, plant distribution.

***Nothobartsia spicata*** (Ramond) Bolliger & Molau in *Pl. Syst. Evol.* 179: 64 (1992)

***Bartsia spicata*** Ramond in *Bull. Sci. Soc. Philom.* Paris 2: 141, pl. 10 fig. 4 (1800) [basió.]

***Alicosta spicata*** (Ramond) Dulac, *Fl. Hautes-Pyrénées*: 381 (1867)

***Bartsia fagonii*** Lapeyr., *Hist. Pl. Pyrénées*: 345 (1813), nom. illeg.

*Ind. loc.*: "Je n'ai encore trouvé cette espèce qu'à deux endroits: savoir, sur le Lhéris au voisinage de Bagnères; et près de Luz, sur les pentes des montagnes. Elle fleurit au milieu de l'été".

*Type*: P, lectotype (cf. BOLLIGER & MOLAU, 1992: 64).

*lc.*: BOLLIGER & MOLAU, 1992; fig. 1b, fig. 2c,f,h,k.

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*Bartsia spicata* was described by Ramond from plants collected in the French Pyrenees. MOLAU (1990: 90) excluded from *Bartsia* some species traditionally treated in this genus, including *Bartsia spicata*. Recently, BOLLIGER & MOLAU (1992: 60) proposed the new genus *Nothobartsia*, with two species traditionally included in *Bartsia*: *B. spicata* and *B. aspera*. The treatment of this new genus, according to the data provided by these authors, seems to be consistent in the context of modern circumscription of the subtribe *Euphrasinae* G. Don.

In the latter work, however, the distribution area of *N. spicata* was not well studied. From BOLLIGER & MOLAU's (1992: 64) distribution map, it appears that the plant has not been found in Spain. However, basic works such as *Flora Europaea* mention it as present in: "C. Pyrenees, Cordillera Cantábrica. Ga Hs" (cf. TUTIN, 1972: 269). Perhaps the revision of some Iberian herbaria would solve this chorological inconsistency. According to the herbarium material of BC and MA and the floristic literature concerning this species, the plant is found in the Cantabric mountains and on the southern face of the Pyrenees.

In the Pyrenees, *N. spicata* occurs in the montane zone (800-1800 m) on the North face, between the Ossau's valley—department of Pyrénées Atlantiques— and the Ariège valley—department of Ariège—. The latter represents the western limit of the species distribution area, as with other Atlantic species such as *Erica vagans*, *Allium ericetorum*, *Carex binervis* or *Carex laevigata* (cf. DUPIAS, 1989: 531). According to DUPONT (1962: 132) *N. spicata* is a montane euatlantic plant.

The only information about its presence in the South of the Pyrenees is based on a collection by Custodio del Campo (MA 114084)—without date, probably at the end of the 19th century— from Trigoniero (Huesca province). On the other hand, the plants of exsiccata *Flora Iberica Selecta*, Cent. I, n.º 85, from near Castanesa (Central Pyrenees), distributed as *B. spicata*, are *B. alpina* (MA 114091). In the latest botanical work on this zone (CARRERAS & *al.*, 1993), there are no references to *N. spicata*.

The citations of *N. spicata* in the Cantabrian mountains are numerous. The first mention of the presence of this plant here is that of VICIOSO (1946: 74), who collected it in La Hermida canyon. It had already been collected in this same locality by R. V. de Litardière (LAFNZ, 1961: 31) at the beginning of the century. A duplicate was found in Gandoger's herbarium who identified it as *Odontites virgata* Lange (cf. GANDOGGER, 1917: 267); this mistake was solved by LAFNZ (1961: 31). More problematic is the citation by GUINEA (1953: 365): "Algorta (H. MA)" which has no endorsement material in MA, at least in the genus *Bartsia* and similar. ASEGINOLAZA & *al.* (1985: 692) comment: "No conocemos en la zona esta planta y nos sorprende mucho su cita".

Most Cantabrian localities are in the northern part of the Picos de Europa (Asturias and Cantabria); only the most westerly locality (pr. Ribadesella, AEDO & *al.*, 1990: 107) is separated by several kilometers from this principal area. The plant occurs in bushes over calcareous soils, generally wet, and always at elevations lower than 400 m.

The difference of habitats and the separation between Cantabrian and Pyrenean populations—more than 350 km— persuade us to carefully examine plants from both origins. The Pyrenaean plants are more vigorous and the flowers are slightly higher. In Pyrenaean plants, the corolla length is 14-20 mm, whilst in Cantabrian plants it is 11-16.5 mm; most samples have the overlapping length, between 14-17 mm. Thus, these small differences do not permit distinction of these populations, even at subspecific rank. On the other hand, we can modify the description of BOLLIGER & MOLAU (1992: 64) in the sense that the inflorescences are generally longer than 5 cm and they can reach 9 cm.

We list the material examined and the bibliographic localities on which the map of figure 1 is based.

FRANCE. ARIÈGE: Rocher au dessus du Col de Massat, versant nord du Pic de Girantes, 42°48'N-1°24'E, 1600 m (GRUBER, 1976: 69ss; GRUBER, 1977: 100s—sub mont Ceint); Aulus, pic de Montbeas, 42°49'N-1°20'E, 1600 m, 18-VIII-1903, *H. Coste*, MA 114087. HAUTE-GARONNE: Versant nord du Pic de l'Escalette, 42°55'N-

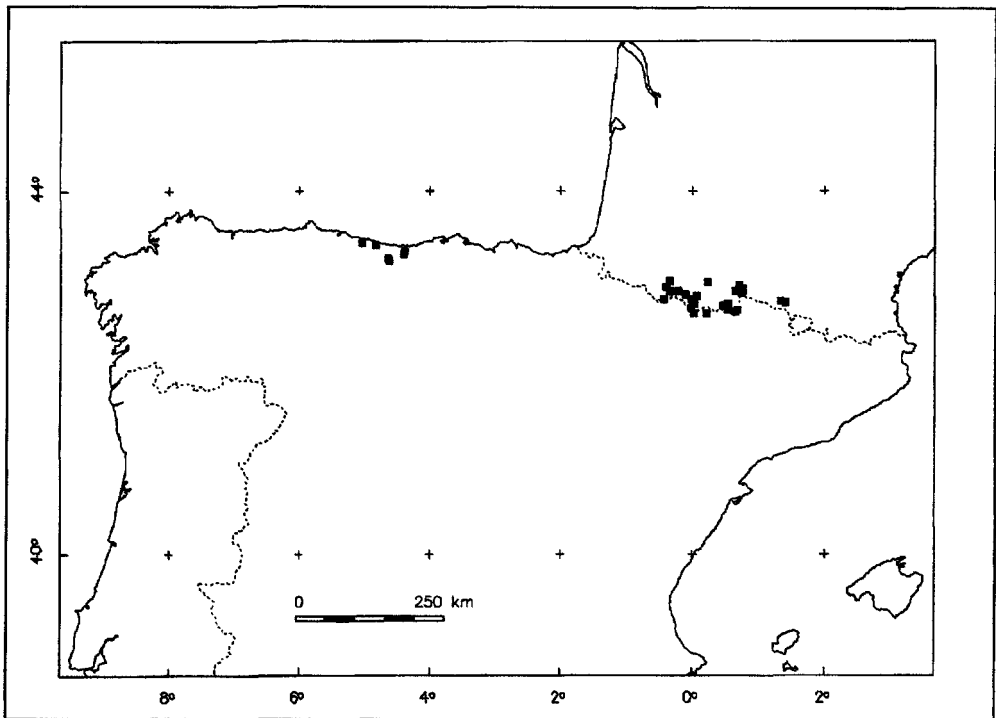


Fig. 1.—Distribution of *Nothobartsia spicata*.

0°45'E, 1750 m, (GRUBER, 1976: 69ss); Cagire, 42°57'N-0°45'E (PHILIPPE, 1859: 118); Pales-de-Bouc, 42°54'N-0°44'E (PHILIPPE, 1859: 118); Pic de Gard, 42°59'N-0°42'E (PHILIPPE, 1859: 118); Saint-Béat, 42°55'N-0°42'E (BENTHAM, 1826: 63); Saint-Béat à la montagne de Rié, (GRENIER, 1853: 610); montagnes de Rié, (PHILIPPE, 1859: 118); Marbrière near St. Béat (BOLLIGER & MOLAU, 1992: 65); port de la Fraîche, 42°43'N-0°41'E (ZETTERSTEDT, 1857: 204); au pied du port de Venasque, 42°42'N-0°39'E (ZETTERSTEDT, 1857: 204); port d'Estauouats, 42°42'N-0°39'E (ZETTERSTEDT, 1857: 204); Marignac, 42°55'N-0°38'E (BOLLIGER & MOLAU, 1992: 65); pic de Céciré, 42°47'N-0°32'E (ZETTERSTEDT, 1857: 204); Crabioules, 42°43'N-0°32'E (ZETTERSTEDT, 1857: 204); lac d'Espingo, 42°46'N-0°31'E (PHILIPPE, 1859: 118); Médassoles, 42°46'N-0°30'E (ZETTERSTEDT, 1857: 204); Esquierry, 42°46'N-0°28'E (ZETTERSTEDT, 1857: 204). HAUTES-PYRÉNÉES: Au voisinage de Bagnères, 43°1'N-0°14'E (RAMOND 1800: 141); l'Héris, fond de la vallée d'Aste, 43°1'N-0°14'E (GRENIER, 1853: 610); Pic d'Ayré, 42°52'N-0°04'E (ZETTERSTEDT, 1857: 204); Gèdre, Pyr., 42°47'N-0°02'E, 1200 m, 25-VIII-1876, MA 114085; *ibid.*, VII-1887, *Bordère?*, BC 659812; *ibid.*, 24-VIII-1876, F. González, BC 654093; *ibid.*, VII-1872, *Bordère*, BC 45595; *ibid.*, 25-VIII-1876, F. González, BC 45597; Gèdre, pâturages de Mosca, terrain schisteux, 1200 m, 3 & 20-VIII-1873, *Bordère*, BC 615472; Marboré, 42°41'N-0°1'E (ZETTERSTEDT, 1857: 204); près Luz,

42°50'N-0°1'W (RAMOND 1800: 141); Gavarnie, 42°44'N-0°1'W, VII-1860, *Bordère*, Herb. Lugdunense M. Gandoger n.° 1302, MA 114086; Cauterets, 42°53'N-0°6'W (GRENIER, 1853: 610); Pic du Midi d'Arrens, à Deville, 42°55'N-0°13'W (BUBANI, 1897: 276). PYRÉNÉES ATLANTIQUES: Pic d'Amoulat, Oloron, Olmédi, 42°55'N-0°20'W, P. *Montserrat*, in litt.; Col de Jaut, Castet, vallée d'Ossau, 43°2'N-0°20'W, P. *Montserrat*, in litt.; les Eaux Bonnes à Marcoth, 42°58'N-0°23'W (BUBANI, 1897: 276); lapiaz cársstico "Males Ores", vallée d'Ossau, F-64-Castet, 42°50'N-0°26'W, 1400 m, 4-VIII-1980, *Vivant*, P. *Montserrat* & L. *Villar*, MA 299639, JACA 3113/80.

SPAIN. HUESCA: En el bosque de Trigoniero (Bielsa), 42°41'N-0°13'E, VII, *Campo*, MA 114084. CANTABRIA: Pr. San Vicente de la Barquera, 43°21'N-4°23'W, 5 m, *Aedo*, herb. *Aedo*; Labarces, 43°19'N-4°24'W, DUPONT (1955: 437); desfiladero de La Hermida, 43°15'N-4°37'W, 30-VIII-1944, M. *Martín* & C. *Vicioso*, MA 114083; desfiladero de Urdón, sierra de Beges, 43°16'N-4°38'W, 14-VII-1976, M. *Ladero* & G. *López*, MA 201256; *ibid.* 14-VII-1976, B. *Casaseca*, J. *Fernández Díez*, E. *Rico* & J. *Sánchez*, MA 204421. ASTURIAS: Celorio (Llanes), in rupestribus calcareis ad 300 m, 43°25'N-4°49'W, 8-VIII-1952, *Lainz*, MA 387509 (cf. LAÍNZ, 1959: 686); pr. Toriello (Ribadesella), 43°26'N-5°2'W, 100 m, *Aedo* & *García Manteca*, herb. *Aedo* (cf. AEDO & *al.*, 1990: 107).

*Doubtful or unlocated records*

Rencluse—probably la Renclusa, pr. Benasque, Huesca, 42°40'N-0°39'E—: erroneous record according to P. Montserrat, in litt. (ZETTERSTEDT, 1857: 204). HAUTES-PYRÉNÉES: Près le pic d'Endretlis, Estibas de Luz (PHILIPPE, 1859: 118); Mont Sacon (BUBANI, 1897: 276). HAUTE-GARONNE: Bords de l'étang d'Escoubous (PHILIPPE, 1859: 118).

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