



Bituminaria basaltica (Fabaceae), a new species from Italy

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Abstract

Bituminaria basaltica is described and illustrated from Filicudi, an islet of the Aeolian Archipelago (Sicily, Italy). This new species, belonging to a small genus of Fabaceae occurring in the Mediterranean region and the Canary Islands, is morphologically distinct from the other taxa in the following features: leaf shape and size, inflorescence size, petal colour, size and shape of flowers, pods and seeds. Its relationships with the known species of *Bituminaria* are examined and a key to the genus is provided.

Key words: Aeolian Archipelago, endemic flora, fodder grass, Mediterranean Basin, taxonomy

Introduction

Bituminaria Heist. ex Fabricius (1759: 165) is a small genus of Fabaceae occurring in the Mediterranean (including Black Sea territories) and Canary Islands, currently including four species (Stirton 1981a, 1981b, Boulos 1999, Greuter *et al.* 1989). *Bituminaria* was restored by Stirton (1981a), to which he ascribed only two species, previously included in *Psoralea* Linnaeus (1753: 762), *P. bituminosa* Linnaeus (1753: 763) [= *Bituminaria bituminosa* (L.) Stirton (1981a: 318)] and *P. acaulis* Steven ex Bieberstein (1808: 206) [= *Bituminaria acaulis* (Steven ex M.Bieb.) Stirton (1981a: 318)]. Afterwards, Greuter (1986) added two more species of *Psoralea*, *P. flaccida* Nábělek (1923: 74) and *P. morisiana* Pignatti & Metlesics (1976: 53) to *Bituminaria*. *Bituminaria bituminosa* shows a certain variability mainly in the shape and size of leaves, flowers, pods, as well as the habit and corolla colour (Zohary 1972, Méndez *et al.* 1991, Jahn & Schönfelder 1995). Such morphological features, that are rather variable within the same population, led to the description of several taxa all referring to this species, e.g. *Psoralea palaestina* Gouan (1773: 51), *P. plumosa* Reichenbach (1832: 869), *P. pontica* Khokhrjakov (1997: 52), *P. bituminosa* subsp. *pontica* (A.P. Khokhr.) Zernov (2000: 70), *P. bituminosa* var. *brachycarpa* Feldmann in Zohary (1972: 455), *P. bituminosa* var. *hulensis* Feldmann in Zohary (1972: 455) and *P. bituminosa* var. *prostrata* Zohary, (1972: 455), *Bituminaria bituminosa* var. *palaestina* (Gouan) R.L. Jahn in Jahn & Schönfelder (1995: 28), *B. bituminosa* var. *albomarginata* Méndez *et al.* (1991: 160) and *B. bituminosa* var. *crassiuscula* Méndez *et al.* (1991: 162). In particular, those varieties described by Zohary (1972) and Méndez *et al.* (1991) seem to be taxonomically valid, and therefore they could be considered as subspecies of *B. bituminosa*. However, a proper taxonomic treatment at infra-specific level of this species will require an in-depth analyses in order to verify whether the diacritical characters used for the differentiation of the aforesaid taxa are an expression of the phenotype or are genetically fixed.

During a field trip in the Aeolian Islands, an archipelago of seven volcanic islets off Milazzo (north-eastern Sicily), a peculiar plant, whose pods clearly denoted its attribution to the genus *Bituminaria*, was found at Filicudi. This plant occurs quite frequently in this island, which is the fifth-largest one of the