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***Genista madoniensis* (Fabaceae), a new species from Sicily**

**Abstract**

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*Genista madoniensis*, a new shrub species in the northern slope of Madonie Mts (C.-N. Sicily), is described. The new taxon, occurring in the *Quercus suber* woods, is close to *Genista cupanii*, endemic to the same mountains, and *G. triacanthos* Brot. occurring also in the cork woods in the southern Iberian Peninsula (Spain and Portugal) and in N. Africa (Morocco and Algeria).

According to Gibbs (1968), Pignatti (1982) and Greuter & al. (1989), in Sicily two endemic species belonging to *Genista* L. sect. *Voglera* Gaertn. occur. These are namely *G. aristata* C. Presl, occurring in the Madonie and Nebrodi Mts (N. Sicily), and *G. cupanii* Guss. closely localized in the montane part of Madonie on quartzarenitic soils.

A new species, also endemic to the northern slope of Madonie Mts, is now to be added to the former ones.

A population of this new species had been found during phytocoenotic surveys in the local cork woods and formerly referred to *Genista cupanii* by Schicchi & al. (1995). Subsequently it appeared quite distinct from both morphological and ecological point of view, as results from comparison with *G. cupanii* itself and with other related taxa, such as *G. triacanthos* Brot. occurring in N. Africa and S. Iberian Peninsula (Valdés & al. 1987, Talavera 1999). Also with regard to the distribution, the new taxon is distinct from *G. cupanii*; besides, it shows both biologically and ecologically homogeneous characters. Therefore it can taxonomically be described and named as *Genista madoniensis*.

***Genista madoniensis* Raimondo sp. nova** (Fig. 1)

*Typus* — Madonie Mts, locality Ficaricchia between Gratteri and Lascari (Palermo), 13°57'50''E, 37°58'45''N, cork woods on siliceous soils, 300 m a.s.l., 24 Apr 1996, Raimondo & Certa (holotypus PAL; isotypi B, FI, G, NAP, PAL).

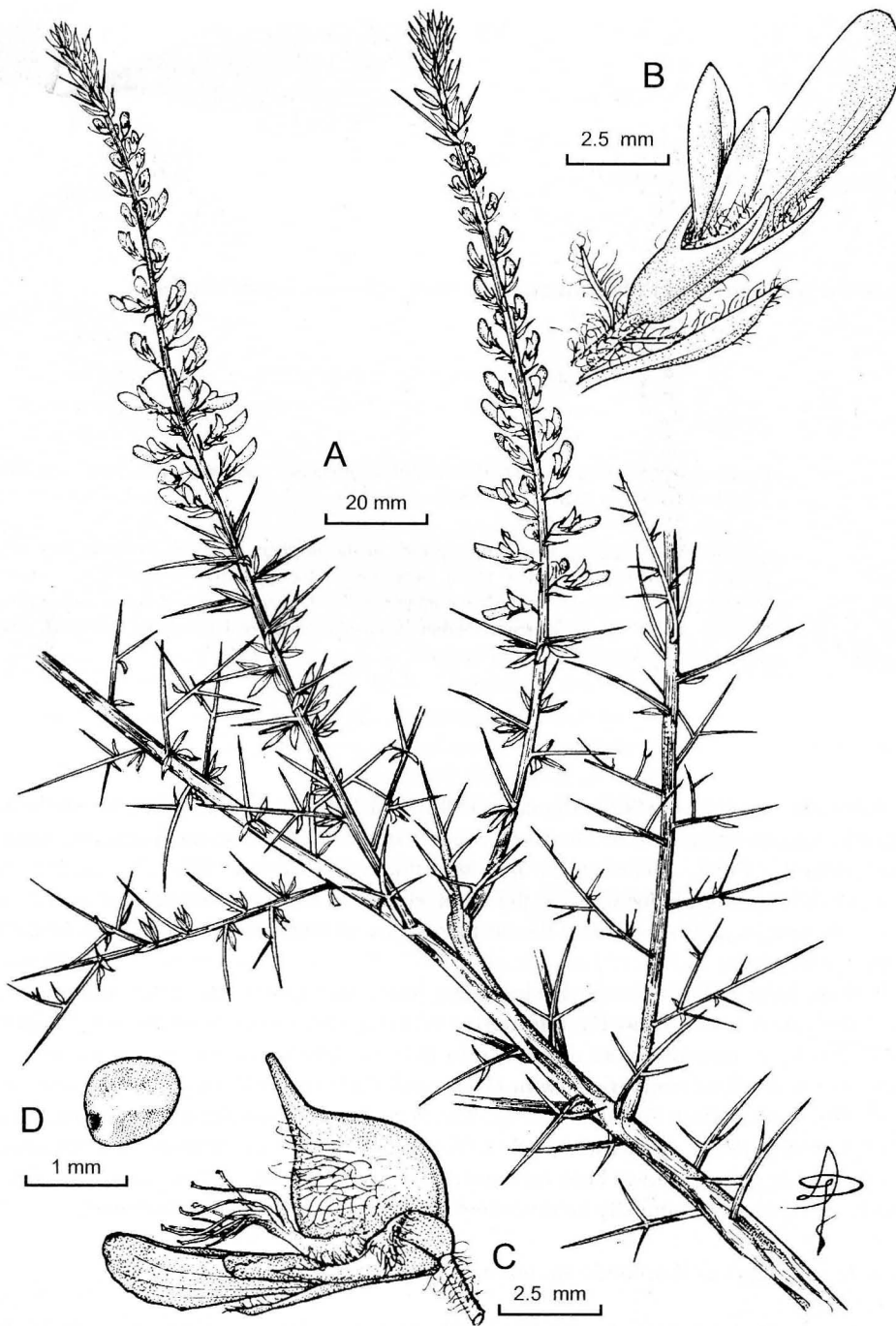


Fig. 1. *Genista madoniensis* Raimondo sp. nov. A, part of the habit; B, flower; C, fruit and rests of the flower; D, seed.



Figs. 2-3. Particular of the terminal raceme of *Genista madoniensis* (left); fruiting shrub of *G. madoniensis* in the underbrush of *Quercus suber* wood in the *locus classicus* (right).

Frutex erectus plus quam 150 cm altus. Caulis striatus; spinae axillares, inferiores ternatae plus quam 2.5 cm longae, apicales simplices 2-2.5 cm. Folia ternata; foliola linearia-lanceolata 5-9 × 1-1.5 mm longa et lata; flores (10-)20-30(-40) in racemo dispositi (Fig. 2); bracteae oblanceolatae, circa 5 mm longae; pedicelli pubescentes, 2-2.5 mm longi; bracteolae calicis binae, lineares-lanceolatae, 1.5 mm longae; calyx sericeus 5-6 mm longus; dentes lesiniformes 2-4 mm longi; corolla luteo-viridis; vexillum glabrum, triangulare, 6 mm longum incluso ungue 2 mm; alae viridulae, glabrae, 3-4 mm longae; petala carinae 10-12 mm longa, marginibus ciliatis. Legumen monospermum, ovatum, acuminatum.

Floret aprili-majo; fructificat majo-junio.

Recedit a *Genista cupanii* statura majore erecta, spinis caulorum ternatis, racemis apicibus inermibus, elongatis, duplo floribundis, pilis sericeis longioribus, efflorescentia et ecologia.

Recedit a *G. triacanthos*, statura majore, spinis caulorum majoribus, majore magnitudine florum, calice pubescente, racemis elongatis magis floribundis.

*Ethimology* — The epithet *madoniensis* refers to the geographical name of the mountain range where the new species has been found. Until the second half of XIX century this area was alternatively called Nebrodi or Madonie. At present the name Nebrodi is reserved for the range in the Messina province East to Madonie Mts.

*Description* — Shrub more than 150 high. Stem striate; spines axillary, ternate and more than 2.5 cm long in the lower branches, simple and up to 2.5 cm in the upper branchlets. Leaves trifoliate; leaflets linear to lanceolate 5-9 × 1-1.5 mm. Racemes elongate bearing (10-)20-30(-40) flowers (Fig. 2); bracts oblanceolate about 5 mm long; pedicels pubescent 2-2.5 mm; two calyx bracteoles linear lanceolate 1.5 mm long; calyx sericeous 5-6 mm long including the awl-shaped teeth which are 2, 3, 4 mm long the lateral pairs and the apical ones, respectively; petals yellow-greenish; vexil glabrous, triangular, 6 mm long including the 2 mm long claw; wings greenish, glabrous, 3-4 mm long; keel 10-12 mm long, each petal with margins ciliate along the commissure. Legume one-seeded, ovate-acuminate.

It differs from *Genista cupanii* for its bigger size and erect shrub habit, ternate spines, racemes elongate and lacking the terminal spine, number of flowers about double, hairs sericeous and longer, flowering-time and ecology.

It differs from *G. triacanthos* for its bigger size, bigger spines, size of flowers, calyx pubescent, racemes elongate with more flowers.

*Distribution and ecology* — C.-N. Sicily in a limited area along the N.-W. slopes of Madonie Mts among Lascari, Gratteri and Collesano municipalities. *Genista madoniensis* occurs in the underbrush of *Quercus suber* L. formation on siliceous soils between 200 and 600 m a.s.l. (Fig. 3). Within this phytocoenosis it plays a remarkable role together with *Erica arborea* L., *Cytisus villosus* Poir., *Calicotome infesta* (C. Presl) Guss., *Arbutus unedo* L., *Asparagus acutifolius* L., *Cistus salvifolius* L., *C. monspeliensis* L., *C. creticus* L., *Smilax aspera* L., *Ruscus aculeatus* L., *Limodorum abortivum* (L.) Swartz, etc.

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#### References

- Talavera, S. 1999: *Genista* L. — Pp. 45-119 in: Talavera, S., Aedo, C., Castroviejo, S., Romero Zarco, C., Sáez, L., Salgueiro, F. J., & Velayos, M. (ed.), *Flora iberica* 7(1). — Madrid.
- Gibbs, P. E. 1968: *Genista* L. — Pp. 94-100 in: Tutin, T. G., Heywood, V. H., Burges, N. A., Moore, D. M., Valentine, D. H., Walters, S. M. & Webb, D. A. (ed.), *Flora Europaea* 2. — Cambridge.
- Greuter, W., Burdet, H. M. & Long, G. 1989: *Med-Checklist* 4. — Berlin, Genève.
- Pignatti, S. 1982: *Flora d'Italia* 1. — Bologna.
- Schicchi, R., Venturella, G. & Raimondo, F. M. 1995: The role of *Genista cupanii* Guss. in the characterization of the cork woods within the Madonie Mountains (Sicily). — *Giorn. Bot. Ital.* 129(2): 279.
- Valdés, B., Talavera, S. & Fernández-Galiano, E. 1987: *Flora Vasculare de Andalucía Occidental* 2. — Barcelona.

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