

## Notas do Herbário Florestal do INRB (LISFA): Fasc. XXXII

¶1. *Novarum Flora Lusitana Commentarii*  
In memoriam A.R. Pinto da Silva  
(1912 - 1992)

### A new combination in *Lotus glaucus* complex (Fabaceae, Loteae) from Porto Santo (Madeira Archipelago)

*Lotus glaucus* Aiton (Fabaceae, Loteae, section *Pedrosia*) from Madeira Island was the first described species of the *Lotus glaucus* complex (AITON, 1789). LOWE (1856) proposed a new genus, *Pedrosia* Lowe, to include the Macaronesian *Lotus* species with a distinct toothed style. In the same publication Lowe described a new species for Porto Santo Island, *Pedrosia florida* Lowe, that he distinguishes from *P. glauca* (Aiton) Lowe (*L. glaucus*), as follows:

"in its more silky, hoary foliage, lanceolate acute leaflets, larger, more numerous flowers, often four or five in a head, and larger, thicker, straighter, and even, instead of strangulato-torulose, pods".

Latter LOWE (1862, p.178), although recognizing *P. florida* as a distinct taxon, discusses its taxonomic status, clearly dismissing a species rank.

MASFERRER (1881) transferred *P. florida* to the genus *Lotus* as *L. floridus* and BRAND (1898) combined *L. floridus* as a variety of *L. glaucus*.

MENEZES (1914) considered *P. florida* within *Lotus glaucus* simply as a form.

The subsequent Madeira flora authors do not recognize any taxonomical rank for *P. florida* (COSTA, 1946, 1948; PICKERING, 1962; HANSEN, 1969; HANSEN & SUNDING, 1985, 1993; VIEIRA, 1992; TURLAND, 1994; JARDIM & MENEZES DE SEQUEIRA, 2008).

Recently SANDRAL *et al.* (2006) studied the taxonomy of *Lotus* section *Pedrosia* and they also do not recognize taxonomically *P. floridus* (*L. floridus*), although they have studied some Porto Santo specimens they include *P. florida* as a synonymy of *Lotus glaucus* and also typified *Pedrosia florida* and *P. florida* var. *sulphurea* Lowe.

Traditionally *Lotus glaucus* was also recognized for all Canary Islands (e.g. HANSEN, 1985), but SANDRAL *et al.* (2006) refer to *L. glaucus* as an endemic species for the Madeira Archipelago. Distinguishing *L. glaucus* subsp. *glaucus* for Madeira, Porto Santo and Desertas and *L. glaucus* subsp. *salvagensis* (R.P.Murry) Sandral & D.D.Sokoloff. for Salvage Islands. Some specimens from Fuerteventura (Canary Islands) are considered by the same authors as uncertain, although others are included in a different species.

The examination of collected material and herbarium specimens (MADJ, MADS, MADM, LISU and MA) and field observations in Porto Santo, Madeira and Desertas show that the Porto Santo plants of *Lotus glaucus* agree with the description given by Lowe for *Pedrosia florida* (Figure 1). Table 1 summarizes the diagnostic characters and compares them with *Lotus glaucus* subsp. *glaucus* (Figure 2). The morphological resemblance of *L. glaucus* with *L. floridus* and the restricted distribution of the later to the Porto Santo Island clearly suggest that a

subspecific rank should be applied, accordingly a new status is proposed for *Lotus floridus*:

*Lotus glaucus* Aiton subsp. *floridus* (Lowe) R. Jardim & M. Seq., *comb. nov.*  
 ≡ *Pedrosia florida* Lowe in Hooker's J. Bot.

Kew Gard. Misc. 8: 294 (1856) (bas.)  
 ≡ *Lotus floridus* (Lowe) Masf. in Anales Soc. Esp. Hist. Nat. 10:160. (1881)  
 ≡ *Lotus glaucus* Aiton var. *floridus* (Lowe) Brand in Bot. Jahrb. Syst. 25: 200 (1898)  
 = *Pedrosia florida* Lowe var. *sulphurea* Lowe, Man. Fl. Madeira 1: 178 (1862)

**Table 1** - Diagnostic characters of *Lotus glaucus* subsp. *glaucus* versus *L. glaucus* subsp. *floridus*

|            | <i>Lotus glaucus</i> subsp. <i>glaucus</i>   | <i>Lotus glaucus</i> subsp. <i>floridus</i>                    |
|------------|--|--|
| Indumentum | Greyish pubescent                            | Densely whitish pubescent or silky                             |
| Leaflets   | Obovate, spatulate, obtuse                   | Elliptic-lanceolate or obovate-lanceolate, acute               |
| Umbels     | 1-3(4) flowers                               | 1-5(6) flowers   |
| Calyx      | 5,0-7,35 mm                                  | 6,90-8,60 mm   |
| Fruit      | 10-28 mm, usually with several constrictions | 10-49 mm, usually cylindrical or with just a few constrictions |



**Figure 1** - *Lotus glaucus* subsp. *floridus* (A, flowers and leaves; B, habit)



**Figure 2** - *Lotus glaucus* subsp. *glaucus* (Flowers, fruits, stems and leaves)

The original description of *Pedrosia florida* is here transcribed:

"*P. fruticulosa sericeo-albicans foliolosa, foliolis confertis parvulis lanceolatis v. obovato-*

*lanceolatis acutis stipulisque conformibus omnino sessilibus, umbellis 2-5-floris, leguminibus rectis cylindricis glabris.*

*Var. a; fl. laete aurantiacis.*

*Var. f; fl. pallide sulphureo-stramineis.*  
HAB. In Portu Sancto".

Although some specimens with flower color corresponding to the description given by Lowe for *Pedrosia florida* Lowe var. *sulphurea* were studied, we agree with SANDRAL *et al.* (2006) in not recognizing them at any taxonomical rank.

Further studies should contribute to clarify the taxonomic relations between taxa included in the *Lotus glaucus* complex in Macaronesia.

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**Roberto Jardim**, Centro de Ciências da Vida, Universidade da Madeira, 9000 - 390 Funchal, Portugal, [rjardim@netmadeira.com](mailto:rjardim@netmadeira.com); **Miguel Menezes de Sequeira**, Centro de Ciências da Vida, Universidade da Madeira, 9000 - 390 Funchal, Portugal, [sequeira@uma.pt](mailto:sequeira@uma.pt)