

OBSERVATIONS ON A PROPOSAL TO CONSERVE THE NAME *EUPHORBIA OBTUSIFOLIA* POIRET.

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The Proposal 1349 by MOLERO & ROVIRA (Taxon 47: 469) would appear to be unnecessary and based on a rather optimistic interpretation of the type specimen of *Euphorbia obtusifolia* Poiret. It, therefore, only adds to the confusion surrounding the name *E. obtusifolia*.

The name *Euphorbia obtusifolia* Poiret was published by Poiret (POIRET IN LAMARCK, 1812) who recognized that *Euphorbia mauritanica sensu* Lamarck was a new species distinct from the *E. mauritanica* of Linnaeus. In Lamarck's description of *E. mauritanica sensu* Lam. non L. (Encycl. 2 : p. 418, 1788 (not p. 43 as given by MOLERO & ROVIRA, 1998a)) he stated "cette plante crôit dans les lieux maritimes de l'Afrique". IT WAS OBVIOUSLY NOT INTENDED TO REFER TO A PLANT FROM THE WESTERN CANARY ISLANDS.

Unfortunately, Poiret overlooked an earlier use of the epithet *obtusifolia* by Lamarck for a *Euphorbia* species from the Iberian Peninsula, probably *E. terracina* but possibly *E. medicaginea* as noted by Molero & Rovira.

Desfontaines, also realizing that Lamarck's *E. mauritanica* was not the same as that of Linnaeus, had previously (1804) published the name *E. virgata* Desf. as a substitute for it but it seems that the *E. virgata* of Waldstein & Kitaibel just predates Desfontaines' use of the name and has priority. Chrtek & Skocdopolova (Acta Mus. Nat. Prag. XXXVIIB: 224, 1982) give 1803 as the date of publication of the Waldstein & Kitaibel name. Desfontaines, like Lamarck, intended his name to refer to the African species and gives its origin as "Afr.", while in the same work the Canary Islands species are cited as "Canaries" or "des Canaries". Sweet, in 1818, published the name *Euphorbia lamarckii* intending it to replace both *E. mauritanica sensu* Lam. and *E. virgata* Desf. and also stated its origin as being from "Africa".

Sweet also used the terms "Canaries" and "Teneriffe" to refer to Canary Islands plants. It is, therefore, clear that none of these authors intended their names to be used for the Canarian species, and especially not for the one confined to the western islands.

The arguments presented by the authors of Proposal 1349 for a Tenerife origin for the type specimen they selected are, to say the least, optimistic in their interpretation. The specimen is in very poor condition. Most older herbarium sheets of the Canarian Euphorbias tend to be so. They are extremely fragile and the inflorescences tend to break up quickly so that their original structure is difficult to decide especially if fragments have been lost over the years. Young inflorescences are often unbranched until after the first bud opens and, in any case, both the western Canarian taxon and the N. African/eastern Canaries taxon are extremely variable in this character. The illustration of a N. African specimen in Vindt's monograph (1953) actually shows a plant without secondary rays. If the type specimen represents a young inflorescence, and there appears to be no sign of capsule formation which suggests that this might be the case, then bract measurements may also be misleading as they may be taken from immature ie. not fully developed bracts. The development of secondary rays often depends on climatic conditions and they usually abort early in periods of drought (as was the case in the years 1998 and 2000). The fact, therefore, that the old, poorly preserved type specimen does not have secondary rays cannot be used as a good reason for attributing its origin to Tenerife, there are grounds for considerable and reasonable doubt.

The cyathial gland shape is also used by Molero & Rovira to justify a Tenerife origin for the *E. obtusifolia* lectotype. Round, truncate, hornless glands are, indeed, very typical of the western Canaries taxon but they are by no means exclusive to it. On Gran Canaria it is by not unusual to find individual plants and even populations of the African/eastern Canarian taxon with hornless glands. I have in front of me a living specimen from a plant originally collected personally in Morocco between Cap Ghir and Agadir in 1991 which has central cyathia with entire, hornless glands and the outer rays with typical horned glands and, further, there is no sign of secondary branching of any of the 8 pleiochasial rays. Molero & Rovira themselves (1998a), in their comment on *E. pseudodendroides* H. Lindb., a taxon originally described from Morocco now considered to be part of the N. African/eastern Canaries complex, state that it has "a tendency of the cyathium glands to be truncate or present shorter horns". VINDT (1953) also described the cyathial glands as being "raremente plurilobulées".

In his comments on *pseudodendroides* he refers to the "glandes à cornes plus cortés" and to the less branched inflorescence but notes that "ces caractères son très variables chez l' espèce". This character is also not a definitive one for assigning geographical origin for the Lamarck specimen chosen as the lectotype of *E. obtusifolia* and cannot be used to support "the unquestionable origin of the type material" (MOLERO & ROVINA, 1998a: 323). The specimen could be from either the western or the eastern Canaries or from North Africa. It could equally be a specimen of the Madeiran *E. piscatoria* Aiton which is inexplicably not included in the revision of the Macaronesian taxa (MOLERO & ROVINA, 1998a). This species which has both entire and horned glands, simple and compound inflorescences and small bracts (3-6.5 mm) can also display all the characters claimed by the authors of the

proposal as proof of the Tenerife origin of the lectotype of *E. obtusifolia*. It was in cultivation in European botanical gardens early in the 19th Century having been introduced by Masson in 1777. In view of the poor state of the specimen and the overlap in characters between several species I consider it virtually impossible to ascribe it with exactitude to any one of the candidate taxa.

Despite Molero & Rovira's claim (1998b) that the name *E. obtusifolia* has been used "for many years to designate a species of 'tabaiba' that is one of the most widespread and characteristic plants of the coastal landscape of the western Canary Islands" an examination of the references they cite shows that this is not so. In general the literature on the Canarian flora adds to the confusion about the name *E. obtusifolia* and it has been used indiscriminately for the two Canarian taxa and the North African populations as well. Most authors have followed Webb (1847) in ascribing it to all the Canary Islands and mixing its distribution with that of *E. regis-jubae* Webb & Berth., the eastern Canarian and African taxon. KNOCHE (1923) confused the two species, citing *E. regis-jubae* from Tenerife and the Western Islands and *E. obtusifolia* from Tenerife and Gran Canaria. LINDINGER (1926) correctly ignored the name *E. obtusifolia* and used the epithet *broussonetii* (*E. dendroides* L. var. *broussonetii* (Willd.) O.Kuntze) for the plant from the Western Canaries and *E. regis-jubae* for the Eastern islands and Gran Canaria, though he also erroneously included Tenerife in its distribution. Santos (1983) reported it from La Palma as subspecies *regis-jubae* which he goes on to list as being from all the Canary Islands. PITARD & PROUST (1908) gave it as being "dans toutes les îles" and specifically cited two Gran Canaria (i.e. *E. regis-jubae*) localities. KUNKEL (1977) got it totally the wrong way round giving Lanzarote; Fuerteventura and Gran Canaria as its geographical home and included all records of *E. regis-jubae* from these islands in *E. obtusifolia*. Hansen & Sunding (1993) continue to cite *E. obtusifolia* from all the Canary Islands but give the distribution of *E. regis-jubae* as Tenerife, la Gomera and la Palma, all in the western Canaries, again confusing the distribution of both taxa. In fact, only LID (1967) cites *E. obtusifolia* as the western Canaries taxon and *E. regis-jubae* as being from the eastern islands.

A pre 1994 International Code of Botanical Nomenclature solution to the problem was provided by BRAMWELL & BRAMWELL (1990) who, considering *E. obtusifolia* Poiret to be an illegitimate later homonym of *E. obtusifolia* Lam. excluded it from the Canarian flora and, at the same time, cleared up the confusion about the distribution of the two Canarian taxa ascribing the name *E. broussonetii* Willd. ex Link to the western Canarian species and *E. regis-jubae* Webb & Berth. To the N. African/ Eastern Canarian species. Even under the 1994 Code and if the above expressed doubts about the geographical origin of the type are accepted, this solution would remain the correct and valid one as it would also remove *E. lamarckii* Sweet, based on the same type as *E. obtusifolia* Poiret from the discussion. This solution requires no name conservation and no acceptance of a dubious type specimen of an illegitimate and very confused name which was never intended by its author to be used for a Canarian plant. CARTER & EGGLI (1997) in the important Cites Checklist of Succulent *Euphorbia* Taxa also adopt this solution listing *E. regis-jubae* and *E. broussonetii* as the names for the two Canarian taxa and the introduction to the Checklist states «Following the approval by the Nomenclature Committee the 10th Meeting of the Conference of the Parties has adopted

the «CITES Checklist of Succulent *Euphorbia* Taxa (Euphorbiaceae) as standard reference to the names of species of succulent *Euphorbias*».

There is no doubt that Lamarck, Poirét, Desfontaines and Sweet all intended their names to be used for the taxon from N. Africa, none of them even mention the Canaries in their protologues. This coupled with the uncertainty of the interpretation of the lectotype, the fact that Poirét's name is an illegitimate homonym under the Code and that a perfectly legitimate solution is already in place in the current widely distributed, standard Flora of the Canary Islands and in the official CITES Checklist means that little is served by Proposal 1349.

The Committee should ask why do we want to conserve an illegitimate name with an uninterpretable type specimen, a name which was never intended to be used for the species to which the authors of the Proposal wish to apply it and which has been a constant source of confusion in the literature for almost all of the past 200 years?

NOTE: A prepublication version of this article was circulated to the Committee for Spermatophyta who resolved the issue in favor of the rejection of Proposal 1349 and the name *E. obtusifolia* Poirét on the grounds outlined here by 14 votes to 1 (TAXON 49: 800-801, 2000). The current correct names for the Canarian species are, therefore, *E. broussonetii* Willd. ex Link for the species from Tenerife and the western islands and *E. regis-jubae* Webb & Berth. for the species from Gran Canaria, Lanzarote and Fuerteventura.

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