The typification of Mimosa farnesiana

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ABSTRACT

The protologue of *Mimosa farnesiana* L. in Species Plantarum ed.1: 521 (1753) was based on several elements. In the absence of a type specimen it was considered desirable to select a lectotype in order to preserve the current application of the name *M. farnesiana*.

The protologue of *Mimosa farnesiana* L., Sp. Pl. ed. 1: 521 (1753), the basionym of *Acacia farnesiana* (L.) Willd. in L., Sp. Pl. ed.4,4: 1083 (1806), is as follows:

"30. MIMOSA spinis geminis distinctis, farnesiana foliis bipinnatis: partialibus octojugatis. Hort. ups. 146.

Acacia indica farnesiana. Ald. farnes. 2. Raj. hist. 977.

Habitat in Domingo. h"

Analysis of the protologue indicates that it was based on several elements, namely, a plant in cultivation in the Botanic Gardens in Uppsala, and the Aldinus and Ray synonymy. Aldinus, Exactissima descriptio rariorum plantarum Romae in Horto Farnesiano: 2–7 (1625), provides, under the name Acacia Indica Farnesiana, a very detailed description and two illustrations of a plant in cultivation in the garden of Cardinal Farnese in Rome. The illustration on p. 2 shows the habit of the plant and the illustration on p. 4 (reproduced here as Fig. 1) is of a twig bearing flowers and fruits. Aldinus records that seed of the plant were received from the island of St. Domingo and were germinated in the year 1611. John Ray, Hist. Plant. 1: 977 (1686), provides a summary of the Aldinus diagnosis.

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Fig. 1.—Illustration of Acacia Indica Farnesiana In Aldinus, Descr. Rar. Pl. Rom. Hort. Farnesiano 4 (1625).

The diagnostic phrase-name of *M. farnesiana* in Species Plantarum is essentially a synopsis of the entry in Hortus Upsaliensis: 146 (1748). This entry in Hortus Upsaliensis: 146 is as follows:

"6. MIMOSA spinis geminis distinctis, foliis duplicato pinnatis, partialibus utrinque octo.

Acacia indica farnesiana. Ald. hort. 2. Raj. hist. 977.

Acacia indica, foliis scopioidis leguminosae, siliquis fuscis teretibus resinosis. *Herm. lugdb.* 5.

Habitat in Domingo.

Hospitatur in Caldario, Arbor.

Obs. Flores sessiles, capitati, lutei, suaveolentes, polyandri. Legumina teretia, crassa, utrinque angustiora, obtusa."

The reference in the phrase-name to leaves with 8 pinnae pairs, "partialibus octojugatis" is odd because *M. farnesiana* seldom, if ever, has 8 pinnae pairs and this observation could not have come from the Aldinus plate as suggested by Isely in Sida 3: 376 (1969) as the maximum number of pinnae illustrated is seven.

Although it is quite clear that Linneaus had a plant in cultivation in the Botanic Garden in Uppsala the origin of this plant is not known and unfortunately there is no specimen of M. farnesiana in the Linnaean Herbarium in London. There is, however, a Linnaean specimen of M. farnesiana in the Museum of Natural History in Stockholm. Through the courtesy of Prof. B. Nordenstam, Curator of the Botany Section of the Museum of Natural History, Stockholm, this Linnaean specimen was received on loan (see Fig. 2). The specimen is not annotated by Linnaeus in any way and it seems unlikely therefore that it was in Linnaeus's possession when Species Plantarum was written. On the back of the sheet, at the bottom and in the centre, is an annotation by Dahl, namely "Dahl a Linné P". According to Lindman, in Arkiv för Bot. 7: 6 (1907), Dahl received many specimens from Linnaeus during the latter's later years and during the years immediately after his death. It is assumed therefore that this specimen of M. farnesiana was in Linnaeus's possession during his later life and after Species Plantarum was written so that it could not have been the specimen on which the phrasename of M. farnesiana was based, if the phrase-name was indeed based on a specimen.

As no specimen on which Linnaeus could have based his phrase-name of M. farnesiana is extant, and as the phrase-name itself is not sufficiently diagnostic to positively identify M. farnesiana, it is desirable to have a lectotype to preserve the traditional and current application of the name, particularly as M. farnesiana is one of a complex of fairly closely related species. The absence of a specimen necessitates the selection of a lectotype from one of the other elements in the protologue. It is quite clear that Linnaeus relied to some extent at least on the Aldinus synonymy for his concept of M. farnesiana. For example, the specific epithet "farnesiana" was obviously taken from Aldinus because there is otherwise no explanation of why Linnaeus would have used this epithet. The habitat recorded by Linnaeus, namely, "Domingo", is also that recorded by Aldinus. The Aldinus plate reproduced here as Fig. 1 is therefore taken as the lectotype of M. farnesiana, and this accords with the view expressed by Isely in Sida 3: 376 (1969).



Fig. 2.—The Linnaean specimen of *Mimosa farnesiana* L, received on loan from the Museum of Natural History, Stockholm.

As M. farnesiana is one of a complex of closely related species it could perhaps be argued that the Aldinus plate does not establish the identity of the species beyond all possible doubt. With this in mind it is proposed that the lectotype is backed up by the representative Linnaean specimen in the Museum of Natural History, Stockholm, and reproduced here as Fig. 2. The specimen does not, of course, have any status as far as typification is concerned, but it was in Linnaeus's possession and it is conceivable that it may have come from the plant that was in cultivation in the Botanic Garden in Uppsala. The conspicuous venation of the leaflets of this Linnaean specimen distinguish it from Acacia pinetorum F. J. Hermann and from A. smallii Isely, and accord with the traditional and current application of the name M. farnesiana.

It is perhaps as well to mention that there is some controversy over the authorship of the work here attributed to Aldinus. Pritzel, Thesaurus Lit. Botanicae ed. 2: 58 (1871) attributes the work to Castellus and notes "Operis "Exactissima descriptio" autor est Petrus Castellus, atque falso sibi vindicavit Aldinus; typographus enim hisce etiam verbis: "In gratiam Tobiae Aldini scripsi cuncta" profitetur, Aldinum Tobiae Aldini scripsi cuncta" profitetur, Aldinum auctorem non esse. Seguier." Aldinus was Cardinal Farnese's physician and so the work may well have been dedicated to him. Saccardo, La botánica in Italia: 12 (1895), credits Aldinus with the work. In the Catalogue of the Library of the British Museum (Natural History) 1: 26 (1903) the work is attributed to Aldinus but there is a note reading "By some this has been considered to be really the work of P. Castelli.