

## The identity of some species of *Hermannia* represented in the Linnaean, Thunberg, Bergius and Cavanilles Herbaria

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A study of the types of *Hermannia* species in the above-mentioned herbaria has brought to light that several names which have fallen into disuse have to be resuscitated. Most of these names were either disregarded or were not investigated by Harvey for his treatment of *Hermannia* and *Mahernia* in the *Flora Capensis* Vol. 1. Some of them are mentioned in his lists of "Doubtful or little-known species". This omission was unfortunate because the present investigation has shown that several name changes are unavoidable. The following species are discussed.

***Hermannia confusa* Salter** in J.S.Afr. Bot. 12: 99 (1946). Type: Cape, between Caledon and Babylon's Tower, *Ecklon & Zeyher* Enum. No. 374 (BOL, holo.).

In 1946 Salter described a new species, *Hermannia confusa* Salter, to accommodate those specimens cited by Harvey in the *Flora Capensis* under *Hermannia tenuifolia* Sims. His reason for doing so was that the identity of *H. tenuifolia* could not be determined with certainty, mainly because of the poorness of the plate in the Bot. Mag. on which it was based. With this opinion I concur since no specimen is available to confirm the identity of the plant figured. (The plate shows an erect plant with an inflorescence different from those of the specimens cited by Harvey.)

I had the opportunity of studying the specimen of which Sims said: "there is a defective specimen in the Banksian Herbarium under the name *decomposita*, which appears like it". The latter specimen, which Salter did not see, closely matches the types of *H. myrrhifolia* Thunb. and of *H. pinnatisecta* Salter, but does not agree with the plate in the Botanical Magazine, which plate must be regarded as the type of *H. tenuifolia* Sims, no specimen having been preserved as far as I could ascertain.

***Hermannia diffusa* L.f.**, Suppl. 302 (1781). Type: Cape, Verloren Valley, *Thunberg* s.n. (LINN Cat. No. 854.16, holo.; UPS, Thunb. Cat. No. 15471, iso).

*Mahernia diffusa* (L.f.) Jacq., Hort. Schoenbr. 2, t. 201 (1797)\*  
*M. biserrata* (L.f.) Cav., Diss. 6: 326 (1788). *M. pilosula* Harv. (& vars) in Harv. & Sond., Fl. Cap. 1: 212 (1860). Types: Cape, Swartland, *Ecklon & Zeyher*; near Paarl, *Drège*; Groenekloof, *Drège*; *Pappe* s.n. (K, S, syns.).

*Hermannia biserrata* L.f. Suppl. 302 (1781). Type: Cape, *Thunberg* s.n., Cat. No. 15466 (UPS, lecto.). *H. pilosula* (Harv.) Hochr. in Annu. Conserv. Jard. Bot. Genève 11-12: 3 (1907).

*Hermannia diffusa* L.f. is not mentioned in the *Flora Capensis* and as a result the name went into disuse for many years. Harvey, apparently unaware of the earlier name, placed all the material referable to *H. diffusa* in *Mahernia pilosula* Harv. and the latter name has to be reduced to synonymy. *H. diffusa* L. is mentioned in Adamson and Salter's *Flora* of the Cape Peninsula, and is contrasted with *H. ciliaris*. It seems doubtful that his description applies to the true *H. diffusa*. *H. diffusa* differs from *H. pinnata* L. (*H. ciliaris* L.f.) in that the leaves vary from ovate to narrowly ovate, with lacerate to deeply bipinnately divided margins, and are never linear or whorled as in the latter species.

In floral characteristics *H. diffusa* is remarkably constant, but the leaves are extremely variable as is described above. This characteristic has caused frequent misidentification and a certain amount of proliferation of names. *Hermannia biserrata* L.f. represents one extreme of the leaf variation having the lamina of the leaf only shallowly lacerate on the margin. There is no specimen of the latter species in the Linnaean Herbarium. It is based on a Thunberg gathering and the specimen named *H. biserrata* (Cat. No. 15466) in the Thunberg Herbarium, which agrees with the description as well as with the Cavanilles plate of *Mahernia biserrata* (L.f.) Cav., should therefore be regarded as the lectotype of this name. *Mahernia bipinnata* L. var. *acutifolia* Harv. and *M. bipinnata* L. var. *glandulosa* Harv. are both referable to *H. diffusa*. The status of *M. pilosula* Harv. var. *latifolia* is somewhat dubious but probably also falls within the variation of the species.

***Hermannia glabrata* L.f.** Suppl. 301 (1781). Type: Cape, Roggeveld, *Thunberg* (LINN Cat. No. 854.11, lecto.; UPS, S, iso-lecto.).

*H. linearis* (Harv.) Hochr. in Annu. Conserv. Jard. Bot. Genève 11-12: 3 (1908).

*Mahernia glabrata* (L.f.) Cav., Diss. 6: 326 (1788). *M. linearis* Harv. in Fl. Cap. 1: 217 (1860). Type: Cape, Somersset, Swartkey on mountain plains, 4 000 ft., *Drège* (K, holo.; TCD, iso.).

*Hermannia glabrata* L.f. is mentioned in the *Flora Capensis* under the little-known and doubtful species of *Mahernia* by Sonder as *Mahernia glabrata* Cav. The only material referable to *H. glabrata* cited in the *Flora Capensis* (a single specimen collected by *Drège*) was placed by Harvey in a new species which he described as *M. linearis*. It is therefore not surprising that the name *Hermannia glabrata* (*Mahernia glabrata*) fell into disuse. *Hermannia glabrata* is represented in the Linnaean Herbarium by two specimens. Both are annotated by Linnaeus the younger, but the annotation on the second (LINN Cat. No. 1854.12) is followed by a question mark and is a poor specimen. Specimen 1854.11 was therefore chosen as lectotype of the species.

***Hermannia grossularifolia* L.**, Sp. Pl. 673 (1753). Type: Cape (LINN Cat. No. 854.14)

*H. vesicaria* Cav., Diss. 483 (1788). Type: Cape, fruiting specimen (P, holo.).

*Mahernia ovata* E. Mey. ex Turcz. in Bull. Soc. Nat. Moscow 31: 221 (1858). Types: Cape, *Drège* s.n. (holo.,?; K, LE, iso.).

This species is represented in the Linnaean Herbarium by a single specimen, Cat. No. 854.14. This sheet is written up in Linnaeus's own hand, the specific epithet 'pinnata' being crossed out and *grossularifolia* written above it. The specimen is in full agreement with the references to *Commelin* and *van Rooyen* in the *Species Plantarum*. There is no specimen in the Hortus Cliffortianus at the British Museum and, since LINN Cat. No. 854.14 is the only specimen we have that was seen by Linnaeus, it must be regarded as the holotype. The description in the *Species Plantarum* would in any case exclude it from actually being confused with *H. pinnata* which has linear leaves. It agrees with *H. vesicaria* Cav. and matches rather closely the specimen collected by *Drège* and deposited in Kew. The latter is an isotype of *Mahernia ovata* E. Mey. ex Turcz.

***Hermannia pinnata* L.** Sp. Pl. 1: 674 (1753).  
Type: Specimen in Hortus Cliffortianus (BM, holo).

*H. verticillata* Berg., Descr. Pl. Cap. 169 (1767), nom. illeg.  
Type: Cape, Legit? (SBT). *H. ciliaris* L.f. Suppl. 302 (1781).  
Types: Cape, Groenekloof, Thunberg s.n., Cat. No. 15468 &  
15469. (UPS, Cat. 15468, lecto.). *H. verticillata* (L.) K. Schum.  
in Pflanzenfam. 3, 6: 80 (1890); Hochr. in Annu. Conserv.  
Jard. Bot. Genève 11–12: 13 (1907).

*Mahernia verticillata* L., Mant. 1: 59 (1767). Type: Cape  
(LINN Cat. No. 854.17, holo.).

Linnaeus described *H. pinnata* in his Species Plantarum of 1753 and refers to a plate in Plukenet, Mantissa 50 t. 344 fig. 3 (1692). This figure is recognizable as representing the species presently known as *H. verticillata* or *H. ciliaris* in most herbaria. There is no specimen bearing the name *H. pinnata* in the Linnaean Herbarium. Linnaeus, however, refers to the Hortus Cliffortianus in the original description and Mr Oliver, formerly liaison officer for this Institute at Kew, kindly checked the Hortus Cliffortianus and found a specimen named *H. pinnata* which proved to agree with the Plukenet drawing and with *H. verticillata* of modern herbaria. The identity of the plant which should bear the name *H. pinnata*, is therefore not in doubt but the name has hardly ever been used in botanical works. In 1767 Bergius, in his Descr. Pl. Cap., described a species which he named *H. verticillata*. This name is, however, illegitimate since Bergius cites *H. pinnata* L., an older name, in synonymy. A month after Bergius's Descr. Pl. Cap. appeared, Linnaeus published his Mantissa Plantarum in which is described *Mahernia verticillata* L. Linnaeus supplied no reference to his earlier *H. pinnata* which, as already stated, is the same species as *Mahernia verticillata* L. Sheet 854.17 in the Linnaean Herbarium bears the name *H. "verticillata"* in the younger Linnaeus's hand as well as an inscription "pinnata?", indicating that the latter considered the possibility that *H. pinnata* could be the same as *M. verticillata* L. The combinations *H. verticillata* (L.) K. Schum., made in 1890 in the Pflanzenfamilien based on *Mahernia verticillata* L., and *H. verticillata* (L.) Hochr., based on the same type, are both invalidated by the earlier illegitimate homonym *H. verticillata* Berg. (1767). *Hermannia ciliaris* L.f., (1781) based on a Thunberg specimen, differs in a few unimportant characteristics from the type of *H. pinnata*, but falls within the variation of this species and must therefore be placed in synonymy.

Adamson in J.S.Afr. Bot. 5,2: 54 (1939) apparently was not aware that *H. pinnata* L. and *Mahernia verticillata* L. were conspecific and his suggestion that *H. ciliaris* L.f., Suppl. (1781) is the oldest available name, is therefore incorrect.

***Hermannia procumbens* Cav.** Diss. 329 (1788).  
Type: Cape, Groenekloof infra Leeuetaart, Thunberg  
(MD, holo., PRE, photo; UPS, iso.).

subsp. ***myrrhifolia* (Thunb.) De Wint.**, comb. nov.

*Hermannia myrrhifolia* Thunb., Diss. Herm. 16 (1794). Type:  
Cape, Swartland, Thunberg s.n., Cat. No. 15487 (UPS, lecto.; S,  
iso-lecto.). *H. pinnatisecta* Salter in J.S.Afr. Bot. 12: 102 (1946).  
Type: Cape, Malmesbury, Mamre Hills, Compton 14928 (NBG,  
holo). *H. pinnatisecta* var. *auriculata* Salter, l.c. Type: Cape,  
Malmesbury, Ysterfontein, Compton 17374 (NBG, holo.; BOL,  
iso.).

The type of *Hermannia pinnatisecta* Salter is a good match of the type of *H. myrrhifolia* Thunb. I have not found it justified to uphold the var. *auriculata* of *H. pinnatisecta*.

The sinking of *H. myrrhifolia* under *H. procumbens* is in line with Pillans's manuscript notes on these species which I have had available for study. The subspecies differs mainly in the dissected leaves and the less membranous calyx which usually has acute, not subacute lobes.

***Hermannia pulchella* L.f.**, Suppl. 302 (1781).  
Type: Cape, Roggeveld, Thunberg s.n. (LINN, Cat.  
No. 854.15, holo.).

*Mahernia pulchella* (L.f.) Cav., Diss. 6: 325, t. 177, fig. 3  
(1788). *M. vernicata* Burch., Trav. 1: 278 (1824). Type: Cape  
Province, Fraserburg, Dovaal Fonteyn, Burchell 1461. (K, holo.;  
PRE, iso.).

*Hermannia pulchella* was described by the younger Linnaeus in his Supplementa in 1781. The Savage Catalogue of the Linnaean Herbarium lists the sheet No. 854.15 as collected by "?Thunberg". Unfortunately the sheet contains two specimens of which the upper agrees with the specimen named *H. pulchella* in the Thunberg Herbarium (No. 15491) as well as with the Thunberg specimen of this species in the Bergius Herbarium. There is, therefore, little doubt that the upper specimen on the sheet in the Linnaean Herbarium should be regarded as the holotype of the species. The lower specimen closely matches the type specimen of Thunberg's *Hermannia cernua*. It seems likely that both specimens were collected by Thunberg and that the lower specimen on sheet No. 854.15 in the Linnaean Herbarium is an isotype of *Hermannia cernua* Thunb. Burchell described a new species *Mahernia vernicata* in 1824 and this name was added later by Harvey in the Flora Capensis 2: 589 (1862) as an additional species which he regarded as probably the same as *Mahernia pulchella* (L.f.) Cav. *Mahernia vernicata* is here regarded as synonymous with *M. pulchella*. The name applied by Linnaeus the younger to this species eventually fell into disuse in spite of being much older. The material of the species can be found under the name *Hermannia vernicata* in most herbaria.