## The Nomenclature of the Cape Acacia.

By

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By the "Cape Acacia" is meant the species which occurs naturally and abundantly to within about 75 miles of Cape Town. It is the only Acacia species in that region but is not restricted to the Cape and further to the north and east other species of Acacia occur as well. The early travellers such as Barrow, Lichtenstein, Sparrman, Thunberg and later Burchell make mention of this Acacia for it is a feature of the landscape in the Hex River Pass and in quite a wide radius from that point to the interior.

Besides the common name "Cape Acacia" it is also known as the "Karoo Thorn", "Cape Thorn Tree", "Doring Boom", "Witdoring" or "Mimosa". In the Transvaal it is commonly called "Sweet Thorn" or "Soetdoring". According to Simon van der Stel's Journal the Namaquas name for it was "Choe" while in Natal the Zulus call it "UmuNga".

The species is characterised by the following features: the habit of growth varies from shrubby thickets to tall, well-shaped trees, all armed with long, straight, white, paired spines; the sweetly scented flowers are yellow (the colour of egg yolk), massed in small globose heads which are axillary in the upper leaves and run into leafless panicles at the apex of the branchlets; the leaves are only 2 to 5 jugate with comparatively large leaflets; and the pods are linear and sickle shaped.

The following is an account of the botanical name and synonyms of this plant.

Acacia karroo Hayne Arzneyk. Gebr. Gewachse 10, descr. et t. 33 (1827); Glover in Ann. Bol. Herb. Vol. 1, p. 150 (1915); Burtt Davy in Kew Bull. 1922 p. 328 and in Tvl. Fl. 2, p. 346; Marloth in Fl. of S.A. 2, p. 51 (1925); and Baker in Leg. of Trop. Afr. p. 843 (1926).

Mimosa nilotica Burm. f. Fl. Cap. p. 27 (1768); Thb. in Fl. Cap. Ed. Schult. p. 432 – (1823) non Linn.

Mimosa capensis Burm. f. 1. c. p. 27 (1768) partly.

Mimosa leucacantha Jacq., Hort. Schoenbr. 3, 75 (1798-1800) non Vatke.

Acacia horrida Willd. Sp. Pl. (1805) as to Jacq. fig.; Harv. and Sond. in Fl. Cap. 2, 281 (1865).

Acacia capensis (Burm.) Burchell. Trav. 1, p. 114 and 189 (1822); Sw. in Hort. Britt.

1, 103 (1826) nomen; Colla in Mem. Acad. Torin 35 p. 175 (1831); Eckl. and Zeyher Enum. Pl. Afr. Aust. 260 (1835) nomen.

Mimosa eburnea Bojer Hort. Maurit, 115 (1837) non Linn.

Mimosa nilotica Burm. f. For this species Burman quotes Plukenet t. 123 fig. 1 and mentions that there are dried specimens and other figures of it. Plukenet t. 123 fig. 1, although showing only a leafy twig, could very well represent the "Cape Acacia." The leaflets are too big for Mimosa nilotica L. and besides it is known that that species does not occur near the Cape. Through the kindness of Prof. Baehni, Director of the Conservatoire et Jardin Botaniques, Geneva, photographs of the only two Acacia specimens in Burman's herbarium were received. The one specimen has written on it "Mimosa nilotica Linn" and "Plukn. Tab. 123. Fig. 1." (the name Mimosa capensis



Fig. 1.—Photo of Acacia specimen in Burman's herbarium, Geneva. Sent by Prof. Baehni in July, 1952.

was later written over *Mimosa nilotica*, see our Fig. 1. As far as one can tell from a leafy twig this also represents the "Cape Acacia".\* So *M. nilotica* was a wrong identification by Burman of the "Cape Acacia".

The same is true for *Mimosa nilotica* Thunb. Barrow made this clear when he wrote in his "Travels" p. 89 (1801) "... skirted by a thicket of the doornboom or thorn tree, a species of Mimosa, called erroneously by the Swedish travellers (Sparrman and Thunberg) the nilotica, or that which produces the gum Arabic. The pods of this are very long and moniliform ... whereas the Karroo Mimosa has short sickle-shaped pods". The sickle-shaped pod of our Acacia is the characteristic by which it can be distinguished from other related species in S:A., Egypt, Asia, and India.

Mimosa capensis Burm, f. In this case Burman quotes only Plukenet t. 123 fig. 2 (see right hand figure reproduced here under our Fig. 2), and he does not mention dried material. This figure is not recognisable as the "Cape Acacia" nor indeed as any S. African species of Acacio. It is true that the same figure, somehow got into the "Van der Stel's Journal of the Expedition to Namaqualand 1685-6" published by Waterhouse in 1932 and is supposed to represent the Acacia met with on that expedition which from description and locality probably was the "Cape Acacia". On the other hand the same figure is quoted by Linnaeus for his Mimosa reticulata. Bentham in his Mimosae p. 507 comes to the decision that both the names based on Pluk. 123 fig. 2, that is M. capensis and M. reticulata, must be rejected since the figure is not recognisable and there are no dried specimens of either species. In following Bentham's decision the present author is supported by the Advisory Committee on Problems of Botanical Nomenclature and Associated Matters in South Africa, which rules that since Burman obviously did not understand the species when he published the name it must be rejected. It appears that later Burman learned of his mistake, for on the herbarium sheet where "Mimosa nilotica Linn." had been written the name "Mimosa capensis" was later written over it, as stated above (see again our Fig. 1).

Mimosa leucacantha Jacq. Jacquin's plate is the first easily identified figure published with a definite name but the combination of the epithet with Acacia is invalidated by the earlier name Acacia leucacantha Vatke. for an entirely different species.

Acacia horrida Willd. Under the name Acacia horrida in Sp. Pl. (1805), Willdenow cites three distinct species:—

- (a) Mimosa horrida L. Sp. Pl. 1505 (1764).
- (b) Mimosa leucacantha Jacq. Hort. Schoenb. 3 p. 75 t. 393 (1798).
- (c) Mimosa orfora Forsk. descr. 177 (1775).
- (a) This is the type of Willdenow's new combination. Linnaeus first described *Mimosa horrida* in Sp. Pl. Ed. 1, p. 521 (1753). Willdenow cites the description as being in Sp. Pl. Ed. 3, 1505 (1764) but since the wording is practically the same in both editions it is not significant. In both editions the species is said to be an Indian species and Pluk. t. 121, Fig. 1, is cited. So Willdenow's name must be restricted to whichever Indian species agrees with Pluk. t. 121, fig. 1.
- (b) As pointed out above Jacquin's figure is of the "Cape Acacia" and different from Mimosa horrida L.

<sup>\*</sup> As a matter of interest the other specimen of Acacia in Burman's herbarium is that of a seedling grown from seed and cannot be identified.



Fig. 2.—Photo of Plukenet Tab. 123: Fig. 1 Quoted by Burman for *Mimosa nilotica*; also quoted by Linnaeus for *Mimosa scorpioides*; Fig. 2 Quoted by Burman for *Mimosa capensis*; also quoted by Linnaeus for *Mimosa reticulata*.

(c) Mimosa orfota (not orfora as written by Willdenow) is combined with Acacia by Schweinfurth in Bull. Herb. Boiss. 4, appendix 2, p. 213, 1896 and Acacia nubica Bth. is sunk under it. This is a species quite distinct from the "Cape Acacia".

Harvey and Sonder's use of the name Acacia horrida Willd. in the Flora Capensis is therefore also incorrect since Willdenow's name must be restricted to Linnaeus' specimen and cannot be applied to the Cape species.

Acacia capensis (Burm.) Burchell. In his "Travels" Vol. 1, p. 114, Burchell mentions the Karroo-thorn-tree at Genadendal and gives it the name Acacia capensis B. but he does not give a Latin diagnosis as is his custom with new species. This suggests that it may have been a new combination but nowhere does Burchell confirm this. On page 189 he describes the Acacia unmistakably and there is a drawing of it at the head of the chapter commencing on that page. In spite of the absence of a Latin description, this might be considered legitimately published under the provisions of articles 37 and 43 of International Rules of Botanical Nomenclature, where it is stated that in certain circumstances a plate with analysis is accepted as equivalent to a description (if the plates and names were published before Jan. 1, 1908). But in the face of Bentham's statement in Mimosae p. 507 this cannot be looked upon as a new

species but as a new combination. Bentham, who worked with Burchell on his Leguminosae, writes "Burchell adopted the name A. capensis for this species, supposing it to be the Mimosa capensis Burm. Cap. p. 27, which it probably is." Burchell's name is therefore the combination with Acacia of Mimosa capensis Burman and must be rejected.

Acacia capensis Colla. This is a doubtful species because (a) the type is a seedling grown from seed which the donor averred was that of Acacia capensis of the Cape of Good Hope, and (b) the description is based on Burchell's description of his Acacia capensis. In any case the name is redundant because as shown above the combination with "capensis" had already been published.

Mimosa eburnea Bojer. The Cape species was introduced into Mauritius and became naturalised there. It was erroneously identified as M. eburnea L.f. by Bojer and listed in his Hort. Maurit. 115 (1837).

Acacia karroo Havne is, therefore, the correct name for the "Cape Acacia".

