

Acanthus Pubescens and A. arboreus Author(s): W. B. Turrill Source: Bulletin of Miscellaneous Information (Royal Botanic Gardens, Kew), Vol. 1913, No. 9 (1913), pp. 336-338 Published by: Springer on behalf of Royal Botanic Gardens, Kew Stable URL: http://www.jstor.org/stable/4115027 Accessed: 26-06-2016 14:50 UTC

Your use of the JSTOR archive indicates your acceptance of the Terms & Conditions of Use, available at http://about.jstor.org/terms

JSTOR is a not-for-profit service that helps scholars, researchers, and students discover, use, and build upon a wide range of content in a trusted digital archive. We use information technology and tools to increase productivity and facilitate new forms of scholarship. For more information about JSTOR, please contact support@jstor.org.



Springer, Royal Botanic Gardens, Kew are collaborating with JSTOR to digitize, preserve and extend access to Bulletin of Miscellaneous Information (Royal Botanic Gardens, Kew)

LIII.—ACANTHUS PUBESCENS AND A. ARBOREUS.

W. B. TURRILL.

The Tropical African Acanthaceae were worked out by the late Mr. C. B. Clarke and published in the Flora of Tropical Africa in 1899-1900. On p. 106 of vol. v. of this work he describes Acanthus arboreus, Forskal, and reduces as synonymous with it the species A. polystachyus, Delile, A. pubescens, Engler, and A. Gaëd, Lindau, and the variety pubescens, T. Thoms., of A. arboreus. In naming the Acanthaceae of the Kässner Expedition, 1908, it was found that a revision of the synonyms given under and of the characters given for A. arboreus, Forsk., in the flora was necessary. The results of the investigation are recorded below.

The degree of hairiness in A. pubescens, Engl., and the allied species is not to be relied upon as a specific or even varietal character, but characters which are constant and in accordance with geographical distribution are to be found in the sepals. Before giving the results obtained by the use of these characters it will be well to give a brief historical resumé of the species and their synonyms under discussion. A. arboreus was described by Forskal from specimens collected in Arabia. The description is meagre but sufficient to show that A. pubescens, Engl., was not the plant meant. The name A. arboreus is the name generally accepted for the Abyssinian and Somaliland plant as well as for the Arabian plant. At Kew there is only one specimen (Schweinfurth 1112) collected in Arabia and this has only an imperfect calyx. If, however, the Arabian and Abyssinian plants prove to be different the latter must bear the name A. polystachyus, Delile, and the name A. arboreus, Forsk., must be retained for the former. Thanks to the good figure and description given by Delile (Cent. Pl. Afr. 62, t. 1, fig. 2), there can be no doubt as to the identity of his .1. polystachyus with the common Abyssinian and Somaliland plant at present bearing the name A. arboreus, Forsk.

A form of A. arboreus, Forsk., has been described by Lindau from Somaliland as A. Gaëd. The type specimen, Hildebrandt 1399, is at Kew and appears to differ from typical A. arboreus, Forsk., only in having smaller flowers. Acanthus arboreus, Forsk., var. pubescens is first used (as a nomen nudum) in Speke's Nile Journey, Appendix, p. 643. It was shortly described by Oliver in Trans. Linn. Soc., vol. xxix., p. 129. The specimen on which this variety was founded, namely, Speke and Grant 136, must be taken as the type of A. pubescens, Engler, though that author included under the one name two other specimens one of which, Steudner 1532, is merely a pubescent form of A. arboreus, Forsk., while the other is not represented at Kew and has not been seen by the writer.

To A. published, Engler, must be referred A. ugandensis, C. B. Clarke, published in the Journal of the Linnean Society, vol. xxxvii., p. 527, and including specimens collected by Dawe and Evan James in Uganda, and by C. F. Elliott in British East Africa. These specimens together with the material from Uganda and British and German East Africa placed by Clarke under A. arboreus, Forsk., in the Flora of Tropical Africa, and also the additions received from these countries since the publication of that work compose the Kew material of A. *pubescens*, Engler, as defined in the description below.

Kässner 3185 from German East Africa is a form differing slightly from the typical A. pubescens in having shorter, somewhat broader and less acuminate bracts.

The following then is the nomenclature and classification of the specimens of these two species represented in the Kew Herbarium :---

Acanthus arboreus, Forsk. (syn. A. polystachyus, Delile, probably; A. Gaëd, Lindau).

Abyssinia. Schimper 1534, 1535; Plowden; Steudner 1532, 1533. Upper Senaar. Kotschy 489.

Acanthus pubescens, Engler (syn. A. arboreus, Forsk., var. pubescens, T. Thoms.; A. ugandensis, C. B. Clarke).

Uganda. Mahon; Dawe 237; Evan James; Wilson 94; Mason. British East Africa. C. F. Elliott 244; Scott Elliott 7057.

German East Africa. Speke and Grant 136; Kässner 3185.

To sum up, the true Acanthus arboreus, Forsk., if identical with A. polystachyus, Delile, is a plant of Arabia, Abyssinia, and Somaliland, while A. pubescens, Engler, has a more southern range, being common in Uganda and having been several times collected in British and German East Africa.

There is one point which owing to the lack of material has not been completely cleared up. In Trans. Linn. Soc., vol. xxix., p. 129, there is under *Acanthus arboreus*, Forsk., var. *pubescens*, a note by Col. Grant to the effect that the seeds of this plant are "covered with a down which makes the fingers itch." Speke and Grant's specimen at Kew contains no seed. However, in a capsule mounted on the same sheet as the specimen collected by Miss Mason in Uganda is a single seed and this is completely covered with stiff brown hairs which, like the well-known hairs on the fruits of species of *Mucuna*, come off easily on to the hands when rubbed and in any quantity would no doubt cause a noticeable irritation. Hence it seems that there is here another, probably constant, character for distinguishing *A. pubescens* from *A. arboreus* for the seeds of the latter are flat, smooth, and shining.

Acanthus pubescens, Engler, Hochgebirgs Fl. Trop. Afr. (1892), p. 390 (Acanthaceae-Acanthoideae); descriptionem ampliatam confecit, W. B. Turrill; A. arboreo, Forsk., affinis, sed bracteis minoribus, sepalis lateralibus latis saepissime obtusis marginibus molliter ciliatis praecipue differt.

Planta erecta, 1-3 m. alta, caulibus subquadrangularibus glabris vel plus minusve pubescentibus. Folia ambitu elliptico-lanceolata, apice acuta spinescentia, basi cordata vel rotundata, usque ad 20 cm. longa, 9 cm. lata, subcoriacea, glabra vel plus minusve pubescentia, irregulariter lobata, lobis spinescentibus, nervis secondariis utrinque usque ad 14 pagina utraque conspicuis, petiolis 1-2 cm. longis. Spicae multiflorae; bracteae ovatae, apice acutae vel acuminatae usque ad 2 mm. longae, 1.5 mm. latae, pagina utraque dense puberulae, marginibus spinescentes; bracteolae lineari-lanceolatae, apice acuminatae, 1.5 cm. longae, 2-3 mm. latae, pagina utraque puberulae,

32221

marginibus superne spinescentibus. Sepala 4, obtusa, dorso plus minusve pubescentia, distincte molliter ciliata ; anticum oblongoovatum, apice denticulatum vel integrum, usque ad 1.5 cm. longum, 9 mm. latum ; posticum ovatum, usque ad 1.5 cm. longum, 1.1 cm. latum ; lateralia elliptico-ovata, 1 cm. longa, 7 mm. lata. Corollae tubus 7 mm. longus, durus, extra glaber, intus dense pubescens; limbus 5-lobatus, pubescens, usque ad 3.5 cm. longus, 3.5 cm. latus. Stamina 4, filamentis inter se aequalibus 2 cm. longis glabris, antheris 5 mm. longis dense ciliatis; pollinis granula longe ellipsoidea, 50 μ longa, 30 μ diametro. Discus 0.5 mm. altus. Ovarium 2 mm. altum, 1 mm. diametro, glabrum; stylus 2.5 cm. longus, glaber, apice breviter et aequaliter bifidus. Acanthus arboreus, Forsk., var. pubescens, Thoms, in Speke's Nile Journey, Appendix, p. 643, and Oliv. in Trans. Linn. Soc. vol. xxix., p. 129. A. arboreus, C. B. Clarke in Fl. Trop. Afr. vol., v., p. 106, pro parte minore, non Forskal. A. ugandensis, C. B. Clarke, in Journ. Linn. Soc. xxxvii., p. 527.

TROPICAL AFRICA. Uganda: Botanic Station, Entebbe, "forms a bush 10 ft. high with handsome, pink, very showy flowers, common," A. Mahon; Buddu, 1170 m. altitude, "a white flowered variety," M. T. Dawe 237; Elgon District, Sir Evan James; between Entebbe and Kampala, Miss M. Mason; without exact locality, "a stout shrubby plant, branched, 3-7 ft. high, flowers pink. Roadsides and grassland, Uganda, very common. I have also seen a variety with white flowers but have no specimen," Rev. C. T. Wilson 94; without exact locality, "very handsome pink Acanthacea all over Uganda and Unyoro, 12-15 ft. high," M. S. Evans 737; British East Africa: Kavirondo, Nandi Range, "a tall shrubby plant, wet ground," Scott Elliot 7057; Mutagaru, Kakameja Forest, "a very common shrub as undergrowth in forests in Nyanza Province and parts of Uganda," altitude 1350-1500 m., J. L. Moon 572; without exact locality, C. F. Elliott 244; German East Africa: Usui (Ussuwi) in Uzinza (Usindja) District, Speke and Grant, 136; Ruzizi Valley in the open plain, Kässner 3185.

LIV.—NEW ORCHIDS; DECADE 41.

401. Megaclinium ugandae, Rolfe; a M. endotrachyde, Kränzl., scapo breviore, sepalis lateralibus acuminatis et petalis latioribus differt.

Herba epiphytica. Pseudobulhi tetragoni, conico-oblongi, 5 cm. longi, 1.6 cm. lati, diphylli. Folia oblonga vel elliptico-oblonga, subobtusa, 7 cm. longa, 2 cm. lata, subcoriacea. Scapus circiter 12 cm. longus, basi vaginis tubulosis obtectus; rachis oblonga, acutangula, 6.7 cm. longa, 8 mm. lata, nervo mediano eccentrico. Bracteae triangulares, acuminatae, acutae, reflexae, 3-4 mm. longae. Pedicelli 5-6 mm. longi. Flores circiter 2 cm. distantes, parvi. Sepalum posticum suberectum, subspathulato-oblongum, obtusum, 7 mm. longum; sepala lateralia late triangularia, reflexa, acuminata, 6-7 mm. longa; mentum subsaccatum, 2 mm. longum. Petala