## A NEW THESIUM FROM ETHIOPIA

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ABSTRACT. Thesium hararensis A. G. Miller (Santalaceae), a new species, is described from Ethiopia.

Whilst preparing the account of Santalaceae for the Flora of Ethiopia several sheets of a distinctive new species of Thesium were discovered. It is described here as T. hararensis A. G. Miller, bringing the number of known species of Thesium in Ethiopia to six.

## Thesium hararensis A. G. Miller, sp. nov. Fig. 1.

Differt a T. viride A. W. Hill lobis perianthii interne dense villosis triangularibus non linearibus, glabris; foliis inferioribus linearibus non subuliformibus nec squamiformibus; floribus in soicis dispositis, unoquoque una bractea et duabus bracteolis subtentis.

Herba suffruticosa, glabra vel interdum scabra. Caules plures, ascendentes, 10–30cm allit, porcati, superne dense ramosi. Folia inferiora linearia, teretia, 5–30mm longa, mucrone hyalino, insuper et in regione inflorescentines squamiformibus diminuenda. Inflorescentine multis spicis omnibus c. 2–3cm longis, 7–10 floribus; flores ± subsessiles, una bractea squamiforme subulata et duobus bracteolis subtenti, uterque quam flore breviore. Perionithium exterum viridi-truneum, internum album, late campamulatum, (15–31,75–4) apicem infernum pilis villosis densis vestiri. Stamina basi loborum inserta, antherae ad lobos per fasciculos pilorum affisica. Sigma capitatum, ad medium antherarum attingens. Nux subspheroidea, 2,5–3×2,5–2,75mm, costis decem, prominentibus, longitudinalibus, et inter eas nervis reticulatis conspicius; perianthium persistens, nuce 3-plo breviora.

Differs from T. viride A. W. Hill in the internally densely villous, triangular not linear, glabrous perianth-lobes; in the linear not subulate, scalelike lower leaves; in the flowers arranged in spikes subtended by 1 bract and 2 bracteoles, not arranged in pedunculate, axillary cymes with the flowers subtended by 6 or 7 bracteoles.

Woody-based, glabrous or sometimes scabrous herb. Stems several, ascending, 10–30cm,±ridged, densely branched above. Leaves linear below, ± terete, 5–30mm, with a colourless mucro, becoming smaller and scale-like above the region of inflorescence. Inflorescence of many spikes c. 2–3cm long, each c. 7–10-floweret; flowers ± subsessile, subtended by a scale-like, subulate bract and 2 bracteoles, both much shorter than flower. Flowers greenish-brown outside, white inside, perianth broaddy campanulate, (1.5–1).75–2mm long; lobes triangular, obtuse, 1–1.5mm long, 0.8–1mm broad, apex hooded, fringed with dense, inwardly pointing villous hairs; orange-brown (when dry) glands present between lobes at base. Stamens inserted at base of perianth-lobes, anthers attached to lobes by tufts of hairs. Stigma capitate, held at same level as anthers. Nut subspheroidal, 2.5–3×2.5–2.75mm, with 10 prominent, longitudinal ribs, with distinct reticulate veins between; persistent perianth c. one-third as long as nut.

In open grassland on limestone slopes, probably semi-parasitic on grasses; 1372-2200m.

Type. Ethiopia, 5-10km N of Midaga, S of Harar, 08°47′N 42°10′E, 14 x 962, W. Burger 2199 (holo. K, iso. WAG).

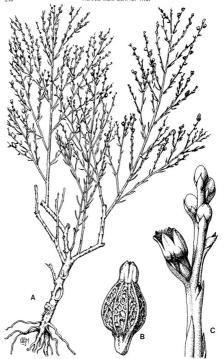


Fig. 1. The sium hararensis, De Wilde 5475: A, habit  $\times$  ½; B, nut  $\times$  9; C, part of inflorescence  $\times$  10.

ETHIOPIA (HU). Harar Province: Gara Achim (Mount Hakim), c. 2km S of Harar, 09°17'N 42°06'E, limestone rocks, common in open grassland, 2100m, 23 vii 1969, J. J. F. E. De Wilde \$475 (C, K); Gara Achim (Mount Hakim), c. 3km S of Harar, 09°17'N 42°06'E, limestone hills, open grassland, 2200m, 19 iii 1970, J. J. F. E. De Wilde 6376 (K, WAG); 5-10km N of Midaga, S of Harar, 08°47'N 42°10'E, 14 x 1962. W. Burger 2199 (holo. K, iso. WAG); Uddendeo plateau, 36km ESE of Harar on road to Dijigdijigga (Ijejga), 09°04'N 42°23'E, limestone soil, 1520m, W. Burger 2065 (K, WAG).

SOMALIA. Nr Ethiopian frontier, 09°02′N 43°54′E, 1372m, 8 x 1932, J. B. Gillett 4230 (K).

T. hararensis is restricted to the Harar province of eastern Ethiopia and neighbouring areas of Somalia, growing mainly in open grassland on limestone, and is apparently semi-parasitic on grasses. It can be distinguished from all other Ethiopian species of Thesium by the densely bearded, triangular perianth-lobes and the broadly campanulate flowers. It resembles the non-Ethiopian species T. viride A. W. Hill in facies but differs in the flowers which are arranged in spikes and are subtended by one bract and two bracteoles, not arranged in pedunculate axillary cymes with the flowers subtended by six or seven bracteoles. It also differs from T. viride in the linear, not subulate, scale-like leaves below and in the internally villous, triangular, as opposed to glabrous and linear, perianth-lobes. In Somalia T. hararensis is represented by a single gathering, Gillett 4230; this differs from Ethiopian specimens in being completely scabrous, and less leafy in appearance, with rather more scale-like leaves, and is generally a rather stunted plant. This degree of variation is not unusual within a species of Thesium. Gillett 4230 grew at a lower altitude than the other, Ethiopian, gatherings and probably represents a low-level form.

A puzzling sheet, Thulin 1430 (from Chilalo awraja, c. 3km S of Assella, growing on grassy slopes along small stream at 2400m), could well represent a further new species but more gatherings are needed before it can be described; it is distinguished from the other Ethiopian species by its scale-like leaves, perennial habit and persistent perianth up to one-third as long as the nut.