

DIOSCOREA KAOI, A NEW YAM FROM TAIWAN

With 1 plate

by

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Dioscorea Kaoi LIU et HUANG, sp. nov. Plate 1.

Suffrutex scandens et volubilis; caulibus vel ramis gracilibus teretibus 2mm. in diametro laevibus vel longitudinaliter tenuissime sulcato-striatis glabris. Folia alterna graciliter petiolata, petiolis 3.5cm. longis glabris intus profunde canaliculatis extus rotundatis longitudinaliter striatis basi dilatatis, partibus dilatatis lineari-triangularibus plus minus falcatis circiter 5 mm. longis basi 1.7 mm. latis caulem amplectantibus; lamina triangulari-ovata obscure 5-lobata in exsiccato chartacea vel tenuiter coriacea 10.5 cm. longa 5.5 cm. lata apice caudato-acuminata vel acuminatissima basi profunde cordata margine subintegra supra in exsiccato fusco-nigricantia subtus fulvo-cinerascentia utraque glabra 9-nervia, nervis ad apicem convergentibus, venulis tenuissimis reticulatis, nervis venis venulisque supra tenuiter elevatis subtus prominente elevatis distinctis. Flores non visi. Paniculae fructiferae axillares cum pedunculis 11-16 cm. longae glabrae, pedunculis gracilibus 1 mm. in diametro sectionis 3-angulatis ad angulis angustissime alatis; ramis paniculae simplicibus gracilimis basi 1-bracteatis, bracteis triangularibus circiter 2 mm. longis 1 mm. latis apice cuspidatis. Capsulae cum alis obcordatae 1.1-1.5 cm. longae 1-1.7 cm. latae apice leviter cordatae basi obtuso-rotundatae breve stipitatae, stipitibus 2-3 mm. longis basi 1-3-bracteolatis, bracteolis triangularibus circiter 1 mm. longis. Semina rotundata valde complanata circumcirca ala membranacea cincta cum alis 5 mm. in diametro.

An entirely glabrous slender scandent and twining subshrub up to 3 m. high with chartaceous or thinly coriaceous triangular-ovate leaves, paniculate fruiting inflorescences, and obcordate 3-winged capsules.

Stem and branches slender, rounded, about 2 mm. in diameter, smooth or very slightly sulcate and striate. Leaves alternate, petiolate; petioles slender, about 3.5 cm. long, glabrous, deeply canaliculate above rounded and slightly striate beneath, dilated at base; the dilated part being linear-triangular, somewhat falcate, about 5 mm. long, 1.7 mm. wide at base, clasping the stem; lamina chartaceous or thinly coriaceous when dry, triangular-ovate, obscurely 5-lobed, about 10.5 cm. wide, apex caudate-acuminate or long acuminate, base deeply cordate or auriculate-cordate, margins subentire, dull black above, brownish grey beneath when dry, glabrous on both surfaces, 9-nerved; nerves ascending, convergent at the apex, veinlets very slender, reticulate; veins and veinlets flattened or slightly elevated above, prominently elevated beneath.

Flowers not seen. The fruiting panicles axillary, about 11-16 cm. long, glabrous; the peduncles slender, triangular in cross section, narrowly winged along the angles; the branches of panicles simple, slender with 1-bract at the base; the bract triangular about 2 mm. long, 1 mm. wide, apex caudate. Capsules obcordate, 1.1-1.5 cm. long, 1-1.7 cm. wide, with the wing slightly cordate at apex, obtuse-rounded at base, shortly stalked, the stalk about 2-3 mm. with 1-3 bracteoles at base, bracteoles triangular, 1 mm. long. Seeds rounded, flattened, surrounded by a membranous wing, about 5 mm. in diameter with the wing.

This interesting plant is distinguished by its paniculate inflorescence and obcordate capsules, and its leaves are triangular-ovate in outline and undulate at base, its 9 nerves are prominent on both sides. It may be very closely related to *Dioscorea Collettii* Hook. f., but the latter has the flowers arranged in a simple or fascicled raceme and the leaves are ovate-cordate and it has 7-nerves instead of 9.

Locality records: Hwalien Hsien; Ta-lu-koh forest near the Fong-shan Office.

Habitat: Vines growing along roadsides twining on shrubs.

Altitude: From 1850 to 1900 m.

Collector: Liu, Chen & Kao.

Date: Aug. 10, 1956.

Type specimen: Kao 100, In Herbarium of Botany Department, National Taiwan University.

This new species is named for the collector in our Botany Department, Mr. Muh-tsuen Kao (高木村) with whom we have been happily associated on several of our expeditions.



***Dioscorea* Kanoi LIU et HUANG**

A. A Fruiting branch

B. A Seed