

***Encephalartos sclavoi* De Luca, D. Stevenson and Moretti  
(Zamiaceae), a new species from Tanzania \***

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*Riassunto*

*Encephalartos sclavoi* De Luca, D. Stevenson e Moretti è una nuova specie della Tanzania caratterizzata, tra l'altro, da foliole estremamente coriacee, tipicamente embricate e con margini revoluti.

In Tanzania, near the Kenyan border, we have located a new species of *Encephalartos*, *E. sclavoi*, which is a member of a group of species containing *E. bubalinus* Melville, *E. gratus* Prain, *E. hildebrandtii* A. Br. et Bouché, *E. tegulaneus* Melville, and *E. voiensis* Moretti, D. Stevenson and Sclavo. *E. sclavoi* differs from the aforementioned species in vegetative and reproductive characters and habitat preference.

***Encephalartos sclavoi*** De Luca, D. Stevenson and Moretti, sp. nov. Type: Tanzania. District Tanga, Gologolo, near Lushoto, 4 Jan. 1986, Sclavo 2 (holotype, K; isotypes, MO).

Truncus erectus, 1 m altus, 30-35 cm diam. Folia 1.75-2 m longa, oblonga, ad basin gradualiter attenuata, atque spinosa; rachis glabra. Foliola mediana alternata vel subopposita, valde coriacea, intera et revoluta, pungentia, imbricata, adaxiale pagina sulcata, 18-28 cm longa, 4 cm lata. Strobilus ♂ subconicus, juvenilis flavo-virens, adultus flavus, 20-25 cm longus, 20 cm diam., pedunculus ebracteatus, 2-4 cm longus, 2-3 cm diam. Microsporophylla media ad axin perpendicularia, deltoidea, 2-5

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cm longa, 2 cm lata, bulla deflexa praedita. Strobilus ♀ cylindricus vel ovoideo-cylindricus, 30-40 cm longus, 15-20 cm diam., juvenilis viridis vel flavus, adultus flavus vel brunneulus; pedunculus 3-4 cm longus, 2-3 cm diam. Megasporophylla media rhomboidea, pedicellata, 4 cm longa, 6.5 cm lata; pedicellus tribus abaxialibus faciebus praeditus; bulla rhomboidea, 6.5 cm lata, 1.3 cm alta, 3.8-4 cm profunda; bullae terminalis facies hexagona atque vulticulo praedita; adaxialis facies ex duobus trapezoidibus partibus atque mediano lobo constituta, tuberculato margine seminalique fimbria praedita; abaxialis facies ex tribus trapezoidibus partibus constituta; mediana pars cristata.

Haec species ad praeclarum studiosum Jean-Pierre Sclavo dicata est.

*Trunk* erect to 1 m, 30-35 diam., leaf bases persistent. *Leaves* 1.75-2 m long, oblong, gradually tapering basally and becoming spinose at the base. *Petiole* 10-15 cm long, bulbous and tomentose basally. *Rachis* straight, glabrous or only very slightly tomentose and with two shallow longitudinal grooves between leaflet insertions. *Median leaflets* alternate to subopposite, strongly coriaceous, blue-green to dark green and yellow at point of attachment, insertion slightly acute to the rachis and oblique in the abaxial and adaxial plane, crowded and overlapping, appearing as an half-opened venetian blind, with median longitudinal groove, oblong to elliptic, slightly inequilateral, 18-28 cm long, 4 cm wide, apex pungent and recurved appearing hook-like, 0-3 short spinose teeth often reduced to callose bumps on basal half of each margin, margins strongly revolute. *Lower leaflets* gradually diminishing in size and then abruptly becoming spinose in the last 3-5 leaflet pairs. *Microsporangiate strobilus* subconical, greenish-yellow when young, yellow when mature, 20-25 cm long, 20 cm diam., peduncle 2-4 cm long, 2-3 cm diam. *Median microsporophylls* deltoid, 2.5 cm long, 2 cm wide, inserted at right angle to axis, bulla deflexed. *Megasporangiate strobilus* cylindric to ovoid-cylindric, 30-40 cm long, 15-20 cm diam., green to yellow when young, yellow to tan when mature; peduncle 3-4 cm long, 2-3 cm diam. *Median megasporophylls* pedicellate with rhomboid bulla, 4 cm long, 6.5 cm wide; pedicel with 3 abaxial facets, the median facet rectangular. *Bulla of megasporophylls* rhomboidal, 6.5 cm wide, 1.3 cm deep, 3.8-4 cm high; terminal facet slightly concave and hexagonal; adaxial face with two lateral trapezoidal facets, a median trapezoidal facet, a short inconspicuous median lobe that is 2-4 mm wide and long, and with margin and seminal

fringe tuberculate; abaxial face with two lateral trapezoidal facets, a median trapezoidal facet with obtuse lateral sagittal ridges, and with the inferior ridge and sagittal crest tuberculate; lateral lobes 5-7 mm long, 2-4 mm wide.

This species is named for Jean-Pierre Sclavo, a dedicated and knowledgeable student of *Encephalartos*, who first discovered and recognized it as new, supplied us with specimens, photographs, and generously gave us his extensive field notes.

With respect to overall vegetative characters and general appearance, *E. sclavoi* is the most distinct species when encountered in the field in East Central Africa, which is here defined in the same sense of MORETTI *et al.* (1989). The extremely coriaceous leaves and leaflets with rigid revolute margins combined with the overlapping position of the leaflets in a half-opened venetian blind appearance is unmistakable.

#### ABSTRACT

*Encephalartos sclavoi* is a new species from Tanzania, characterized by very tough, embricate leaves, with revolute margins.

#### REFERENCES

- MORETTI A., DE LUCA P., SCLAVO J.P. and STEVENSON D. WM., 1989. *Encephalartos voiensis* (Zamiaceae), a new East Central African species in the *E. hildebrandtii* complex. Ann. Missouri Bot. Gard. 77: In press.