

## A NEW SPECIES OF *TERMINALIA* FROM NIGERIA

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A new species of *Terminalia*, *T. pennyana* (Combretaceae), is described and its relationship to *T. glaucescens* and *T. ivorensis* is discussed.

### *Terminalia pennyana* Anozie, sp. nov. Fig. 1.

Planta inter *T. glaucescentem* [Planch. ex] Benth. et *T. ivorensem* A. Cheval quasi intermedia sed ab ambobus fructibus late oblongis differt.

Type: Nigeria, Enugu state, Nsukka, 6°51'N 7°24'E, in degraded savanna behind the Botany Building of the University, tree 12m, 30 v 1973, *Uzoechina* U82 (holo. FHI; iso. UNN, E).

Tree to 37m with disrupted whorled branching pattern. *Bark* shallowly fissured. Young shoots glabrous with somewhat drooping leaves. *Leaves* with 1.0–3.3cm petiole; lamina 9.0–15.2 × 5.5–7cm, usually obovate, widest above middle and tapering to an acute base; lateral nerves 7–8 alternating pairs, prominent below, curving away from leaf-margin, greenish white. *Inflorescence* a 7.2–8.5cm raceme. *Flowers* cream, hairy; pedicels 2.5–2.7cm; calyx lobes 5, acute; stamens 10; receptacle with a fluff of hairs. *Fruit* 7.3–8.5 × 2.0–2.2cm, widely oblong with an obtuse to truncate apex and a cuneate base; body brown and very finely hairy.

*Additional specimens examined.* NIGERIA. Enugu state: Nsukka, from Type tree [fruiting specimen], 28 x 1982, *Anozie et al.* U103 (UNN, FHI, E); *ibid.*, 12 xii 1983, *Anozie* U104 (UNN, FHI); *ibid.*, 17 v 1993, *Anozie* U139a (UNN, FHI, K); Enugu, 6°20'N 7°29'E, Colliery Avenue by Club Road, tree 36.5m, flowering specimen, *Anozie* U141 (UNN, FHI); *ibid.*, fruiting specimen of the same tree, *Anozie* U141b (UNN, FHI). Anambra state: Umuaji, 6°20'N 7°16'E, 26–27km along Enugu-Onitsha road, tree 15.3m, shrubby savanna, *Anozie* U140 (UNN, FHI).

This species is dedicated to a British lady, Marjorie Penny, former Higher School biology mistress of Queen's School, Enugu, whose extensive fieldwork, plant collection and identification was an inspiration to her students.

*Terminalia pennyana* flowers in May and abundant fruits ripen from October to December. In recent years there has been complete defoliation by caterpillars in July, leaving the tree completely bare apart from the profuse, light-coloured bunches of fruits.

The *Flora of West Tropical Africa* (Hutchinson & Dalziel rev. by Keay, 1954–58) reports 11 species as distributed over West Africa and the new species adds a twelfth, while it increases to 10 the nine species recorded for Nigeria by Keay (1989). It is closely related to *Terminalia ivorensis* A. Cheval and *T. glaucescens* [Planch. ex]

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Bentham and was mentioned as an intermediate between these two species in my earlier work (Uzoechina, 1978). A comparison of the diagnostic characters of the three species is given in Table 1, and morphology, germination, seedling characteristics and other observations on *T. ivorensis* and *T. glaucescens* are treated at length in Uzoechina (1978). All three have been grown under the same cultural conditions and have maintained their distinctness. Field studies show habitat differences between the three species: *T. pennyana* occupies deciduous and often degraded savannas, *T. ivorensis* forest and adjoining savanna, while *T. glaucescens* is found in open savanna, frequently on hillsides. The pronounced morphological intermediacy of *T. pennyana* between *T. ivorensis* and *T. glaucescens* suggests that hybridization of the latter two

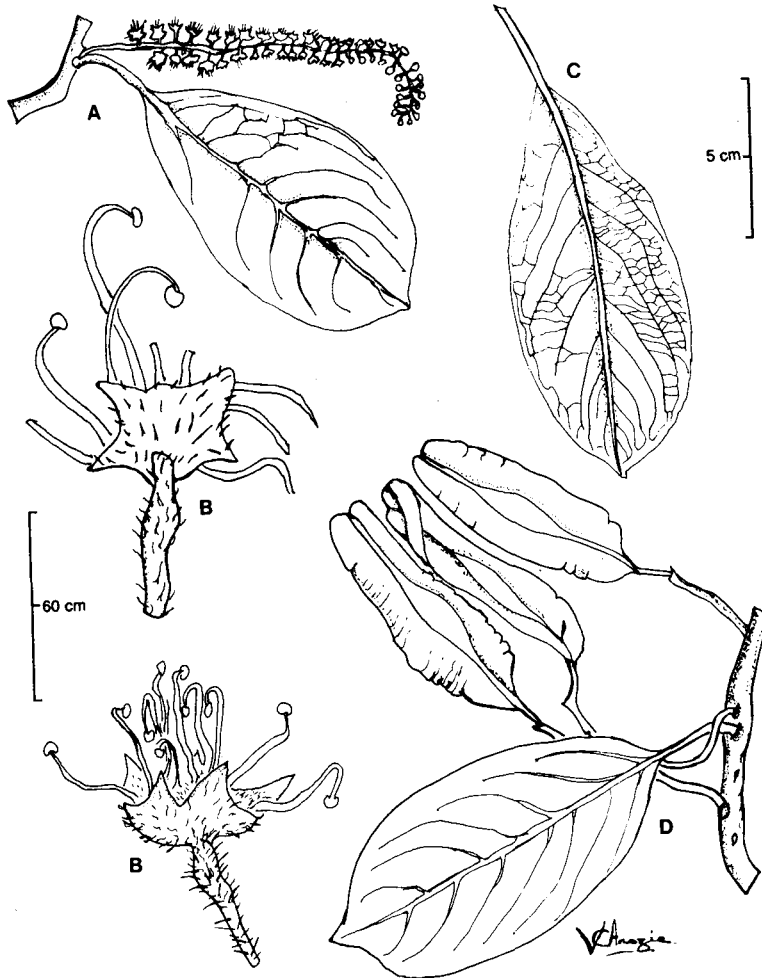


FIG. 1. *Terminalia pennyana* Anozie. A, inflorescence; B, flowers; C, leaf; D, mature fruits. A, B, C from Uzoechina U82; D from Anozie et al. U103.

TABLE 1. A comparison of the diagnostic characters of *Terminalia glaucescens*, *T. pennyana* and *T. ivorensis*.

	<i>T. glaucescens</i>	<i>T. pennyana</i>	<i>T. ivorensis</i>
Branching pattern	No recognizable whorling	Disrupted whorled habit	'Pagoda' (whorled habit) well defined
Bark	Deeply fissured corky bark	Shallowly fissured	Smooth or with thin square plates in older parts
Leaves	15.0–22.5 × 5.8cm Usually larger	9.0–15.2 × 5.5–7.0cm Usually intermediate	10.5–13.5 × 4.5cm Usually smaller
Seed germination	Epigeal Cotyledon pegs present	Epigeal No pegs	Epigeal No pegs
Seedling leaf-veins	White	White	Red to purple
Fruit	4.5–7.5 × 1.5–2.5cm Narrowly oblong to oblong-elliptic. Apex emarginate, base obtuse to rounded	7.3–8.5 × 2.0–2.2cm Broadly oblong. Apex obtuse to truncate, base cuneate	7.0–9.5 × 2.0–2.6cm Narrowly oblong. Base cuneate. Apex rounded to mucronate

species might be involved in its origin. At present we are raising new generations of *T. pennyana* in the glasshouses of the Forestry Institute, Ibadan, with a view to discovering if any segregation giving evidence of hybrid origin occurs.

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