

# *Justicia jamisonii* Jongkind & Vollesen (Acanthaceae), a new species from Guinée, Côte d'Ivoire and Kenya

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**Summary.** A new species, *Justicia jamisonii* is described and illustrated. It resembles *Rungia paxiana* but has a much narrower membranous margin on the inflorescence bracts and the corolla is hairy on the outside. The species has an extraordinary geographical distribution, it is only known from Guinée and Côte d'Ivoire in the west and Kenya in the east, two areas separated by a c. 4,700 km gap. It is described here in *Justicia* because the genus *Rungia* will soon be united with the older genus *Justicia* by the second author.

**Key Words.** Africa, *Rungia*, taxonomy.

## Introduction

Three different species of *Rungia* were collected on recent expeditions around the Nimba Mountains. Two of them were identified as *Rungia guineensis* Heine and *R. paxiana* (Lindau) C. B. Clarke. The third one also keys out as *R. paxiana* using the key in *Flora of West Tropical Africa* (Heine 1963: 429) but the recently collected plant is different and is described here as new.

## Taxonomy

***Justicia jamisonii* Jongkind & Vollesen sp. nov.** Species nova *Rungiae paxianae* (Lindau) C. B. Clarke affinis, sed bracteis inflorescentiae margine translucenti multo angustiore differt. Typus: Guinée, Nimba Mountains, Gouan Valley, 850 m alt., 21 Aug. 2008, Jongkind 8374 (holotypus WAG; isotypus K).

<http://www.ipni.org/urn:lsid:ipni.org:names:77116131-1>

*Herb* c. 0.5 m. high. *Leaves* opposite, entire, petiolate; lamina papery, up to 22 cm long and 5 cm wide, gradually narrowing to the petiole, apex acuminate, puberulous on both sides, with 6 – 9 pairs of lateral nerves, midrib and lateral nerves more densely hairy. *Inflorescence* a sessile, axillary spike up to 3 cm long; bracts and bracteoles 5 – 7 × 3 – 5 mm, uniformly green with a narrow c. 0.5 mm wide colourless membranous margin, apiculate, upper half outside with many c. 1.5 mm long, white to pale brown straight hairs on the surface and along the edge, lower half

almost glabrous. *Calyx* 4 – 5 mm long, with 5 gradually narrowing lobes slightly different in length. *Corolla* 2-lipped, lower lip trilobed, white with purple dots on the middle lobe of the lower lip, puberulous on the outside, with 2 pockets of hairs in the mouth on the upper lip, lobes imbricate in bud, tube 3 – 4 mm long, infundibuliform, lips c. 3 mm long; stamens 2, exserted from the corolla tube, filaments 2 – 3 mm long, glabrous, anthers 1 – 1.5 mm long, with obliquely placed thecae, lower theca tailed at base; ovary hairy, style just exserted from the corolla tube, with hairs on lower half. *Fruit* glabrous or with a few hairs, 2-seeded, the placenta arising elastically from the base at maturity, c. 16 mm wide after dehiscence; seeds ellipsoid, strongly compressed, 3 × 4 mm, glabrous. Fig. 1.

**DISTRIBUTION.** South-eastern Guinée (Guinée Forestière, Nzérékoré), western Côte d'Ivoire (Danané) and western Kenya.

**SPECIMENS EXAMINED. CÔTE D'IVOIRE.** Mt Tonkoui, *Aké Assi* 12933 (P); Mt Tonkoui, 1100 – 1200 m alt., *Boughey* GC 18218 (K, WAG). **GUINÉE.** Nimba Mts, Gouan Valley, 850 m alt., *Jongkind* 8374 (holotype WAG; isotype K); Nimba Mts, Zougoué Valley, 850 m alt., *Nimba Botanic Team WH* 650 (K, WAG); Nimba Mts, *Schnell* 3566 (P). **KENYA.** Kakamega Forest, Yala R., Iloro, 1650 m alt., *M. G. Gilbert* 6900 (EA, K).

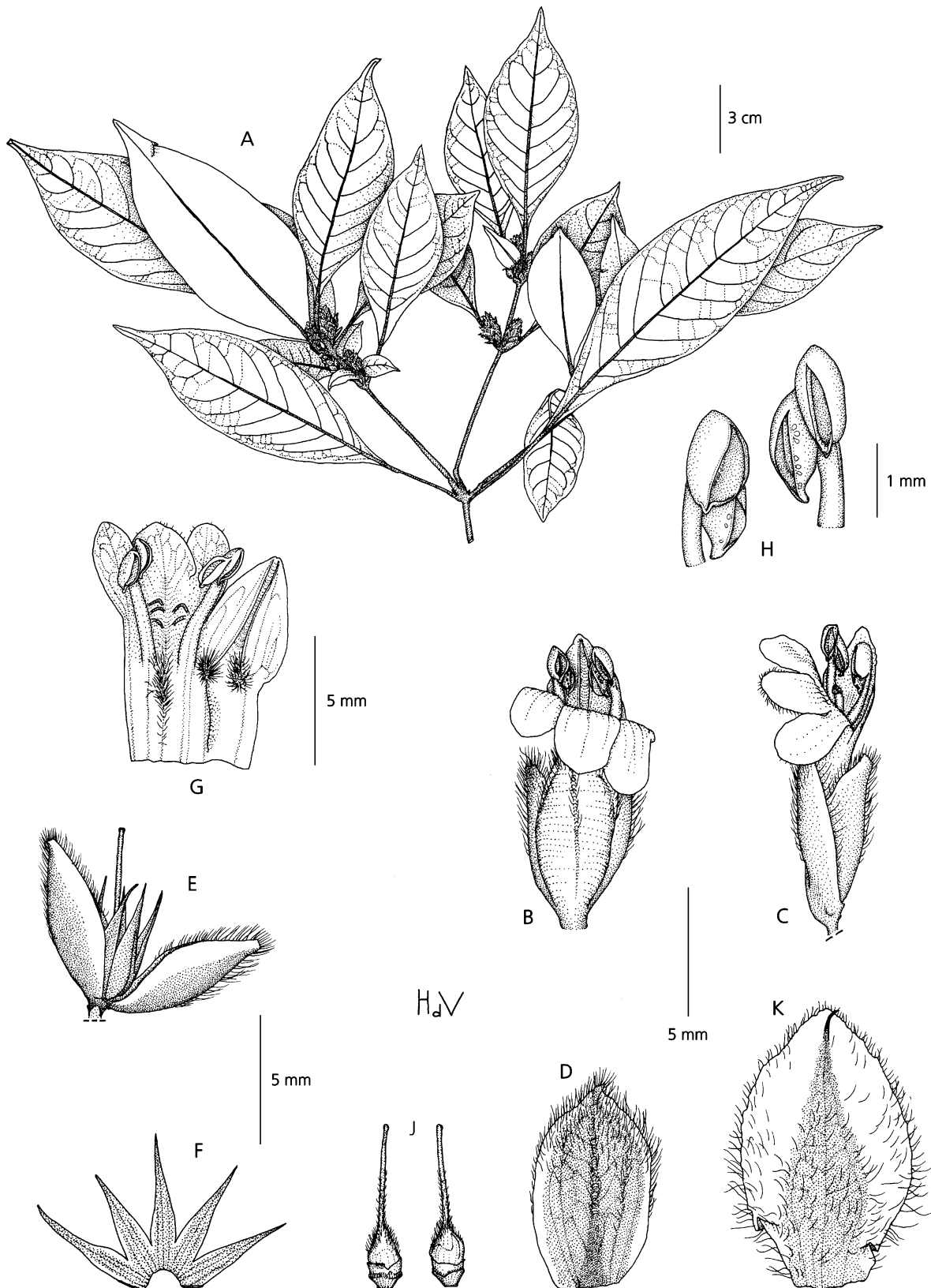
**HABITAT.** Forest on the slopes of mountains; alt. 800 – 1650 m.

**CONSERVATION STATUS.** Owing to the very unusual distribution pattern shown by this species it is impos-

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**Fig. 1.** A – J *Justicia jamisonii*. A habit; B flower viewed from below; C flower, lateral view; D large frontal bract showing the narrow membranous margin; E calyx with 2 lateral bracts, the right bract pushed aside to show calyx; F calyx from the outside; G dissected corolla; H anthers; J ovary and style from 2 sides. K *Rungia paxiana* large frontal bract for comparison. A – J from Jongkind 8374, K from Adames 652. DRAWN BY HANS DE VRIES.

sible currently to give an accurate conservation assessment. Therefore we treat it as Data Deficient (DD) following the IUCN (2001) categories. However, it is certainly not a common species.

**ETYMOLOGY.** This species is named after Jamison Suter. Without his continuous support over several expeditions in Guinée and Liberia, we would not have been able to undertake most of our fieldwork and the type material of this new species would not have been collected.

**NOTES.** The leaves of *Justicia jamisonii* and of *Rungia paxiana* look much alike and the size of the inflorescences is similar, but the bracts are smaller (5 – 7 mm long vs 8 – 10 mm in *R. paxiana*) and the membranous margin of the bracts of the new species are c. 0.5 mm wide while these of *R. paxiana* are 2 – 3 mm wide. Apart from the difference in the bracts, the new species also has the corolla hairy on the outside while it is glabrous in *R. paxiana*. Two of the earlier collected specimens of this new species had been identified as *R. paxiana* and Schnell 3566 from western Africa is cited under this species in the *Flora of West Tropical Africa* (Heine 1963).

The geographical distribution of the new species was considerably enlarged to the east when the type specimen was shown at Kew to the second author. He recognised it as being the same species as an unidentified *Justicia* specimen from Kenya in K. The locations in the west and east are separated by a c. 4,700 km gap. It is not the only species found on the Nimba Mountains and nearby highlands and then again far to the east in other forests often at higher elevation, but in these other cases the gap is only 800 – 1800 km wide. Examples of such species are *Epistemma assianum* D. V. Field & J. B. Hall, *Marsdenia exellii* C. Norman, *Justicia guineensis* (Heine) W. D. Hawth., *Dorstenia astyanactis* Aké Assi and *Erica silvatica* (Engl.) Beentje. Within Acanthaceae there are other examples of species disjunct between West and East Africa. *Satanocrater*

*fellatensis* Schweinf. occurs in Guinée and the border regions between Sudan and NW Ethiopia, *Crossandra massaica* Mildbr. occurs in one locality in Ghana and is widespread in East Africa from Ethiopia to S Tanzania. Both of these are dry country species.

In the West, three of the five specimens of the new species indicate a preference for forest on medium altitude slopes; altitude data is lacking for the other two specimens. The Kenyan specimen is from somewhat higher altitudes but has a similar ecology.

The new species is described here in *Justicia* because the genus *Rungia* will soon be united with the older genus *Justicia* by the second author.

The following specimens of *Rungia paxiana* were studied from the same area and vegetation: Côte d'Ivoire, Cascades du Mont Tonkoui, 350 m alt., Bamps 1940 (BR); Guinée, Nimba Mts, Gouan Valley, 800 m alt., Jongkind 8362 (BR, WAG); Liberia, Nimba Mts, LAMCO HQ Camp, 550 m alt., Adames 652 (K, P).

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