Aloe ikiorum: A new species from Uganda

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Introduction

In January 2006, the author joined Gilfrid Powys on a road trip from Kenya to north east Uganda to visit Kidepo National Park. To shorten the journey it was decided to cross to Uganda via the seldom used Kenyan border post of Oropoi. This border post is in Turkana District, in the north west of Kenya, at the base of the Rift Valley directly facing the Ugandan escarpment and south of Kidepo National Park. In our haste to reach Kidepo, no time was spent on the escarpment. However, on the way back it was decided to explore the top of the steep Ugandan escarpment overlooking the Kenyan plain. The area, because of its high altitude, receives considerably more rainfall then the arid lowland of north-west Kenya, and has lush Juniper forest on the mountain tops, interspersed, on the lower slopes, with large grassland areas dominated by tall *Hyparrhenia*

1 Ugandan escarpment overlooking the Kenyan border. Several plants of *Aloe ikiorum* are scattered among tall *Hyparrhenia* spp. grass. Find them!

Table 1: Comparison of *Aloe ikiorum* and its presumed closest relatives

	A. IKIORUM	*A. LATERITIA* VAR. *GRAMINICOLA*	*A. WOLLASTONII*
STEM	present	sometimes present on older plants	none
LEAVES	20–40 × 4–6 occasionally spotted	27 × 7 spotted	40–50 × 8–10 spotted
INFLORESCENCE	0.85–1.55 m tall 4–6 branches, capitate	1 m tall 3–8 branches, capitate	1.25 m tall 4–6 branches, cylindrical
FLORAL BRACTS	18 mm	12 mm	10–20 mm
PEDICEL	10–13 mm	20 mm	15–20 mm
PERIANTH	24 mm long pinkish red, fading to pale yellow in the upper third cylindrical trigonous with basal swelling, 6 mm across ovary constricted above to c 4 mm	33 mm long scarlet to orange with yellow tip, sometime all yellow cylindrical trigonous with basal swelling, 8 mm across ovary constricted above to c 5 mm	30–35 mm long flesh-pink to orange red or yellow cylindrical with basal swelling 8–10 mm across ovary constricted above to c 6 mm
OUTER LOBES FREE	8–10 mm	8 mm	10–12 mm
DISTRIBUTION & ALTITUDE	Uganda (North East) 1900 m	Kenya (Central) 1600–2500 m	Uganda (Central, South), Kenya (West) 1100–2285 m

spp. and scattered plants of woody genera, such as *Acacia*, *Erythrina* and *Combretum* spp. The area is the home of the Ik, hunter gatherers and today subsistence farmers, numbering a few thousand, and the subject of a controversial anthropological study a few years back (Turnbull 1972). Succulents were our main quest though obviously the dense tall grass made such search a hopeless case (Fig. 1). After several hours of fruitless searching we were ready to call it a day when, while following a tortuous path to a farm house, a familiar shape was noted! It was a smallish, single stemmed aloe growing almost on the path. A rapid search amongst the surrounding grasses revealed several others. The plant most closely resembled *Aloe lateritia* var. *graminicola* (Carter 1994, Carter et al. 2011) and more distantly another species, *Aloe wollastonii,* which was previously named *Aloe lateritia* var. *kitaliensis* (Reynolds 1966), but the presence of clear morphological differences suggested that the plant could be a new taxon (Table 1).

Diagnosis and description

Aloe ikiorum Dioli & G. Powys **sp. nov.**, *A. lateritiae* var. *graminicolae* (Reynolds) S. Carter *affinis*, *sed foliis angustoribusis et tenuioribus, inflorescentiis et bracteis floralibus longioribus, perianthiis et pedicellis brevioribus distinguitur.*

Type locality: Uganda, Karamoja Region, Kaabong District, among tall *Hyparrhenia* spp. on the escarpment overlooking Kenyan border, 3° 39′ N, 34° 17′ E, c 1.900 m, 5th January 2006, *Dioli 116* (holotypus ABH58276! photo FT! photo EA!).

Plant: solitary, medium sized, growing among dense *Hyparrhenia* spp. (Fig. 2a–c).

Stem single, rarely branched, recumbent then erect, 20–30 × 5–7 cm, with some dried leaf remains persistent thereon. In cultivation, the stem apex branches profusely (Fig. 3).

Leaves 12–24, in a dense rosette, spreading, lanceolate, 20–40 × 4–6 cm, thin, ca. 0.3–0.5 cm thick at the base, and easily broken, smooth, upper surface bright green and lower surface paler grey-green. In dry conditions, upper surface reddish-brown to grayish-green, lower surface paler grey-green, with apex of older leaves dry and curled (Fig. 2b). Surfaces profusely, yet obscurely, striated longitudinally by thin white-greenish lines which are more distinct on the lower surface; juvenile plants abundantly spotted, adult plants generally unspotted, occasionally some adult plants with lenticular spots ca. 8 × 2 mm, scattered or in irregular transversal lines, more visible on the upper surface; margins whitish with soft uncinate brown

2a–c Adult plants of *Aloe ikiorum* among *Hyparrhenia* spp. grass.

3 *Aloe ikiorum* plants in cultivation. *4* *Aloe ikiorum* inflorescence.

5 Close up of raceme of *Aloe ikiorum*. *6* Perianth development of *Aloe ikiorum*.

tipped teeth ca. 2 mm long, 4–16 mm apart (or 8–10 teeth per 10 cm). Exudate pale yellow when fresh, to yellowish-brown, changing to chestnut-brown when dry.

Inflorescence erect 85–155 cm high, with 4 –5 branches, widely spreading. **Peduncle** greenish-grey, fleshy, basally flattened, ca. 15 mm wide at base, with bracts ca. 30 × 8 mm subtending the branches, and several narrow bracts ca. 2–20 mm below the main raceme (Fig. 4). **Racemes** erect, densely capitate 3–8 cm long (Fig. 5). **Floral bracts** reflexed to subtending ca. 18 × 2 mm, papery linear-lanceolate with 1–3 dark brown lines. **Pedicels** ca. 10–13 mm long. **Perianth** pinkish-red, fading to pale yellow in the upper third, curved, glabrous, cylindric and slightly trigonous with basal swelling, ca. 24 mm long, 6 mm across at the ovary, slightly constricted above to 4 mm then widening toward the mouth, outer tepals free for 8–10 mm with slightly spreading tips. **Buds** with greenish tips (Fig. 6). **Stamens** and **Style** scarcely exserted. **Capsule** ovoid, ca. 30 mm long

Etymology: This species is named after the Ik, the ethnic group living in the area where the plant was discovered.

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