



Fig. 3. Distribution maps. A: *C. evansii* (●) and *C. hukaungensis* (■). B: *C. meghalayensis* (+), *C. minor* (■) and *C. spicatus* (●).

## 2. *Calamus hukaungensis* A. Henderson, sp. nov.

Figs. 1B & 2B

TYPE: MYANMAR. Kachin: Ledo road, Tanai Township, 38 km S of Tanai toward Myitkyina, 26°03'N, 96°43'E, 285 m, 3 Feb 2005, A. Henderson, C. Peters, U Saw Lwin, U Myint Maung, U Tin Maung Ohn, U Tun Shaung, U Kyaw Lwin 3174 (HOLOTYPE: NY! ISOTYPES: K! RAF! RANG!).

A similariibus speciebus differt inflorescentiis bracteis primariis marginibus apicibus dense setosis.

Stems clustered, to 4 m long and 0.8-1 cm diameter (with leaf sheaths). Leaf sheaths greenish-brown with whitish tomentum, densely covered with reddish-brown, flattened, horizontally spreading spines to 1 cm long, with a non-spiny, swollen area both sides of sheath between petiole insertion and knee; knees present; ocreas present, to 0.5 cm long, densely bristly; flagella present, to 1.5 m long; petioles 12-22 cm long, sparsely covered laterally and abaxially with recurved spines to 0.5 cm long; rachis 16-30 cm long, abaxially with few, recurved, solitary spines; pinnae 4-6 per side of rachis, lanceolate, arranged in distant groups, 20-30 cm long, 2.5-3.5 cm wide, without spines except at apices, the apical pair of pinnae joined at their bases for one quarter to one half their length; cirri absent. Inflorescences to 2 m long, flagellate; partial inflorescences inserted below the mouth of the partial inflorescence bract; partial inflorescence bracts, closely sheathing the main axis except at the apex, where open and flat (and apparently tattering), with few, very short, recurved spines, the apical margins densely covered with bristles as the ocrea; staminate inflorescences branched to three orders, with up to 3 partial inflorescences; rachillae to 1.5 cm long; rachillae bracts distichously arranged, to 1 mm long, glabrous except for ciliate margins; floral bracteoles 0.5 mm long, glabrous; staminate flowers to 3 mm long, to 14 per rachilla, arranged alternately and distichously along the rachillae; calyx 2 mm long,

tubular except for the 3-lobed apex; corolla 3 mm long, with 3 valvate petals free to the base; pistillode 0.5 mm long; pistillate inflorescences branched to two orders, with up to five partial inflorescences, each with up to 15 rachillae; rachillae 1.5-5 cm long; rachillae bracts distichously arranged, 2 mm long, with brown hairs; pistillate flowers to 20 per rachilla, borne alternately and distichously along the rachillae; sepals to 3 mm long, connate basally for ca. two-thirds their length, lobed above; petals to 3 mm long, free; fruits not seen.

Local names and uses: htin phu (Naga language); the stems used for weaving.

Distribution and habitat: Myanmar (Kachin)(Fig. 3A); lowland forest on flat land, at 190-285 m elevation.

Notes: Distinguished from other species in Group V by its partial inflorescences inserted below the mouths of the partial inflorescence bracts, which are open at the apex and have densely bristly apical margins.

Additional specimen examined: MYANMAR. Kachin: Shinbwiyang gold mine, disturbed area near mine, 26°41'N, 96°13'E, 190 m, 14 Jan 2005, Henderson et al. 3125 (K, NY, RAF, RANG).

## 3. *Calamus meghalayensis* A. Henderson, stat. & nom. nov. *Calamus floribundus* var. *depauperatus* Becc., Ann. Roy. Bot. Gard. (Calcutta) 11: 79. 1908. Type. INDIA. Meghalaya: Gari in the Garo Hills, no date, C. Clarke s. n. (HOLOTYPE: FI-B n.v.; holotype image in Beccari 1913).

Stems to 2 m long and 0.5-0.6 cm diameter (with leaf sheaths). Leaf sheaths green with brown tomentum, sparsely covered with brown, flattened, horizontally spreading spines to 1 cm long; knees present; ocreas present, less than 0.5 cm long, densely bristly; flagella present, to 2 m long; petioles