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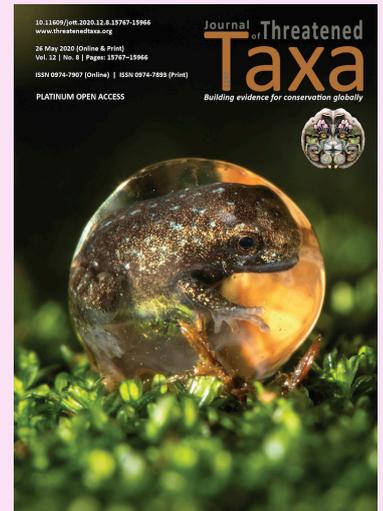
### NOTE

## HENRY'S RATTAN CALAMUS HENRYANUS BECC. (ARECACEAE), A NEW RECORD TO INDIA

Selim Mehmud & Himu Roy

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## Henry's Rattan *Calamus henryanus* Becc. (Arecaceae), a new record to India

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The genus *Calamus* L. is the largest group of Arecaceae, represented by 520 species and distributed in OW tropics especially Malesia (Mabberley 2017). Out of 48 species of *Calamus* in India, 47 were reported by Renuka et al. (2010) and one more species by Mandal et al. (2019). While exploring the Barak valley of Assam, an interesting species of *Calamus* viz., *Calamus henryanus* Becc. was collected from Bhuban Hill of Cachar District located in the southern part of Assam (Figure 1). This species is a new record to the flora of India as it has not been reported in any of the works on rattans in India (Basu 1992; Biswas & Dayal 1995; Renuka 1999; Rahman 2007; Barooah & Ahmed 2014). This species is known to occur in China, Thailand, Laos & Vietnam (Evans et al. 2002), and Myanmar (Henderson et al. 2018).

Standard method (Jain & Rao 1977; Dransfield 1986) for collection of specimens and herbarium preparation was followed and preliminary identification of the specimen was done on the basis of careful taxonomic analysis and survey of literature (Beccari 1908; Henderson 2009; Peters & Henderson 2014). The identity of the species was confirmed through online herbaria Kew Herbarium Catalogue (K) and New York

Botanical Garden (NYBG). The website Palm Web was also consulted. The specimens have been deposited in the departmental herbaria of Cotton University (Image 2) and a duplicate was submitted in ASSAM (Accession No. 95113, 95114). Taxonomic description along with photographs (Image 1 & 2), habitat, examined specimens and a note is provided to facilitate its easy identification.

*Calamus henryanus* Becc., Rec. Bot. Surv. India 2:199.1902.

Clustered climbing rattan, 6–8 m tall; stem 10–12 mm across including sheath and 8–9 mm excluding sheath, leaf sheath of young stem is covered by brown indumentum, mature stem green; spines triangular, brown, 0.3–2.5 cm long, comparatively more dense and longer below the knee. Internodes 10–12 cm. Knees 2.5–3×0.6–0.7 cm, armed or unarmed, light green to yellow, surface smooth or with brown indumentums. Ocrea inconspicuous, 1–2 mm long, unarmed. Flagella 1.3–1.5 m, base c. 5×3 mm, armed by 2–3 mm spines. Leaf ecirriate, 1–1.1 m long, abaxially armed by 2–3 mm spines, adaxially rachis unarmed. Petiole 28–30 cm with triangular adaxial spines 4–5 mm. Leaflets 30–46 per side, regular, alternate and opposite, in equidistant, linear to

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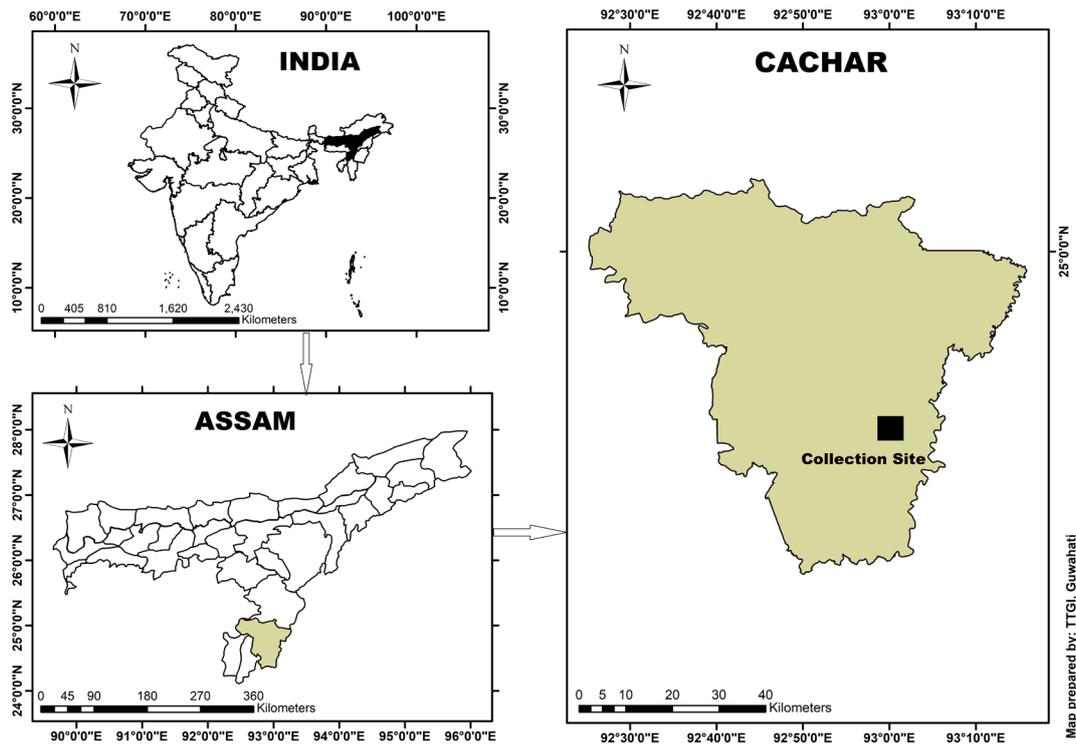


Figure 1. Study area showing collection site.

ensiform, basal longest leaflets 30–33×2 cm, mid region leaflets 26–28×1.3 cm, terminally free 14–16×0.5–0.6 cm, 5–nerved, acute to long acuminate at apex; bristles 2mm long, brown, crowded abaxially, few and restricted to the vein adaxially. Inflorescence flagellate, prophyll 18–20 cm long, tubular; partial inflorescence with splitting, dry or tattering bract; long one at base; terminal rachilla is two to three times longer than others. Staminate inflorescence 3–3.5 m long with 5–7 nos. partial inflorescences 7–23 cm long; flagella 25–30 cm long, armed. Rachillae 2–4 cm long, alternate, slightly bent or straight. Staminate flower ovate c. 3×2 mm; calyx c. 2mm long, connate, green; corolla c. 3mm long, free, ovate; six stamens, c. 3mm long; filaments linear, 2mm long, anthers bi-lobed, 2mm long, fertile, yellow; pistillode c. 1mm long, trifid. Pistillate inflorescence 1.5–1.8 m long, partial inflorescences 2–4 nos. 4–23 cm long; flagella 80 cm long, densely armed. Rachillae 1–4 cm long; dyad alternately arranged. Pistillate flower c. 3×1 mm, ovate; calyx connate, tip villose; corolla free c. 2×1.5 mm long, ovate, light green; six staminodes, c.1mm long, staminodal ring c. 2mm long with six tips; gynoecium c. 2mm long; ovary tri-carpellary; style short; three stigmas. Neuter flower oblique or ovate, c. 2mm long; pedicel c. 0.5mm long; perianth same as pistillate flower; five staminodes, c. 1mm; filaments linear, free, c.

0.5mm long; pistillode bifid, c. 1mm long. Immature fruit ovoid 5×3 mm.

**Flowering:** November–January; **Fruiting:** February onwards.

**Habitat:** The species was found in association with *Alpinia* spp. *Bambusa* spp., *Bauhinia acuminata* L., *Mesua ferea* L., *Mikania micrantha* Kunth, *Calamus erectus* Roxb., *Saraca asoka* (Roxb.) de Wilde., and *Licuala peltata* Roxb. ex Buch-Ham. at an elevation up to 704m on slopes and shady areas.

**Specimen examined:** #69 (Image 2A), 10.xi.2018, India, Assam: Bhuban Hill, Cachar District, 24.644°N; 93.144°E, 704m, coll. S. Mehmud; #116 (Image 2B), 23.iii.2019, 24.648°N; 93.007°E, 112m, coll. S. Mehmud (Department of Botany, Cotton University; ASSAM); NQD 2023, Vietnam, Ha Giang Province, Quang Binh District, Vinh Hao State Forestry Company, Compartment 9, Block 301, Coordinates 482386 & 2470188, 134m, 16.x.2019, Nguyen Quoc Dung and Le Manh Tuan (NYBG barcode 01204787!); #1967, 22.xi.2003, Myanmar, Mon State, Kyaikto, Mt. Kyaikhtiyo, 17.479°N, 97.093°E, 900m, D.R. Hodel (NYBG barcode 02390385!).

**Note:** The leaf of the specimens examined was found with regular leaflets while the presence of both regular and interrupted leaflets are known to occur in the species (Evans et al. 2002). The collection site located



Image 1. *Calamus henryanus*: A—habit | B—C—staminate inflorescence | D—pistillate inflorescence | E—rachilla with pistillate and neuter flower | F—neuter flower | G—stamens of staminate flower | H—pistillodes of staminate flower | I—calyx tip of pistillate and neuter flower | J—K—staminode of pistillate and neuter flower respectively | L—pistillode of neuter flower | M—immature fruit. © Selim Mehmud.



Image 2. Herbarium of *Calamus henryanus*: A—with staminate inflorescence | B—with pistillate inflorescence.

in the Bhuban Hill is 44–50 km away from the district headquarters at Silchar. Occurrence of the species was noted in a few spots and was within a range of around 7–9 km. A total of five populations with around 17 individuals were observed in the study area. Three populations out of five were observed near roadsides. The cane was found to be utilized by local people for preparation of furniture and domestic uses, which probably shrinks its occurrence in the study area. As the study area shares a border with Manipur, Mizoram, and Tripura, therefore, there are chances of occurrence of the species in these states of northeastern India.

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### Corrigendum

**Citation: Pawar. D., H.P. Nelson, D.R.L. Pawar & S. Khanwilkar (2019).** Estimating Leopard *Panthera pardus fusca* (Mammalia: Carnivora: Felidae) abundance in Kuno Wildlife Sanctuary, Madhya Pradesh, India. *Journal of Threatened Taxa* 11(5): 13531–13544; <https://doi.org/10.11609/jott.4774.11.5.13531-13544>

- 1) Abstract—Page 13531, Line no 7 “16 Trail cameras” should be stated as “10 Trail cameras”
- 2) Material and method section under the title “Trail camera placements”(Column 3) page 13534, Line No—12 “Sixteen trail cameras” should be stated as “Ten trail cameras”.
- 3) Abstract—Page 13531, Line no 8 “The total sampling effort was 180 trap-nights” could be stated as “The total sampling effort was 180 trap-nights for each study habitat”





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