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# **Journal of Threatened Taxa**

Building evidence for conservation globally

www.threatenedtaxa.org

ISSN 0974-7907 (Online) | ISSN 0974-7893 (Print)

#### **NOTE**

# CAREX PHACOTA, SPRENG. (CYPERACEAE): A NEW RECORD FOR THE CENTRAL WESTERN GHATS OF KARNATAKA, INDIA

E.S.K. Udupa, H.U. Abhijit & K.G. Bhat

26 December 2019 | Vol. 11 | No. 15 | Pages: 15087-15088

DOI: 10.11609/jott.4482.11.15.15087-15088





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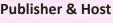
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## **Partner**



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# CAREX PHACOTA, SPRENG. (CYPERACEAE): A NEW RECORD FOR THE CENTRAL WESTERN GHATS OF KARNATAKA, INDIA

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The genus Carex L. of the family Cyperaceae is represented by 1,800–2,000 species. It has a cosmopolitan distribution at high altitudes of the temperate and tropical regions (Mabberley 2008). Hazra & Verma (1996) reported 62 species of *Carex* from Sikkim and the Darjeeling Himalaya. During a survey of grasses in Kudremuk National Park, Karnataka (13.169°E & 75.281°N) a species of Carex was collected and confirmed as Carex phacota by using the floristic literature. The genus Carex is characterized by a perennial rhizome, panicled spike, unisexual flowers rarely dioceses, glumes numerous, persistent and imbricate around the rachilla (Images 2 & 3). Unisexual spikelets with one or two male florets at the tip and remaining female florets in the inflorescence, shortly beaked utricles are the key characters of Carex phacota (Gamble, 1928). They usually grown on wetlands, stream sides or lakes; hence they are commonly called lakeshore sedge. It is distributed in southern and eastern Asia, Bhutan, Nepal, China, Indonesia, Japan, Malaysia, Myanmar, Sri Lanka, northern Thailand, and Vietnam (Chowdary 2016). In India it was first reported by Gamble

in 1928 at Nilgiri Hills, Tamil Nadu; later from Assam, Chhattisgarh, Kerala, Meghalaya, Sikkim, West Bengal and now Karnataka also. The herbarium is deposited in Central National Herbarium, Botanical survey of India, Howrah and also Herbaria, Department of Applied Botany, Kuvempu University, Shankaraghatta, Shivamogga, Karnataka (Image 4).



ISSN 0974-7907 (Online) ISSN 0974-7893 (Print)

PLATINUM OPEN ACCESS



Flowering and Fruiting: November-March

Habitat and Ecology: Wet soil of grasslands, ditches, banks of streams and roadsides ditches at an altitude of up to 1,400m of shola (Image 1).

Specimens examined: KUABYLKS21, 21.i.2017, Gogudda, Kudremuk National Park, Chikkamagalore District, Karnataka, coll. H.U. Abhijit.

### Carex phacota Spreng.,

F.B.I. vi.708. Syst. Veg. 3: 826. 1826; Hook.f., Fl. Brit. India 6: 708. 1894; Gamble, Fl. Pres. Madras 1686(1169). 1931; Manilal, Fl. Silent Valley 338. 1988; Karthik. et al., Fl. Ind. Enum. Monocot. 40. 1989; Vajr., Fl. Palghat Dist. 542. 1990; Rejani, Cyperaceae. Kerala 101. 1991; C.D.K. Cook Aquat. Wetl. Pl. Ind. 99. 1995; Sasidh. et al., Bot. Stud. Med. Pl. Kerala 39. 1996; Sasidh., Fl. Shenduruny WLS 363. 1997; Swarup. et al., Shola For. Kerala 78. 1998; Sasidh., Fl. Periyar Tiger Reserve 484. 1998; Sasidh., Fl. Parambikulam WS 372. 2002; Mohanan & Sivad., Fl. Agasthyamala 772. 2002.

An erect, perennial herb with tufted culms 50–60 cm long, leafy mainly at the base. Leaves are slightly yellowish-brown in color size about 40x0.5 cm. Utricles

**DOI:** https://doi.org/10.11609/jott.4482.11.15.15087-15088

Editor: B. Ravi Prasad Rao, Sri Krishnadevaraya University, Ananthapuramu, India.

Date of publication: 26 December 2019 (online & print)

Manuscript details: #4482 | Received 11 August 2018 | Final received 02 October 2019 | Finally accepted 01 December 2019

Citation: Udupa, E.S.K., H.U. Abhijit & K.G. Bhat (2019). Carex phacota, Spreng. (Cyperaceae): a new record for the central Western Ghats of Karnataka, India. Journal of Threatened Taxa 11(15): 15087–15088. https://doi.org/10.11609/jott.4482.11.15.15087-15088

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Funding: Kudremuk National Park, Karnataka Forest Department.

 $\label{lem:competing} \textbf{Competing interests:} \ \ \textbf{The authors declare no competing interests.}$ 

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Acknowledgements: The authors are thankful to Dr. V. P. Prasad of Central National Herbarium, Botanical survey of India, Howrah for help in the ID conformation. The gratitude extended to DFO and Team, Karnataka Forest Department, Kudremukh National Park for giving the entry to the national park. We also thank Prof. Y.L. Krishnamurthy, Department of Applied Botany, Kuvempu University for herbarium deposition in department Herbaria and also CBZ students, Sri JCBM College Sringeri.



Image 1. Habitat of Carex phacota, Spreng.



Image 2. Habit



Image 3. Inflorescence

not or very shortly beaked. Female glumes 2mm long with hispid awn, oblong or ovate, apex deeply emarginated, sides pale brown, midrib and awn green. Bracts long, upper filiform; spikelet's unisexual, one terminal male, rest female with some times a few male flowers at the tip,

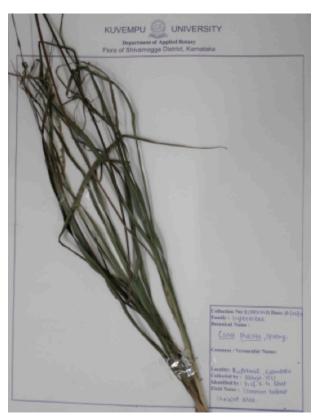


Image 4. Hebarium sheet of Carex phacota, Spreng.

linear-cylindric, 1–4.6 mm long, solitary, pedicelled, often drooping: stigmas 2; utricles biconvex, ovate or trapezoid, acute, hardly beaked, usually very shortly stipitate, brown with pale angles, faces covered with white papillae which turn chocolate or purplish-brown on drying (Gamble 1928; Prasad 2002)

Flowering and Fruiting: November-March

Habitat: Growing in swampy places or streams of Shola.

Specimens examined: KUABYLKS21, Gogudda, Kudremuk National Park, Chikkamagalore District, Karnataka, coll. H.U. Abhijit.

## References

Chowdary, A., R. Biswas, M. Chowdary & A.P. Das (2016). Carex phacota Spreng. (Cyperaceae): a new record for West Bengal, India. *Journal of Economic and Taxonomic Botany* 40(2): 43–45.

Gamble, J.S. & C.E.C. Fischer (1935). Flora of the Presidency of Madras. Volume 3. Adlard and Son, London, 1398pp.

Hazra, P.K. & D.M. Verma (1996). Flora of Sikkim. Volume 1. Botanical Survey of India, Kolkata, 336pp.

Mabberley, D.J. (2008). Mabberley's Plant Book-A Portable Dirtonary of the Plane, Their Classification and Uses. Cambridge University Pres & Cambridge, 1021pp.

Prasad, V.P. & N.P. Singh (2002). Sedges of Karnataka (India). Scientific Publishers (India), Jodhpur, 354pp.





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ISSN 0974-7907 (Online) | ISSN 0974-7893 (Print)

December 2019 | Vol. 11 | No. 15 | Pages: 14927–15090 Date of Publication: 26 December 2019 (Online & Print) DOI: 10.11609/jott.2019.11.15.14927-15090

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