

Eleocharis wichurae (Cyperaceae): A new record for India

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Abstract

Eleocharis wichurae Boeckeler (Cyperaceae) is reported for the first time from India. The present report provides a brief description, along with a photoplate and notes on distinguishing characters for its easy identification in further collections.

Keywords: Cyperaceae, *Eleocharis*, India, new record, Sikkim Himalaya

Introduction

The authors are engaged in the taxonomic revision of the genus *Eleocharis* R.Br. in India. While examining the materials of *Eleocharis* in BSHC (Botanical Survey of India, Sikkim Himalayan Regional Centre, Gangtok) some specimens were found identified as *E. congesta* D. Don. Perusal of relevant literature (Boeckeler, 1870; Dai & Strong, 2010) and critical analysis of the glumes and nut morphology, identity of the species was revealed as *E. wichurae* Boeckeler. A thorough scrutiny of literature (Clarke, 1893; Cook, 1996; BSI, 2018) revealed that this species is so far not recorded from India and hence it is reported here as a new record for India.

Eleocharis wichurae Boeckeler, *Linnaea* 36: 448. 1870. *E. petasata* (Maxim.) G. Zinserl., *Fl. URSS* 3: 589. 1935. *E. tetraquetra* Nees var. *wichurae* (Boeckeler) Makino, *Bot. Mag., Tokyo* 52: 396. 1938. *Scirpus petasatus* Maxim., *Bull. Soc. Imp. Naturalistes Moscou* 54: 64. 1879. **Fig.1**

Perennial herbs. Stolons short or absent. Culms greyish green, tufted, c. 30 cm high, slender, sharply 4-angled, smooth; sheaths 2 per culm, reddish to purplish, mouth obliquely truncate. Spikelet solitary, terminal, placed oblique at the tip of culms, brownish to pale green, ovoid to narrowly ovoid-oblong, 8–12 × 3–4 mm, distinctly wider than the culm, many-flowered, apex acute. Basal glumes 2, empty; basal-most glume amplexicaul

for whole spikelet base; fertile glumes pale green medially and rust-colored striate on both sides, tightly spirally imbricate, oblong to elliptic and boat-shaped, c. 4 × 2.3 mm, membranous, midvein thin and obscure, margins broadly hyaline, apex obtuse-rounded. Perianth bristles 5 or 6, unequal, rust colored, as long as or slightly longer than achene, plumose with spreading hairs; hairs c. 0.3 mm long. Style 3-lobed. Achenes pale olivaceous to brownish, obovoid to broadly obovoid, c. 1.7 × 1 mm, obtusely 3-sided, slightly compressed, both surfaces smooth, apex not constricted; persistent style base narrowly ovoid; style base as long as achene or nearly so, laterally compressed, apex acute to obtuse.

Flowering & fruiting: July – September.

Distribution: China, Japan, Korea, Russia (Far East, Siberia) (Dai & Strong, 2010) and now in India.

Specimen examined: INDIA, Sikkim, Chungthang district, on the route of Chungthang-Lachen, 16.08.1989, N.R. Mandal 10470 (BSHC).

Note: *E. wichurae* is close to *E. tetraquetra* Nees, hence at times it is also treated as a variety of the latter. Clarke (1893) in *Hooker's Flora of British India* treated this name as a synonym under the latter. Therefore, it is obvious that the description of *E. tetraquetra* in the *Flora of British India* includes

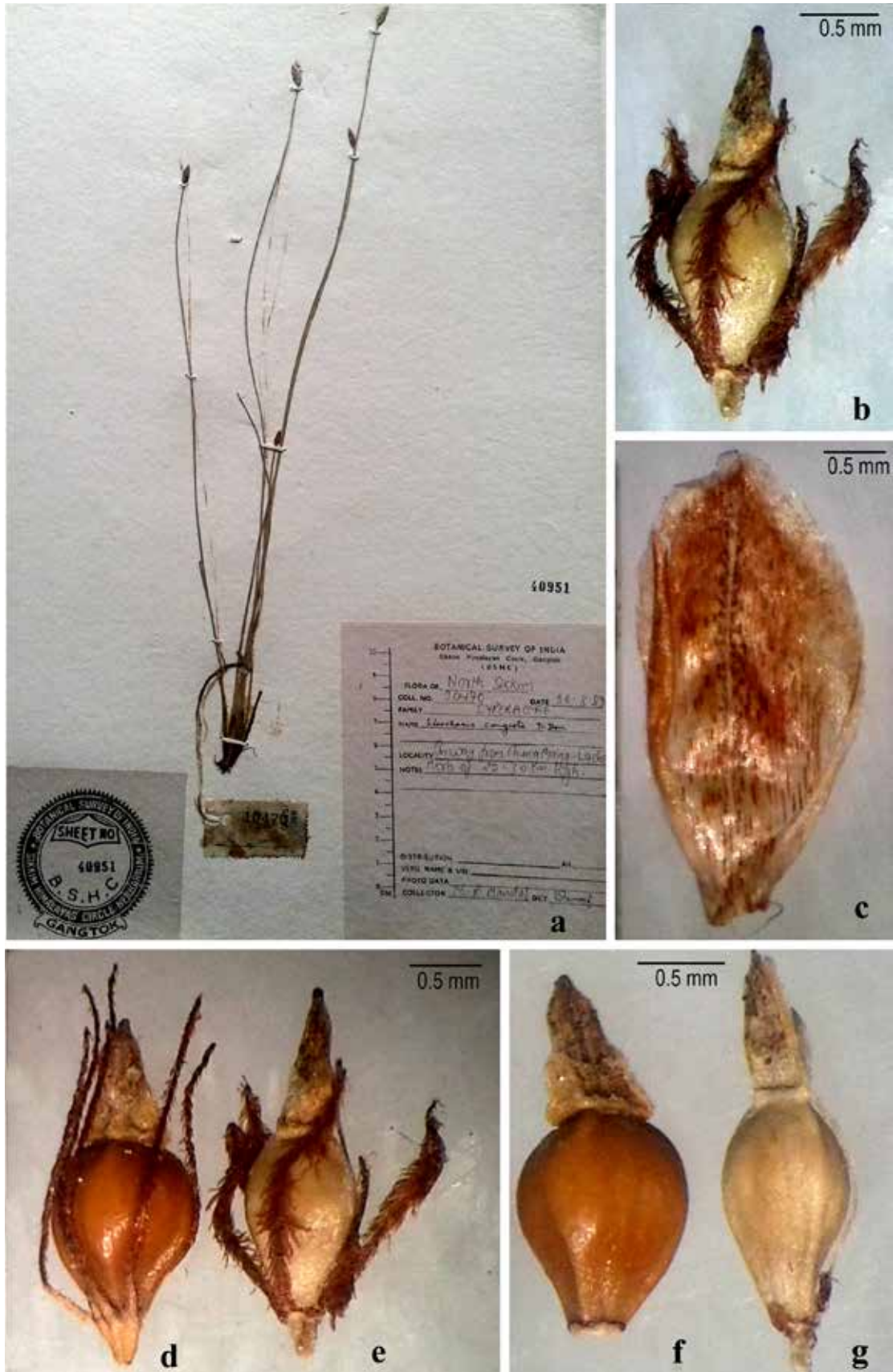


Fig. 1. *Eleocharis wichurae* Boeckeler: **a.** Herbarium specimen (N.R. Mandal 10470, BSHC); **b.** Achene; **c.** Glume; **d-g.** Comparison of achenes (with or without perianth bristles): **d & f.** *E. tetraquetra*; **e & g.** *E. wichurae*.

the features of *E. wichurae* as well. However, it can be distinguished from *E. tetraquetra* by its larger glumes, plumose perianth bristles with spreading hairs, 1.7 mm long achenes (as opposed to 1.4 mm in *E. tetraquetra*) and narrowly ovoid persistent style bases.

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