

Cyperus conglomeratus subsp. *curvulus* - a new distribution record for India

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Introduction

While working on the specimens of the genus *Cyperus*, the author came across an unusual variant of *Cyperus conglomeratus*, collected from the arid region of Rajasthan. The specimen received on loan from BSJO was studied in detail and identified as *C. conglomeratus* subsp. *curvulus* (Boeckeler) Kukkonen which is not reported from India. To confirm the identity, the specimen was matched with image of the isolectotype of the basionym *Cyperus curvulus* Boeckeler housed in Herbarium B. The specimen studied is from the Bikaner district of Rajasthan adjoining Pakistan. Incidentally, the earlier report of *C. conglomeratus* subsp. *curvulus* in Indian subcontinent is from Pakistan (Kukkonen, 2001). As per the World Checklist (WCSP, 2015) it is distributed in Madagascar, Socotra in Northeast Tropical Africa, Saudi Arabia and Yemen in Arabian Peninsula, Iran in Western Asia and Pakistan in Southern Asia. Therefore, it is reported here as a new record for India. For the easy identification, a description of the plant is provided here along with nomenclature citations and a plate depicting the habit, floral parts and achene.

Taxonomy

Cyperus conglomeratus subsp. *curvulus* (Boeckeler) Kukkonen in Ann. Bot. Fenn. 32: 158. 1995. *C. curvulus* Boeckeler in Linnaea 35: 541. 1868. Type: Saudi Arabia, In arenosis prope Dscheddam (Jedda), Schimper 810, 13-11-1835 (B) Image! (Barcode: B 10 0296514 – accessed on 14-10-2015). *C. effusus* Rottb., Descr. Icon. Rar. Pl.: 22. 1773. *C. conglomeratus* var. *socotranus* Balf. f. in Proc. Roy. Soc. Edinburgh 12: 411. 1884. (Fig. 1)

Perennial with thick rhizome, 7-8 cm high. Rhizome short, somewhat woody, covered with remains of basal sheaths. Roots wiry, much longer than culms, up to 16 cm long, often fine tomentose towards the base. Culms trigonous, glabrous, c 2 mm thick. Leaves crowded towards the base, somewhat thick, mostly exceeding the culm, linear, gradually narrowed to tip, acute at apex, canaliculate, often recurved, scabrous on the margins; basal sheaths brownish, ultimately disintegrating into fibrous remains. Inflorescence an umbel of heads, 2-3.5 cm across. Rays 1-4, 8-15 mm long. Involucral bracts 3-4, exceeding the inflorescence, gradually narrowed to apex, scabrous on the margins. Heads crowded with 3-7 spikelets. Spikelets digitate, compressed, oblong, acute at apex, 6-10 x 3-4 mm, whitish stramineous, 10-20-flowered; rachilla not winged. Glumes densely imbricate, oblong-ovate, acute and mucronate at apex, c 2.2 x 2 mm, with reddish streaks inside, with a prominent midnerve and 2 side-nerves, scarious towards the margin. Stamens 3; filaments up to 3 mm long; anthers linear-oblong, c 1.6 mm long. Style c 2 mm long, narrowed to



Fig 1. *Cyperus conglomeratus* subsp. *curvulus* (Boeckeler) Kukkonen: a. Habit, b. Spikelet, c. Glume, d. Stamen, e. Style, f. Achene (G.P. Roy 1750 BSJO)

base; stigmas 3, c 2 mm long. Nut (immature) trigonous or planoconvex, with concave ventral surface, obovoid, apiculate at the obtuse apex, c 1.2 x 0.5 mm.

Flowering & Fruiting: March (based on single collection).

Specimen examined: Rajasthan: Balab garden farm, Bikaner Dist., 20-03-1975, G.P. Roy 1750 (BSJO).

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References

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