

# *Schoenoplectiella* Lyein Haroti Region, South-East Rajasthan

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**Abstract:** *The members of Cyperaceae are popularly known as Sedge, they perennate by creeping sympodial rhizomes. Sedge almost resembles to the grasses. They chiefly inhabit swamp and wet pastures. Schoenoplectiella Lye is a genus of sedges. Its native range is world-wide. This paper deals with occurrence, distribution and general account of Schoenoplectiella Lye flora in Haroti region of South-east Rajasthan.*

**Keywords:** Cyperaceae; Haroti region; Rhizomatous; Sedge; *Schoenoplectiella* Lye

## 1. Introduction

The member of Cyperaceae is closely resembling with family Poaceae, hence included in the order Glumiflorae along with Poaceae by some authors. But can be distinguished from the latter by characters of stem (triangular), flower, fruit, seed and the method of germination. Some authors indicated that the Poaceae are not close allies of the Cyperaceae and so both should be placed in separate orders, Cyperales and Graminales.

The general vegetative parts characters of member of Cyperaceae are: herbs rarely sub-shrubby; perennate by creeping sympodial rhizomes; stems rarely hollow; leaves linear, grass-like; sheathing at the base and blade often quite reduced. The characters of floral parts of sedges are: flowers anemophilous, becoming unisexual; perianth reduced to scales or setae or absent; fruit an indehiscent nutlet and seeds with endosperm. The main genera of Cyperaceae of Haroti region are *Bulbostylis*, *Cyperus*, *Eleocharis*, *Fimbristylis*, *Fuirena* and *Schoenoplectiella*.

The genus *Schoenoplectiella* was first described in 2003 by Kaare Arnstein Lye. This genus was earlier known as *Schoenoplectus* and *Scirpus*. The *Scirpus* was most popular genera of sedge family. After the establishment of the new genus, related members have been placed in *Schoenoplectiella* Lye.

The present paper deals with habit, habitat and locality of *Schoenoplectiella* Lye flora of Haroti region. Haroti region covers Kota division of Rajasthan and includes Kota, Bundi, Jhalawar and Baran districts respectively. This is a part of south-east Rajasthan. Haroti plateau is situated at the edge of the Malwa plateau at 23°45' to 25°53' N latitude and 75°9' to 77°26' E longitude in the south eastern corner of Rajasthan. This region has dense floristic diversity suggests various wild plant species includes various wetlands, moist places and irrigated areas.

## 2. Material and Methods

Important floristic and ecological studies of various part of India have been made by various authors (Dadhich, 1974;

Lye, 2003; Pandey and Dilwaker, 2008; Hoenselaar, Verdcourt and Beentje 2010; Hayasaka, 2012; Kumar, 2012; Vashistha and Kaur Mandeep, 2013; Gautam and Sharma, 2014; Govaerts, Jiménez-Mejías, Koopman, Simpson, Goetghebeur, Wilson, Egorova & Bruhl, 2016; Jadhav, 2016 and Sharma, 2018, 2021 and 2022).

The main herb associate species of *Schoenoplectiella* Lye. in the area are *Cyperus rotundus* L., *Cyperus bulbosus* Vahl., *Cyperus compressus* L., *Eleocharis geniculata* (L.) Roem. & Schult., *Juncus bufonius* L., *Asphodelus tenuifolius* Cav., *Typha domingensis* Pers., *Spirodellapolyrhiza* (L.) Schleid., *Lemna perpusilla* Torrey and *Pontederia crassipes* Mart. A survey of the whole area was carried out from July 2020 to December 2022. Considerable account regarding the morphological characters, flowering and fruiting time and locality of common species of *Schoenoplectiella* Lye of Haroti region are discussed in this communication.

## 3. Results and Discussion

The *Schoenoplectiella* Lye is a widely distributed genus having many species, includes in the family Cyperaceae. Occurrence and systematic enumeration of common species of *Schoenoplectiella* Lye in Haroti region have been pointed out and described in this observation.

1. *Schoenoplectiella articulata* (L.) Lye  
(Syn. *Schoenoplectus articulatus* (L.) Palla and Syn. *Scirpus articulatus* L.)

Family: Cyperaceae

A glabrous perennial herb, roots adventitious, stems densely tufted, fistular, terete, green, trigonous, strait, leaves absent or the sheaths with a membranous acute tip. Inflorescence terminal or lateral spikelets with glumes, flowers trimerous, zygomorphic, bisexual, perianth represented by bristle or scale. Stamens 3, anthers linear, obtuse, yellow, basifixed, ovary tricarpellary, unilocular, single basal ovule, style long, stigma trifid, feathery. Fruits nut trigonous.

Status: Very common near various water bodies and marshy places.

Fls. and Frs: September to February.

Habitat: Marshy areas in grasslands and wet fallow fields

2. *Schoenoplectiellaroylei* (Nees) Lye  
(Syn. *Schoenoplectusroylei* (Nees.) Ovcz. & Czukav. and  
Syn. *Scirpusroylei* (Nees.) Parker)

Family: Cyperaceae

An annual tufted sedge, shallow roots, culms terete, sheaths membranous, without leaves. Spikelets sessile, pale reddish brown, ovoid, glumes lanceolate. Fruit nuts trigonous, brown to black.

Fls. and Frs: September to December.

Habitat: Common in marshy, moist and low-lying areas.

3. *Schoenoplectusscirpoides* (Schrad.) Browning

(Syn. *Schoenoplectuslittoralis* (Schrad.) Palla.)

Family: Cyperaceae

A perennial sedge, hygrophilous rhizomatous, stoloniferous stout, trigonous stem, bracteoles scale like spikelets, red brown, glumes boat shaped, thin. Fruit nuts obovate.

Fls. and Frs: October to April.

Habitat: Common along ponds, canals, riverbeds etc.

Three common species of *Schoenoplectiella* Lye (*Schoenoplectiella articulata* (L.) Lye, *Schoenoplectiellaroylei* (Nees) Lye and *Schoenoplectusscirpoides* (Schrad.) Browning) occurring in the Haroti region are enumerated in this article.

#### 4. Conclusion

Cyperaceae or the Sedge family includes sedges, often called slough grasses which resemble the grasses so much that they are commonly mistaken for them. The members of Cyperaceae (Sedges) are perennate by creeping sympodial rhizomes. They are perennial, rarely annual, grass-like or rush-like herbs perennating by means of an underground rhizome. They are chiefly inhabiting swamp and wet pastures. The species of *Schoenoplectiella* Lye dominated over mostly wetlands vegetations of area.

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