

DISTRIBUTION OF SEDGES IN VIDARBHA REGION OF MAHARASHTRA

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ABSTRACT

The results of field studies provide a general account of the distribution of cyperaceous plants in the Flora of Vidarbha. Maximum cyperaceous plants were collected from wetland. Frequent visits were made during October to January in the study region and specimens were collected and processed. The specimens were identified with the help of floras and available literature. Inland sedge vegetation can be categorised in different ecological groups which are discussed in the present paper.

Kew World: *Distribution, Cyperaceae, Vidarbha Region*

INTRODUCTION

Cyperaceae (Commonly Called sedge family) is the second largest family among monocotyledons and stands next to grasses. Cyperaceae is one of the most intricate families represented by 70-80 genera and 4000 species distributed throughout the world with about 28 genera and 500 species in India. Due to minute to smaller size of flower, least economic importance and intricacy due to narrow generic and specific delimitation, extreme variation in vegetative and floral parts (Khan, 1983; 1998; 1999 and 2000) the sedges have been neglected by most taxonomists. This is probably the reason, why studies could not progress as compared to other families such as grasses. Thus taxonomically Cyperaceae are neglected group of flowering plants in India more so in Vidarbha region. Therefore it needs to have been given specialized treatment from different angles and different aspects for the preparations of accounts.

Vidarbha is the north-eastern region of Maharashtra state made up of Nagpur and Amravati division includes district viz. Buldhana, Akola, Yavatmal, Vardha, Chandrapur, Bhandra, Gondia, Gadchiroli and Washim are the other districts of Vidarbha.

Vidarbha has lush green deciduous forests which are home to variety of flora and fauna. Geographically Vidarbha lies on northern part of Deccan plateau and the Vidarbha river lies in this hilly terrain. There are no major hilly areas many small and large lakes are in Vidarbha. Gondia district of Vidarbha is frequently called lake district of Maharashtra as there are as many as 5000 tanks frequently scattered all over the district and covering near about more than 70 miles thick forest area. Due to presence of large lakes and rivers the study region is rich for Cyperaceous plant as can be realized from literature and from own experience.

MATERIALS AND METHODS

During the present work an attempt is being made to document the occurrence of sedges of Vidarbha frequent visits were made during October to January to this area and 70 species belonging to 12 genera were collected and processed as per the method described by (Prain, 1996; Rao and Verma, 1990 and Prasad and Singh, 2002). The specimens were identified with the help of floras by (Clarke, 1893; 1902 and 1909; Fischer, 1928; Cooke, 1908; Hooper, 1976 and Sedgwick, 1918) and available literature (Karthikeyan, 1989; Kern, 1974; Sharma *et al.*, 1996. and Koyama, 1985) and identification is confirmed in herbaria of Majalgaon (Herbarium of Cyperaceae) Majalgaon College Majalgaon and (BAMU Herbarium) Department of Botany, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad.

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DISSCUSIONS

Inland sedge vegetation can be categorised in different ecological groups as under

Oligotrophic Habitat

The common swamp and marshy sedges with excess of moisture. The characteristic members are *Cyperus babakan*, *C. digitatus*, *C. exaltatus*, *C. scariosus*, *C. alopecuroides*, *C. procerus*, *C. pilosus*, *C. platystylis*, *C. laxis*, *Pycnus sanguinolentus*, *P. diaphanus*, *P. stramineous*, *P. flavidis*, *P. polystachyos*, *Fimbristylis miliacea*, *F. tertragona*, *Kyllinga brevifolia*, *Scripus grossus*, *S. kaysoor*, *S. mucronatus*, *S. articulates*, *S. praelongatus*, *Rhynchospora corymbosa* and *Fuirena sp.*

Eutrophic Habitat

Cyperus bifax, *C. alulatus*, *C. esculentus*, *C. sphacelatus*, *C. difformis*, *C. squarrosus*, *C. corymbosus*, *C. pangorei*, *C. distans* var. *pseudonutans*, *C. cuspidatus*, *C. nutans* subsp. *eleusinoides*, *C. halpan*, *C. hyalinus*, *Scripus affinis*, *Kyllinga melanosperma*, *K. squamulae*, *Fmbristylis alboviridis*, *F. microcarya*, *F. complanata*, *F. bisumbellata*, *F. argentea*, *F. tomentosa*, *F. dispacea*, *F. adenolepis* several forms of *F. dichotoma*, *F. striolata*, *F. oblonga*, *Scripus jacobii*, *S. laterflorus*, *Scleria terrestris*, *S. benthamii*, *S. rugosa*, *S. Caricina* and *S. biflora*

Floating Sedges

Cyperus cephalotes, *C. Platyphyllus* and *Scripus fluitans*

Rice Fields

Rice field provide favourable habitat with excess of moisture suitable for sedge-growth. A diverse form of sedges is found to occur in rice-field habitat. The notable ones are *Cyperus tenuispica*, *C. halpan*, *C. corymbosus*, *C. iria*, *C. rotundus*, *C. stoloniferous*, *C. distans*, *C. compactus*, *C. pseudokyllingioides*, *C. difformis*, *Pycnus pumilus*, *P. punctatus*, *P. nervulosus*, *P. sanguinolentus* p. *hyalinus*, *Scirpus squarrosus*, *S. kernii*, *S. juncoides*, *S. lateriflorus*, *Fuirena capitata*, *F. ciliaris*, *Scleria biflora*, *S. multilocunosa*, *S. benthamii*, *S. caricina*, *Fimbristylis quinquangularis*, *F. miliacea*, *F. merrilli*, *F. Dichotoma* and *Lipocarpha sphacelata*.

Mixed Dry Land Sedges

Many types of sedge are found even in semidry soil or localities providing comparatively less moisture. The common ones are *Cyperus compressus*, subsp. *Micranthus* and subsp. *compressus*, *C. distans* ssp. *pseudonutans*, *C. iria*, *C. pygmaeus*, *C. squarrosus*, *C. teneriffae*, *C. maderaspatanus*, *C. rotundus*, *C. stoloniferous*, *C. bulbosun*, *C. meeboldii*, *C. compactus*, *C. leucocephaltus*, *Fimbristylis tenera*, *F. ovata*, *F. polytrichoides*, *Bulbostylis barbata*, *Kyllinga bulbosa*, *Scirpus kyllingioides*, *Scleria levis*, *S. Annularis* and *S. lithosperma*.

Marginals

Characteristically a few sedges are found along the margins of rivers, lakes, streams and similar other water bodies the notable ones *Cyperus corymbosus*, *C. pangorei*, *C. bifax*, *C. articulates*, *C. nutans* subsp. *eleusinoides*, *C. alopecuroides*, *C. exaltatus*, *C. difformis*, *C. teneriffae*, *C. halpan*, *C. articulates*, *Pycnus flavidus*, *Fimbristylis dichotoma*, *F. miliacea*, *Scirpus affinus*, *S. littoralis* and *S. corymbosus*.

Grasss Land Sedges

Characteristically a few sedges are found in wet open grass-lands or marshy grass-lands. They are *Fimbristylis salbundia*, *F. aphylla*, *F. dichotoma*, *F. merrillii*, *F. quinquangularis*, *F. falcate*, *Fuirena ciliaris*, *F. umbellate*, *Cyperus iria*, *C. compactus*, *C. pseudokyllingioides*, *Scirpus juncoides*, *Rhynchospora wightiana*, *R. longisetis*, *Scleria terrestris*, *S. multilocunosa*. Among the small grass such *Pycnus pumilus*, *Cyperus cuspidatus*, *Scleria africana*.

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The species found common to all habitats are *Cyperus rotundus*, *C. iria*, *C. alulatus*, *C. tenuispica*, *C. squarrosus*, *C. compressus*, *C. stoloniferous*, *C. difformis*, *Pycerus pumilus*, *P. flavidus*, *P. benthamii*, *Fimbristylis tenera*, *F. dichotoma*, *F. microcarya*, *F. tetragona*, *F. schoenoides*.

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