

Distribution of Pteridophytes in Ajmer District, Rajasthan

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ABSTRACT: Ajmer district is located in the centre of the Rajasthan state between 25°38' and 26°58' north latitudes and 73°54' and 75°22' east longitudes. This district covers an area of 8478 sq. km, which is about 2.48% of total area of the state and stands sixteenth in the rank from area point of view amongst districts of Rajasthan the topographic feature of Rajasthan is Aravalli range. Aravalli range divides the state into two vegetational segments western xerophytic segment and southern mesic segment. Ajmer district lies between both segments and thus it is an ecotone zone. Due to this ecotone nature great biodiversity is represented in the floral element. Naturally pteridophytic flora is also represented in this region. Todgarh- Raoli forest, Nagh-Pahar, Pushkar-localities, Happy-valley and Nashirabad valley are the main possible habitat of pteridophytic locality in Ajmer district.

This group of plants is represented by 21 genera and 39 species (Gena, 1998). The distributions of pteridophytic flora of Ajmer district have been discussed in this paper.

KEYWORDS: -Pteridophytic flora, Aravalli ranges, Ajmer district

I. INTRODUCTION

Ajmer district is located in the centre of the Rajasthan state between 25°38' and 26°58' north latitudes and 73°54' and 75°22' east longitudes. This district covers an area of 8478 sq. km, which is about 2.48% of total area of the state and stands sixteenth in the rank from area point of view amongst districts of Rajasthan the topographic feature of Rajasthan is Aravalli range.

Aravalli range divides the state into two vegetational segments western xerophytic segment and southern mesic segment. Ajmer district lies between both segments and thus it is an ecotone zone. This district is the transition zone of both vegetational segments. Xerophytic and mesic vegetation occurs as mixed formation. Due to this ecotone nature great biodiversity is represented in the floral element. Naturally pteridophytic flora is also represented in this region. Todgarh- Raoli forest, Nagh-Pahar, Pushkar localities, Happy valley and Nashirabad valley are the main source of pteridophytic locality in Ajmer district.

As per earlier pteridologist Mt. Abu was regarded to be the only pteridophytic localities in Rajasthan state. The pteridophytic flora of various localities of Rajasthan has been studied by many workers. Important contribution of those of Biret *et al.* (1963), Mittal *et al.* (1968), Bhardwaja *et al.* (1977-1987), Gena *et al.* (1983). First time the systematic and Taxonomy of pteridophytes of Rajasthan is given by Gena 1998 and Yadav *et al.* (1989). They surveyed a number of localities in Rajasthan state. Chaudhary and Dulawat (2008) carried out an extensive survey of various localities of South-East Rajasthan and reported 27 species of pteridophytes belonging to 10 families of this part of Rajasthan. This group of plants is represented by 21 genera and 39 species (Gena, 1998). The distributions of pteridophytic flora of Ajmer district have been discussed in this paper.

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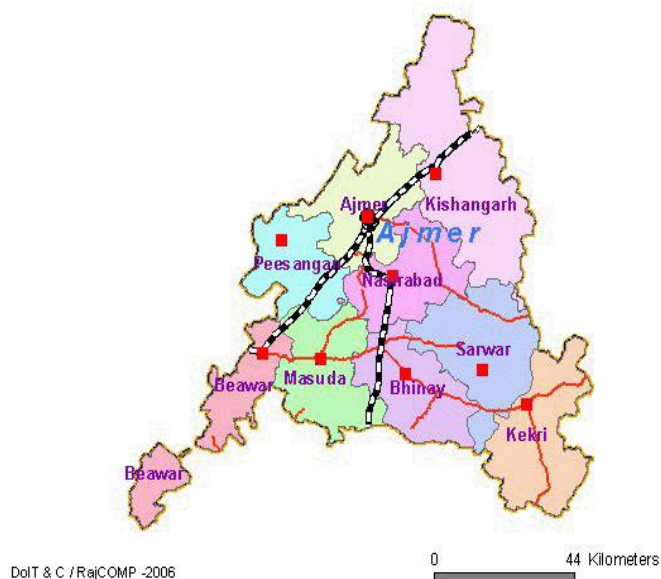


Fig. 1 Location of study area

II.METHODOLOGY

The present paper is based on the Phytodiversity and Survey of pteridophytic flora in different parts of Ajmer district Rajasthan. All the localities have been visited time to time and again throughout the year but mainly during monsoon period. The Botanical excursions were undertaken from time to time. Rainy season that is from July to October each year is the best time and attempt to visit as many places for the study habit and habitats of pteridophytes.

Observations

S.No.	Name /Vernacular name	Family	Distribution
1	- <i>Actiniopteris radiata</i> L -Mayurpankh, Palm fern	-Pteridaceae	-Plants of dry localities, -Widely distributed in Aravalli range -Naghpahar, Pushkar region, Todgarh region
2	<i>Adiantumcapillus-veneris</i> L -Maiden hair fern	-Adiantaceae	-Widely distributed in Aravalli range -TodgarhRaoli forest
3	<i>Adiantumincisum</i> Forssk -Hans-raj,Hans-pad, Walking-fern	-Adiantaceae	-Widely distributed in Aravalli range -TodgarhRaoli forest
4	<i>Azollapinnata</i>	-Salviniaceae	-A very common free floating water fern of Ajmer district.

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5	<i>Cheilanthes farinose</i> -Silver fern	-Cheilanthaceae	-Widely distributed in Aravalli range -TodgarhRaoli forest
6	<i>Equisetum ramosissimum</i> -Horse tail plant	-Equisetaceae	-Happy valley Ajmer, -Nashirabad valley
7	<i>Marsileaegyptiaca</i>	-Marsileaceae	-Ana Sagar Ajmer -Pushkar region
8	<i>Marsilearajasthanensis</i>	-Marsileaceae	-Ana sagar Ajmer -GagraGhati Ajmer
9	<i>Marsileaminuta</i>	-Marsileaceae	-One of the most widely occurring water fern of Ajmer district
10	<i>Pterisvittata</i>	-Pteridaceae	-TodgarhRaoli forest -Pushkar regions
11	<i>Nephrolepis cordifolia</i> (L) Proesl	-Nephrolepidaceae	-Beawar region

III.DISCUSSION

Pteridophytes make an important contribution to the earth's plant diversity. They form a significant sometimes dominant component of biosphere. Eleven species belonging to seven families were recorded from various localities from the district. The preceding data clearly indicate that pteridophytes have an important component of biodiversity.

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