Indian J.Sci.Res.2(4) : 131-132, 2011

Short Communication

PTERIDOPHYTIC FLORA OF VARANASI DIVISION

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ABSTRACT

Present paper deals with the pteridophytes of Varanasi division. About 17 species belonging to 13 genera and 12 families have been recorded. For each species correct name of the plant, synonyms if any, physiognamy, field number and locality have been given.

KEY WORDS: Pteridophyte, distribution, Varanasi division

Pteridophytes grow in a variety of habitats and in all climatic zones, but show maximum diversity between 1300-1400 meters (Blanford,1888). Though majority of them prefer shady and moist places but a few survive in rock crevices and a few in dry places. *Lygodium* climb on trees and members of Salviniaceae, Marsileaceae and Azollaceae grow in aquatic habitats (Bower, 1923, 1963).

Majority of pteridophytes are found in Eastern Himalayas and North East India (Clarke, 1880). About 1200 species of pteridophytes are reported from India, out of which 17% are endemic to India (Sanjappa and Venu, 2010). Certain species like *Dryopteris* and *Marsilea* are edible where as species of Adiantum, *Selaginella*, *Lycopodium* and *Marsilea* exhibit high medicinal properties(Pant and Khare 1973).

MATERIALS AND METHODS

Varanasi division falls in the dry sub-humid ecoclimatic zone located between 24^0 56' and 25^0 35'N latitude and 82^0 14' and 83^0 12' E of longitude and has an area of 5091 sq.km. It includes the gangetic plain as well as the vindhyam range. Its forest is situated in Vindhyam region. Pteridophytes of the division have not been studied before by any worker. Therefore, it was thought worthwhile to study the pteridophytes of the area.

Genera and species are arranged alphabetically. Voucher specimens are deposited in the Herbarium of Botany department, Udai Pratap College, Varanasi.

OBSERVATION

1. ***Adiantum incisum*** forsk (Adiantaceae)
   Found frequently on moist shady places in forests.
   T.N. Singh 11072 Chandraprabha.
2. ***Adiantum phillippense*** L. (Adiantaceae)
   Syn. *A. lunulatum* Burm.
   Frequent on moist shady places in forests along river Chandraprabha
   T.N. Singh 11824.
3. ***Actinopteries radiata*** Link, (Actinopteridaceae)
   Rare on steep side of the hills in shady places.
   T.N. Singh 11266.
4. ***Azolla pinnata*** R.Br. (Azoaceae)
   Common in ponds.
   T.N. Singh 11846.
5. ***Cheilanthes farinosa*** kaulf (Cheilanthaceae)
   Aleuritopteris farinosa (Forsk.) Fee
   Common, found on moist shady places on hills.
   T.N. Singh 11195, 11341.
6. ***Equisetum debile*** Roxb. (Equisetaceae)
   Abundantly found along with rivers Ganges, Varuna and Karmnasha on sandy soils.
   T.N. Singh 11220.
7. ***Hymenophyllium denticulatum*** Swartz.
   Rare. Found on hills.
   T.N. Singh 11825.
8. ***Isoetes corommandelina*** L. (Isoetaceae)
   Rare. Found in shallow ditches on hills and also in plains.
   T.N. Singh 11182.

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9. ***Isoetes indica*** L. (Isoetaceae)
Rare on hills in shallow water reservoirs.
T.N. Singh 11340.

10. ***Lygodium circinatum*** Swartz. (Lygodiaceae)
Rare. Found on moist and shaded places on hills.
T.N. Singh 11400.

11. ***Marsilea minuta*** L. (Marsileaceae)
Common, Found near ditches and ponds
T.N. Singh 11498.

12. ***M. quadrifolia*** L. . (Marsileaceae)
Commn. Found near ponds and ditches
T.N. Singh 11052.

13. ***Ophiogssum vulgatum*** L. (Ophioglossaceae)
Common. Found along forests, roads.
T.N. Singh 11878.

14. ***Pteris longifolia*** L. (Polypodiaceae)
Found as scape along moist walls of old buildings and in old wells.
T.N. Singh 11384.

15. ***Selaginella bryopteris*** Baker. (Selaginellaceae)
Abundant on hills.
T.N. 11525.

16. ***S. proniflora*** Baker . (Selaginellaceae)
Rare,found in shady and damp places.
T.N. Singh 11252.

17. ***Salvinia natans*** (L.)All. (Salviniaceae)
Common, occurs in the ponds.
T.N. Singh 11090.

RESULTS AND DISCUSSION

Pteridophytes dominated the planet earth in Jurassic period when reptiles were dominant form of animal kingdom. This is why pteridophytes are often termed as"snakes of plant kingdom". Tree ferns like *Alsophila* and *Cyathea* were dominant tree vegetation. With gradual evolution of seeded plants (gymnosperms and angiosperms), species diversity of pteridophytes gradually get reduced and today they are restricted to smaller habitat mostly in temperate region.

Out of 1200 species which are found in India only 17 are reported from study area mostly in moist places of forested area. It is represented by 13 genera and 17 species of pteridophyte.

ACKNOWLEDGEMENT

The authors are thankful to Principal, Udai Pratap College, Varanasi and Principal M.V. College, Buxar. for encouragement and facilities provided during the investigation.

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