

ORIGINAL RESEARCH PAPER

DIVERSITY OF COMMON COMMERCIAL TIMBER YIELDING TAXA IN ALIRAJPUR DISTRICT OF MADHYA PRADESH, INDIA **Botany**

KEY WORDS: Malwa plateau, Narmada River, timbers, Bhagoriya.

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ABSTRACT

The Alirajpur region is situated in the south western part of Madhya Pradesh. Alirajpur forest rages are an important corridor between Gujarat and Maharashtra forest areas. Topographically it is fairly flat area. During field plant survey near 54 plants specimens collected and indentified. These plants consist of 23 families, 39 genera and 54 species of flowering plants. Leguminosae is the most dominant family of the study area having 17 species.

INTRODUCTION

In the present time demand of timber is very high so that timber yielding plants are the most widely used plant products. The range of Alirajpur covers almost the entire range of woody communities. The study of the timber yielding plans has been made by many workers in different part of the worlds as well as India some of them are fallowing. Balfour 1862, Watt 1908, Gamble 1922, Howard 1948, Troter 1960, Sagreriya 1967, Singh and Singh 1987, Dobhal 2003, Dhaulakhandi 1996. A littile work has been done in this area by Sainkhediya & Pachaya 2015. Pachaya & Sainkhediya, 2014

Study area

Alirajpur district lying between 22°18'N latitude and 74°20'E longitude, covers an area of 3182 square kilometers. Mahee and Narmada rivers make its Eastern and Southern border. According to census 2011, Alirajpur population is 728,999. Alirajpur District average Rainfall is 850 mm. Alirajpur District temperatures ranges between 23°- 30°C. Bhagoriya is a special cultural public festival of Alirajpur district. Amkhut and Katthiwara have a rich pocket of vegetation and dense forest.



Fig.1: maps of the study area

METHODOLOGY

The present study was conducted in Alirajpur districts of Madhya Pradesh. During the study period authors selected some important blocks in Alirajpur districts i.e. Sondwa, Katthiwada, Bhabra, Jobat and Uaigarh. This are were selected purposively due to the existence of large number of tribal families. This region is inhibited by tribal communities like Bhilala, Patliya, Bhil and other diverse groups. For the study of timber yielding plants the study will conducted form different parts of Alirajpur district of Madhya Pradesh, India during the year 2018-2020 by well plant schedule. Frequency field trips will make to various parts of the study area to collect the

specimens of timber plants and maintend herbarium sheet. Plant specimens were preserved by dipping the whole specimens in saturated solution of Mercuric chloride and alcohol. Dry and preserved plants mounted on herbarium sheets by adhesive glue and fevicols. For the plant collection we have fallowed standards method of Jain and Rao 1977. Identification of the plants is done by with the flora Hooker, 1892-1897, Hains, 1921-1924., Duthi, 1960. Cook, 1903, Mudgal, et. al. 1997. Khanna et.al. 2001, Verma 1993, Singh et.al. 2001 and other taxonomic literature. The entire plant specimen was deposited in herbarium of Govt. P. G. College Alirajpur, Madhya Pradesh.

RESULTS AND DISCUSSION

The present investigators during their timber value enquire obtained information about timber resource, the result which is being presented in the research paper. Utilization of plant resources needs the survey and exploration of factual data. A comprehensive and up to date flora will able to offer critical knowledge of numerous timber yielding plants. Regularly filed survey was carried out from 2018-2020 and visited different villages of Alirajpur district of Madhya Pradesh, India. During field plant survey near 100 plants specimens collected among then 54 plants were indentified. These plants consist of 23 families, 39 genera and 54 species of flowering plants. Leguminosae is the most dominant family of the study area having 17 species.

CONCLUSION

Now a day's most of the timber yielding species extinguish due to increasing population and degradation of soil around the study are a vegetation of the study area are influenced by construction work and shifting of a number of population from different parts of the a study area. Climate of the area is suitable for the vegetation wealth but environmental condition become changed which is a bad signal for native plants which are present in very less amount. Commercially very little of timber yielding plants were used as timber because most of them had very less values of frequency.

ACKNOWLEDGE

I am very much thankful to Principal Govt. P. G. College, Alirajpur for providing research and library facilities. The help and co-operation during plant survey rendered by informants, guide, and local people of Alirajpur region is highly acknowledged.

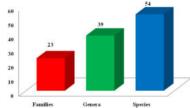


Fig.-2: distribution of timber yielding taxa within family genera and species

Table-1: Timber yielding plants of Alirajpur district of Madhya Pradesh

Mad	Madhya Pradesh		
S.N.	Familes	Botanical name	
1.	Annonaceae	Annona reticulata L.	
2.	Annonaceae	Annona squamosa L.	
3.	Dipterocarpaceae	Shorea robusta Gaerth f.	
4.	Malvaceae	Bombax ceiba L.	
5.	Malvaceae	Grewia tiliifolia Vahl.	
6.	Malvaceae	Kydia calycina Roxb.	
7.	Zygophyllaceae	Balanites aegyptiaca (L.) Delile.	
8.	Rutaceae	Aegle marmelos (L.) Correa	
9.	Rutaceae	Murraya paniculata (L.) Jack	
-	Simaroubaceae	Ailanthus excelsa Roxb.	
	Burseraceae	Boswellia serrata Roxb. ex Colebr.	
	Meliaceae		
_		Azadirachta indica A.Juss.	
_	Meliaceae	Melia azedarach L.	
_	Celastraceae	Ziziphus jujuba Mill.	
_	Anacardiaceae	Mangifera indica L.	
_	Leguminosae	Acacia leucophloea (Roxb.) Willd.	
17.	Leguminosae	Acacia nilotica (L.) Delile ssp. indica	
10		(Benth.) Brenon	
	Leguminosae	Albizia lebbeck (L.) Benth.	
	Leguminosae	Bauhinia purpurea L.	
20.	Leguminosae	Bauhinia racemosa Lam.	
_	Leguminosae	Bauhinia variegata L.	
22.	Leguminosae	Butea monosperma (Lam.) Taub.	
23.	Leguminosae	Cassia fistula L.	
24.	Leguminosae	Cassia javanica L.	
25.	Leguminosae	Dalbergia latifolia Roxb.	
26.	Leguminosae	Dalbergia sissoo DC.	
27.	Leguminosae	Hardwickia binata Roxb.	
28.	Leguminosae	Pithecellobium dulce (Roxb.) Benth.	
29.	Leguminosae	Pongamia pinnata (L.) Pierre	
30.	Leguminosae	Prosopis cineraria (L.) Druce	
31.	Leguminosae	Prosopis juliflora (Sw.) DC.	
32.	Leguminosae	Tamarindus indica L.	
33.	Combretaceae	Anogeissus latifolia (Roxb.ex DC)	
		Wall ex. Guill. & Perr.	
34.	Combretaceae	Anogeissus pendula Edgew.	
35.	Combretaceae	Terminalia alata Wall.	
36.	Combretaceae	Terminalia bellirica (Gaertn.) Roxb.	
37.	Combretaceae	Terminalia chebula Retz.	
38.	Combretaceae	Terminalia elliptica Willd.	
39.	Myrtaceae	Syzygium cumini (L.) Skeels	
	Lecythidaceae	Careya arborea Roxb	
41.	Lythraceae	Lagerstroemia parviflora Roxb.	
42.	Sapotaceae	Madhuca longifolia var. latifolia	
		(Roxb.) A.Chev.	
43.	Sapotaceae	Manilkara hexandra (Roxb.) Dubard	
	Ebenaceae	Diospyros chloroxylon Roxb.	
45.	Ebenaceae	Diospyros melanoxylon Roxb.	
46.	Bignoniaceae	Dolichandrone falcata (Wall. ex	
-0.	3	DC.) Seem.	
47.	Lamiaceae	Tectona grandis L.f.	
48.	Santalaceae	Santalum album L.	
\vdash	Phyllanthaceae	Phyllanthus emblica L.	
_	Phyllanthaceae	Phyllanthus emblica L.	
_	Moraceae	Ficus benghalensis L.	
	Moraceae	Ficus racemosa L.	
53.		Ficus religiosa L.	
_	Moraceae	-	
1114	Arecaceae	Phoenix sylvestris (L.) Roxb.	

REFERENCES

- Balfour E, 1862. The timber trees and timber and fancy wood, also timber forest of India and eastern-southern Asia, madras, India.
- $\textbf{CookT}, 1903. Flora\ of\ the\ presidency\ of\ Bombay. BSI\ Pub.\ Calcutta, India.\ 1-3.$
- Dhaulakhandi 1996.study on structure phytosociology and regeneration of $an \,oak \,forest\,of\,Bhagirathi\,valley, Garhwal\,University, Srinagar, India.$

- Dobhal 2003. Inventory and population dynamics of medicinal plants of Arakot-Khadikhal forest of Tehari Garhwal, Ph. D. thesis, Garhwal University, Srinagar, India. Duthi JF, 1960. Flora of the upper Gangetic plains. BSI Pub. Calcutta, India. 2
- Gamble 1922. A manual of India timber -ii, Sampson low Marston and co. ltd.
- 7 Hains HH, 1921-1924. The Botany of Bihar and Orissa. BSI Reprint, Calcutta, India.1-3
- Hooker JD, 1892-1897. Flora of British India. BSI Pub., Calcutta, India. 1-7.
- 9. Howard 1948. Manual of timber of the world: their characteristic and uses. Mac Millon and co. Ltd. London
- 10. Jain SK and Rao RR, 1976.A Handbook of Herbarium methods. Today and tomorrow publ. New Dehli.
- Khanna KK, Kumar A, Dixit RD and Singh NP, 2001. Supplementary flora of Madhya Pradesh. BSI Publications, Calcutta, India. 11.
- Mudgal V, Khanna KK and Hajara PK, 1997. Flora of Madhaya Pradesh. 2.
- Pachaya J & Sainkhediya, J. 2014. Floristic studies in Govt. P.G. College Alirajpur campus, Madhya Pradesh, India. Naveen shodh sansar. 1:(8). 19-22.
- Sagreriya 1967. Forest and forestry national book trust of India, New Delhi.
- Sainkhediya J & Pachaya J 2015. A preliminary survey of weed flora in maize (zea mays L.) Fields of Alirajpur district, Madhya Pradesh, India. Research journal of multiple disciplines 1:3.9-18.

 16. Singh JS and Singh SP 1987. Forest vegetation of the Himalaya .botanical
- review.53:80-192.
- 17. Singh NP, Khanna KK, Mudgal V and Dixit RD 2001. Flora of M. P. BSI Pub. Calcutta, India) 3.
- 18. Troter 1960. the common commercial timber of India and their uses. Manager Pub. Govt. of India, Delhi.
- Verma DM, Balakrishnan, NP and Dixit RD, 1993. Flora of Madhya Pradesh. BSI 19. Publication, Calcutta, India, 1.
- Watt 1908. The commercial product of India, John Murray London.