



ISSN: 0975-833X

RESEARCH ARTICLE

SURVEY OF FLORA FROM RAMLING HILL STATION –A SACRED GROVE

*Shiragave, P. D.

Devchand College, Arjunnagar, India

ARTICLE INFO

Article History:

Received 15th September, 2015
Received in revised form
29th October, 2015
Accepted 15th November, 2015
Published online 30th December, 2015

ABSTRACT

It is very rich in plant Biodiversity. About 264 plant species belongs to 218 genus and 77 families has been recorded from Ramling hill stations around Arjunnagar. Further, detailed study is required for understanding the flora of this sacred grove. This data gives idea about the plant biodiversity and importance of sacred groves in conservation of flora

Key words:

Plant Biodiversity
Ramling hill
Conservation of flora

Copyright © 2015 Shiragave. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Citation: Shiragave, 2015. "Survey of flora from ramling hill station –A sacred grove", *International Journal of Current Research*, 7, (12), 23951-23953.

INTRODUCTION

India is among the 12 mega biodiversity countries in the world having 25 hot spots of the richest and highly endangered ecoregion of the world (Myers *et al.*, 2000). These are catering to a large population residing in their vicinity in terms of food, fodder, shelter and medicine. Since time immemorial conservation of natural resource has been an integral part of diverse cultures in different ways. Sacred groves represent forest with rich diversity, which have been protected by the local people for centuries for their cultural and religious beliefs (Godbole, 1996). Sometimes, they are also known as natural museums of giant trees, treasure houses of threatened species, dispensaries of medicinal plants, regulators of water sheds, recreation centers for urban life, veritable gardens for botanists, gene banks of economic species, paradise for nature-lovers and laboratory for environmentalists (Bhagwat, 2009 Manikandan *et al.*, 2011). Sacred groves are distributed across the globe, and diverse cultures recognize them in different ways encoding various rules for their protection. Sacred groves occur in many parts of India viz., Western Ghats, Central India, northeast India, etc. particularly where the indigenous communities live. Sacred groves act as an ideal centre for biodiversity conservation (Gadgil and Vartak, 1976).

Several plants threatened in the forest are still well conserved in some of the sacred groves (Maru *et al.*, 2013). It has been observed that several medicinal plants that are not to be found in the forest are abundant in the sacred groves (Chandrakar *et al.*, 2014) Further, rare, endangered, threatened and endemic species are often concentrated in sacred groves. In the present work, extensive and frequent visits to Ramling hill station was carried out during the year 2008 to 2014 for understanding the floral Biodiversity. The plant species were identified and data was recorded.

Location

Ramling hill station is located near the NH-4 Highway on border region of Karnataka and Maharashtra. It is 7 KM away from Nipani on the way to Ajara. The geographical details are as

Area	: 3482 m ²
Altitude	: 615 m
Latitude	: 16° 23' 59.0" N (16.40°)
Longitude	: 74° 22' 59.0" E (74.38°)
Temperature	: Min. 10°C, Max. 41°C
Annual Rainfall	: 762 mm
Forest type	: Dry deciduous

Methodology

Frequent visits were arranged to survey the flora from Ramling hill station. The plants were identified with the help of Flora

*Corresponding author: Shiragave, P.D.
Devchand College, Arjunnagar, India.

of the Bombay Presidency (Cooke, 1903), Flora of Maharashtra State (Singh and Karthikeyan, 2000) and Flora of Kolhapur District (Sardesai and Yadav, 2002) and the data was recorded.

RESULTS AND DISCUSSION

Sacred groves are the representatives of virgin forest that were left untouched by the local inhabitants and are protected by the local people due to their cultural and religious beliefs and taboos that the deities reside in them. Sacred groves are harbor for rich biodiversity.

Table 1. Plant species recorded during survey from Ramling hill station

Family	Botanical Name	Common Name
Ranunculaceae	<i>Clematis heynei</i> Singh	Morvel
Annonaceae	<i>Annona reticulata</i> L.	Ramphal
	<i>Annona squamosa</i> L.	Sitaphal
	<i>Michelia champaca</i> L.	Chapa
	<i>Artabotrys hexapetalous</i> L.	Hirva Chapa
	<i>Polyalthia longifolia</i> Son.	Ashok
Menispermaceae	<i>Tinospora cordifolia</i> Willd.	Gulvel
Papaveraceae juss.	<i>Argemone mexicana</i> L.	Pivala Dhotra
Brassicaceae burn.K	<i>Brassica juncea</i> (L.)	Mohari
	<i>Brassica oleracea</i> L.	
Cleomaceae (Pax)	<i>Cleome viscosa</i> L.	Pivali tilwan
Capparidaceae Forst.	<i>Capparis spinosa</i> L..	Nepti
	<i>Capparis zeylanica</i> L.	Wagati
Bixaceae Endl.	<i>Bixa orellana</i> L.	Shendri
Malvaceae Juss.	<i>Abelmoschus ficulneus</i> (L.)	Jangali Bhendi
	<i>Thespesia populnea</i> (L.)	Gul Bhendi
	<i>Hibiscus rosa-sinensis</i> L.	Kaswand
Bombacaceae Kunth.	<i>Bombax ceiba</i> L.	Kate Savar
Elaeocarpaceae Dc.	<i>Muntingia calabura</i> L.	Cherry
Zygophyllaceae R.Br	<i>Tribulus terrestris</i> L.	Gokharu
Balsamaceae Rich.	<i>Impatiens balsamina</i> L.	Gauri
Oxalidaceae R.Br.	<i>Oxalis corniculata</i> L.	Ambushi
Rutaceae Juss.	<i>Aegle marmelos</i> (L.)	Bel
	<i>Citrus aurantifolia</i> (Christm.)	Limbu
	<i>Limonia acidissima</i> L.	Kavat
	<i>Murraya koenigii</i> L.	Kadhi-Nimb
Simaroubaceae DC.	<i>Ailanthus excelsa</i> Roxb	Maharukh
Meliaceae juss.	<i>Azadirachta indica</i> Juss	Kadu Nimb
	<i>Khaya senegalensis</i> Desr.	Khaya
	<i>Swietenia mahagoni</i> L.	Mahogoni
Celastraceae R.Br.	<i>Celastrus paniculatus</i> Willd	Mal Kangoni
Rhamnaceae juss.	<i>Ziziphus mauritiana</i> Lam	Bor
Vitaceae juss.	<i>Cissus quadrangularis</i> L.	Hadsandi
Sapindaceae juss.	<i>Cardiospermum helicacabum</i> L.	Kanphuti
	<i>Dodonea angustifolia</i> L.	Bandukicha Pala
	<i>Sapindus laurifolius</i> Vahl.	Ritha
Anacardiaceae lin#dl.	<i>Mangifera indica</i> L.	Mango
	<i>Semecarpus anacardium</i> L.	Biba
Moringaceae dumort.	<i>Moringa oleifera</i> Lam.	Shevaga
Papilionaceae	<i>Abrus precatorius</i> L.	Gunj
	<i>Alysicarpus pubescens</i> Law	Palas
	<i>Butea monosperma</i> Lam.	Tur
	<i>Cajanus cajan</i> L.	Harbara
	<i>Cicer arietinum</i> L.	Nili Gokarna
	<i>Clitoria ternatia</i> L.	Undirmari
	<i>Gliricidia sepium</i> Jacq.	Pavata
	<i>Lablab purpureus</i> L.	Karanj
Caesalpinaceae R.Br.	<i>Bauhinia purpurea</i> L.	Kanchan
	<i>Bauhinia racemosa</i> Lam.	Apta
	<i>Caesalpinia pulcherrima</i> L.	Sankasur
	<i>Cassia fistula</i> L.	Bahava
	<i>Delonix regia</i> Boj.	Gulmohar
	<i>Tamarindus indica</i> L.	Cinch
	<i>Acacia farnesiana</i> L.	Dev Babhul
Mimosaceae R.Br.	<i>Albizia lebbek</i> L.	Shirish
	<i>Leucaena latifolia</i> L.	Subabhul
	<i>Mimosa pudica</i> L.	Lajalu
	<i>Pithecellobium dulce</i> Roxb.	Vilayti Chinch
	<i>Prosopis cineraria</i> L.	Shami
	<i>Samanea saman</i> Jacq.	Parjanya Vriksha
Rosaceae juss.	<i>Rosa damascena</i> Mill.	Gulab
Crassulaceae Dc.	<i>Kalanchoe pinnata</i> Lam.	Paanphuti
	<i>Quisqualis indica</i> L.	Rangoon Creeper
	<i>Terminalia catta</i> L.	Badam
Myrtaceae juss.	<i>Callistemon citrinus</i> Curtis.	Bootlebrush
	<i>Eucalyptus globulus</i> Labill.	Nilgiri
	<i>Psidium guajava</i> L.	Peru
	<i>Syzygium cumini</i> L.	Jambhul
Lythraceae j.St.Hil.	<i>Lagerstroemia parviflora</i> Roxb.	Bondara
	<i>Lawsonia inermis</i> L.	Mehandi
	<i>Woodfordia fruticosa</i> L.	Dhayati
Cucurbitaceae juss.	<i>Coccinea grandis</i> (L.)	Tondali
	<i>Momordica dioica</i> Roxb.ex.Willd	Kartoli
Cactaceae juss.	<i>Epiphyllum macropterum</i> Britton.	Bramha Kamal
	<i>Cereus peruvianus</i> Mill.	Tridhari Nivdung
	<i>Opuntia elatior</i> Mill.	Nivdung
Rubiceae juss.	<i>Ixora pavetta</i>	Lokhandi
	<i>Morinda pubescens</i> J.E	Bartondi
Asteraceae dumort.	<i>Ageratum conyzoides</i> L.....	Osadi
	<i>Parthenium hysterophorus</i> L.	Gajar Gavati
	<i>Sonchus asper</i> L.	Mhatari
	<i>Tridax procumbens</i> L.	Dagadi pala
	<i>Xanthium indicum</i> Koen	Vinchu
Sapotaceae juss.	<i>Madhuca longifolia</i> Koen	Moha
	<i>Manilkara zapota</i> L.	Chikku
	<i>Mimusops elengi</i> L.	Bakul
Apocynaceae juss.	<i>Alstonia scholaris</i> L.	Satvin
	<i>Carissa carandus</i> L.	Karwand
	<i>Cascabela thevetia</i> L.	Pivali Kanher
	<i>Catharanthus roseus</i> L.	Sadaphuli
	<i>Nerium indicum</i> Mill.	Kaner
	<i>Plumeria alba</i> L.	Pandhara Chapha
	<i>Tabernaemontana citrifolia</i> L.	Tagar
Asclepidaceae R.Br.	<i>Hemidesmus indicus</i> L.	Anantmul
	<i>Calotropis gigantea</i> L.	Rui
	<i>Gymnema sylvestre</i> Retz.	Madunashini
Gentianaceae juss.	<i>Canscora diffusa</i> R.Br.	
Convolvulaceae juss.	<i>Convolvulus arvensis</i> L.	Chandvel
	<i>Evolvulus alsinoides</i> L.	Shankhpushpi
	<i>Ipomoea carnea</i> Jacq.	Besharam
	<i>Ipomoea quamoclit</i> L.	Ganeshpushp
Cuscutaceae demort.	<i>Cuscuta reflexa</i> Roxb. .	Amarvel
Solanaceae juss.	<i>Cestrum nocturnum</i> L.	Rat Rani
	<i>Datura innoxia</i> Mill.	Dhotra
	<i>Physalis minima</i> L.	Ranpopati
	<i>Solanum anguivi</i> Lam.	Ringani
	<i>Solanum virginianum</i> L.	Bhui Ringani
Scrophulariaceae juss.	<i>Russelia equisetiformis</i> L.	
Bignoniaceae juss.	<i>Spathodia companulata</i> P.	Pichakari
	<i>Tabebuia rosea</i> DC.	
Martyniaceae stapf	<i>Martynia annua</i> L.	Vinchu
Acanthaceae juss.	<i>Barleria prionitis</i> L.	Kathe-Koranti
	<i>Crossandra infundibuliformis</i> (L.)	Abholi
	<i>Justicia adhatoda</i> L.	Adulsa
Verbinaceae J.St.Hill.	<i>Clerodendrum philippinum</i> Schuer	Battis Mogra
	<i>Lantana camara</i> L.,	Ghaneri
	<i>Tectona grandis</i> L.	Saag
	<i>Vitex negundo</i> L.,	Nirgudi
Lamiaceae Lindl.	<i>Leucas aspera</i> (Willd.)	Shankroba
	<i>Ocimum tenuiflorum</i> L.	Tulas
Nyctaginaceae juss.	<i>Bougainvillea spectabilis</i> Willd.	Kagadi phul
Amaranthaceae juss.	<i>Achyranthes aspera</i> L.	Aghada
	<i>Amaranthus spinosus</i> L.	Kurdu
	<i>Celosia argentea</i> L.	
Santalaceae R. BR.	<i>Santalum album</i> L.	Chandan
Euphorbiaceae juss.	<i>Emblca officinalis</i> Gaertn.	Awala
	<i>Euphorbia hirta</i> L.	Dudhani
	<i>Jatropha curcas</i> L.	Angli Erand
	<i>Phyllanthus reticulatus</i> Poir.	Kanguni
Moraceae Link.	<i>Ficus benghalensis</i> L.	Vad
	<i>Ficus religiosa</i> L.	Pimpal
Casuarinaceae R. BR.	<i>Casuarina equisetifolia</i> L.	Suru

Summary and Conclusion

An overcrowding population and their activities has resulted in to fragmentation of the groves. This lead to habitat disturbance and deforestation which are the major causes for poor

regeneration of many economically important species (Kushalappa and Bhagwat, 2001). In the present study, 264-plant species belonging to 77 families has been recorded from Ramling Hill station and some of them are represented in Table 1. The study also emphasizes on need of conservation of the most valuable species in such sacred groves.

REFERENCES

- Bhagwat, S.A. 2009. Ecosystem services and sacred natural sites: reconciling material and non-material values in nature conservation. *Environ. Values* 18:417-427
- Cooke, T. 1901-08. The flora of the presidency of Bombay. London. (B.S.I. Reprint). Calcutta, Vols. I-III, 1958.
- Gadgil, M. and Vartak, V.D., Sacred groves of Western Ghats of India. *Ecological*, 30, 152-160 (1976)
- Godbole, Archana 1996. Role of tribals in preservation of sacred forests. *Ethnobiology in Human Welfare* (Jain, S.K., ed.). Deep Publications, New Delhi, pp. 345-348.
- Chandrakar, D. K. Verma, D. Sharma, K.C. Yadav 2014. A Study on the Role of Sacred Groves in Conserving the Genetic Diversity of the Rare, Endangered and Threatened Species of Flora & Fauna of Chhattisgarh State (India) *Int. Jr. of Sci. and Res. Publications*, 4(1) :1-5.
- Kushalappa, C.G. and Bhagwat, S.A. 2001. Sacred Groves: Biodiversity, threats and conservation. In: Uma Shaanker, R., Ganeshaiah, K.N. and Bawa, K.S. (eds), *Forest Genetic Resources: Status, Threats and Conservation Strategies*, Oxford and IBH Publishing Co. Pvt. Ltd. Pp. 21-29.
- Manikandan, P., Venkatas, D.R., Muthuchelian, K. 2011. Conservation and management of sacred groves in Theni district, Tamil Nadu, *India. Jr. Biosci. Res.* 2(2):76-80
- Maru, R.N. and Patel, R.S. 2013. Ethno-Botanical Survey of Sacred Groves and Sacred Plants of Jhalod and Surrounding Areas in Dahod District, Gujarat, India *Res. J. Recent. Sci* Vol. 2(ISC-2012), 130-135
- Myers, N., Mittermeir, R.A., Mittermeir, C.G., da Fonseca G.A.B., Kents J. 2000. Biodiversity hotspots for conservation priorities. *Nature* 403:853-858
- Singh, N.P. and S. Karthikeyan 2000. Flora of Maharashtra .Botanical Survey of India, Calcutta.
- Yadav, S.R. and Sardesai, M.M. 2002. Flora of Kolhapur District. Shivaji University, Kolhapur.
