

Flora of Shri Vyankatesh arts, comm. & science college campus Deulgaon raja dist. Buldhana (MS)

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Abstract

We have inherited a rich plant diversity with a high proportion of endemic elements. We are grateful to small, mid-sized or lofty trees who oblige us during their lifetime with oxygen, shade, food, fibre, fruits, timber and medicine. One of the major challenges of our country today is the management of plant specially tree diversity development. In a decades of years a number of very small trees have been planted in our campus. Keeping this in view, we have undertaken documentation of trees of our biodiversity rich College campus for the first time and we also propose to establish conservation strategies in future for tree(s). The total number of trees recorded in the college campus 345 belonging to 39 families, 51 genera and 54 species. The family Anonaceae was represented by maximum number of 110 tree genera. The genus *Ficus* has been represented by maximum number of 06 tree species viz. *F. religiosa*, *F. benghalensis*, *F. racemosa*. The medicinally important many plants like *Azadirachta indica*, *Eucalyptus citriodora*, *Aloe vera*, *Ocimum gratissimum* are present in botanical garden of College and in the campus. *Polyalthialongifolia* is grown as ornamental or avenue tree and is represented by 110 plants followed by *Albizialebbek*. As like as many ornamental plants are also present in college campus.

Keywords: systematic enumeration, tree biodiversity, sv college campus, deulgaon raja

Introduction

Ethnobotany deals with the study and evaluation of plant-human relations in all phases and the effect of plant environment on human society. Ethnobotany is considered as a branch of ethnobiology. The term "Ethnobotany" was coined by J. W. Harshberger in 1896^[7] to indicate plants used by the aboriginals: From "ethno"-study of people and "botany" study of the plants. Ethnobotany is the study of how people of a particular culture and region make of use of indigenous plants. Ethnobotanists explore how plants are used for such things as food, shelter, medicine, clothing, hunting, and religious ceremonies. The plants growing in their natural habitat serve as raw material for industries and other local uses. Keeping these facts in view, it was undertaken to prepare an accurate and up to date inventory of trees growing in sprawling approximately 13 acres 7 gunthas of college campus at Deulgaon Raja (MS). The establishment of the college in 1967 run by Shri Balaji Sansthan's Deulgaon Raja affiliated by Sant Gadge Baba Amravati University, Amravati. Deulgaon Raja is located in Buldhana district and boundry of the Vidarbha, of Maharashtra State. Deulgaon Raja is 80 Km away from district place and 80 Km also from Aurangabad. Deulgaon Raja is located in the northern part of Maharashtra. The 70% of the population is rural. The main occupations of these people are dairy, farming and agriculture. The famous salt water Lonar Crater is situated in this district, 90 kms from here. And, The Rajmata Jijabai's father Lakhujji Jadhav's native place is located at Sinkhed Raja which is important historical place in district also. The major crop of this district is cotton, jawar and

groundnut. Several taxonomists and ethnobotanists continued to survey many areas of Maharashtra, Addition to Maharashtra Flora Vol. I (Singh N.P. & Karthikeyan S. 2000)^[14], Flora of Buldhana District (Diwakar P.G. & Sharma B.D. 2000)^[5]. Earlier the works were carried out an ethnobotanical, medicinal and floristic aspects of plants by a good number of workers. The present research report is carried out in Shri Vyankatesh Arts, Com. & Science College Campus Deulgaon Raja Dist. Buldhana (MS) to explore the diversity of plants.

Objectives of the study

The main aim of the survey was to collect information about the vegetation of plant species which are used by local people for various purpose and also the species are identified and documented by collecting samples of plant species. Survey were made for collection of plants their identification, followed by Botanical name, Family, Habitat, Uses and Propagation. The campus was visited for the collection of medicinal plants, their digital photographs were also taken. The identification was also done based on literature study (Hooker, 1875)^[8].

Materials and methods

The field study was carried out during session 2016-2017 in the Shri Vyankatesh Arts, Com. & Science College Campus Deulgaon Raja Dist. Buldhana (MS). Description of habitat, material and methods as well as the methods of sample collection and identification have been described elsewhere (Bimalet *al.*, 1991)^[3].

Table 1: Plants diversity of Shri Vyankatesh Arts, Com. & Science College Campus

Sr. No.	Tree Name	Family	Marathi Name	Tree Count
1	<i>Polyalthia longifolia</i>	Anonaceae	Ashok	110
2	<i>Ficus religiosa</i>	Moraceae	Pimpal	01
3	<i>Ficus benghalensis</i>	Moraceae	Vad	05

4	<i>Ficus racemosa</i>	Moraceae	Umbar	01
5	<i>Ricinus communis</i>	Euphorbiaceae	Erand	01
6	<i>Emblica officinalis</i>	Euphorbiaceae	Awla	01
7	<i>Hevea brasiliensis</i>	Euphorbiaceae	Rubber plant	01
8	<i>Mangifera indica</i>	Anacardiaceae	Aamba	02
9	<i>Cassia fistula</i>	Caesalpiniaceae	Bahawa	02
10	<i>Delonix regia</i>	Caesalpiniaceae	GulMohor	21
11	<i>Catharanthus roseus</i>	Caesalpiniaceae	Sadaphuli	05
12	<i>Albizia lebbek</i>	Mimosaceae	Siras	01
13	<i>Azadirachta indica</i>	Meliaceae	Kaduneem	40
14	<i>Alstonia scholaris</i>	Apocynaceae	Saptarni	15
15	<i>Nerium indicum</i>	Apocynaceae	Kanher	02
16	<i>Colocasia esculenta</i>	Araceae	Aloo	10
17	<i>Murraya koenigii</i>	Rutaceae	Kadhipatta	01
18	<i>Citrus aurantifolia</i>	Rutaceae	Limbooni	01
19	<i>Hibiscus rosa sinensis</i>	Malvaceae	Jaswand	02
20	<i>Bryophyllum pinnatum</i>	Crassulaceae	Panphuti	01
21	<i>Piper betle</i>	Piperaceae	Nagwel	01
22	<i>Ocimum gratissimum</i>	Lamiaceae	Ran Tulasi	04
23	<i>Aloe vera</i>	Liliaceae	Korphad	01
24	<i>Jasminum officinale</i>	Oleaceae	Chameli	01
25	<i>Jasminum sambac</i>	Oleaceae	Mogara	01
26	<i>Jasminum multiflorum</i>	Oleaceae	Kunda	01
27	<i>Dalbergia sissoo</i>	Papilionaceae	Shisam	05
28	<i>Prunus amygdalus</i>	Rosaceae	Badam	01
29	<i>Terminalia arjuna</i>	Combretaceae	Arjun	01
30	<i>Eucalyptus citriodora</i>	Myrtaceae	Nilgiri	15
31	<i>Zizyphus zujube</i>	Rhamnaceae	Bor	02
32	<i>Michelia champaca</i>	Magnoliaceae	Chafa	02
33	<i>American palm</i>	Arecaceae	Palm tree	22
34	<i>Moringa oleifera</i>	Brassicaceae	Shewaga	01
35	<i>Cupressus ampervirens</i>	Cupressaceae	Saru	15
36	<i>Opuntia ficus</i>	Cactaceae	Niwdung	01
37	<i>Cereus peruvianus</i>	Cactaceae	Niwdung	01
38	<i>Bamboosa bamboo</i>	Poaceae	Bamboo	22
39	<i>Coccus nucifera</i>	Palmaceae	Nariyal	01
40	<i>Pongamia pinnata</i>	Fabaceae	Karanj	06
41	<i>Clitoria ternatea</i>	Fabaceae	Gokarn	01
42	<i>Abrus precatorius</i>	Fabaceae	Gunj	01
43	<i>Mimosa pudica</i>	Fabaceae	Lajalu	01
44	<i>Cycas revoluta</i>	Cycadaceae	Cycas	04
45	<i>Spilanthe sacmella</i>	Asteraceae	Akkalkadha	01
46	<i>Embeliaribes</i>	Primulaceae	Wavding	01
47	<i>Bougainvillea glabra</i>	Nyctaginaceae	BoganWel	01
48	<i>Datura innoxia</i>	Solanaceae	Dhotara	01
49	<i>Solanum torvum</i>	Solanaceae	Ranwange	01
50	<i>Punica granatum</i>	Lythraceae	Dalimb	01
51	<i>Araucaria columnaris</i>	Araucariaceae	Xmas tree	01
52	<i>Musa acuminata</i>	Musaceae	Keli	01
53	<i>Canna indica</i>	Cannaceae	Kardali	02
54	<i>Cissus quadrangularis</i>	Vitaceae	Kandwel	01

Results

Floristic studies are important to understand the tree wealth as well as their biology (Panda *et al.*, 2014) ^[11], and also play an important role in developing the aesthetic values as well as ecosystem services. The present paper is based on preliminary surveyer and serves as biodiversity data bank for biological and biotechnological applications (Uniyal and Singh, 2014) ^[17]. Further, it provides information related to the plant resources which is necessary for any conservation and management practices. On the basis of field survey of plant diversity in campus of Shri Vyankatesh Arts, Comm. & Science College Campus Deulgaon Raja, the preliminary data recorded such as

botanical name of tree identified and tree count etc. It is resulted that 345 plants belonging to 39 families, 51 genera and 54 species showed their presence in the campus which were collected, identified and listed in Table No. 1. The inventory of tree wealth of the campus shall provide the ground work for further studies.

Discussion

The data shows that maximum plant species are family Anonaceae similar result have also reported by Tirkey (2006) ^[16]. From these some are medicinal plant species in college botanical garden. Similarly Ayyanar and Ignacimuthu (2005) ^[2],

also reported medicinal importance of plants. These plant species have Antibacterial, Insecticidal, Antiseptic, Analgesic properties and they are useful in treatment of various skin diseases, allergic reactions and diarrhea treatment. Similarly Jain *et al* (2006) ^[9], Kala (2009) ^[10], have also reported antihelminthic, anticancerous, antitumour, antirheumatic, antiasthmatic and antidiarrhoeal activities of various plants.

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