

FLORA OF WALL CRACKS AND CREVICES OF WESTERN PART OF NAGPUR CITY

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ABSTRACT

Total 41 plant species belonging to 22 families and 36 genera were recorded from western part of Nagpur city as wall flora. Of which 39 plant species were of angiosperms and rest 2 species belonging to pteridophytes. *Ficus religiosa* was found to be frequently occurring species in angiosperms and *Pteris vitata* in pteridophytes on wall cracks and crevices of the study area.

KEYWORDS: Flora of wall crevices, Nagpur city.

INTRODUCTION

We are observing that old buildings have cracks and crevices. These cracks became the habitats of plants those can survive in that particular environment. We observe that seeds of some plants can germinate only in these cracks. Birds feed on fruits and the seeds move through digestive system of birds and passed out along with fecal material. Fecal material also provide small dose of fertilizer to grow the plants. Other factors are also responsible for the dispersal of the seeds to cracks and crevices of buildings. Arvind Singh (1911) recorded 119 vascular wall flora of Banaras Hindu University Campus, India.^[1] Arvind Singh (2016) explored the woody flora of Banaras Hindu University main campus, India and documented 23 plant species.^[2] The wall flora can be referred as cultural landscapes and significant in understanding the ancient objects and ecological features of any urban ecosystem.^[3]

Nagpur is the third largest city in Maharashtra and known as orange city. Nagpur is named after the river Nag flows through the city. Old Nagpur city today called as Mahal. Earlier name of Nagpur was Fanindrapura. It derives the origin from Marathi word "Fan" it has meaning hood of Cobra. Nagpur is situated at center of the Indian continent. The city has zero mile stone locating the geographical centre of India.

MATERIALS AND METHODS

Several tours were arranged to observe the flora of wall cracks and crevices of several parts of Nagpur city especially western region. Photographs were taken for documentation and listed the plant species. Plants were identified with the help of available literature at Department of Botany, Dharampeth M P Deo Memorial Science College, Nagpur.



Data Collection and Photography

RESULTS AND DISCUSSION

During the investigation, total 41 plant species belonging to 22 families and 36 genera were noted as wall flora of study area. Of which 39 plant species were of angiosperms and rest 2 species belonging to pteridophytes. When we categorized on the basis of

habit, out of 41 plant species, 6 species were recorded as tree, 4 shrubs, 30 species as herbs and 1 species as climber (Fig.1). *Ficus religiosa* and *Ficus racemosa* were frequently observed on wall cracks and crevices. Recorded Plant species were enumerated as Botanical names, Family, Local Name and Habit (Table 1.).

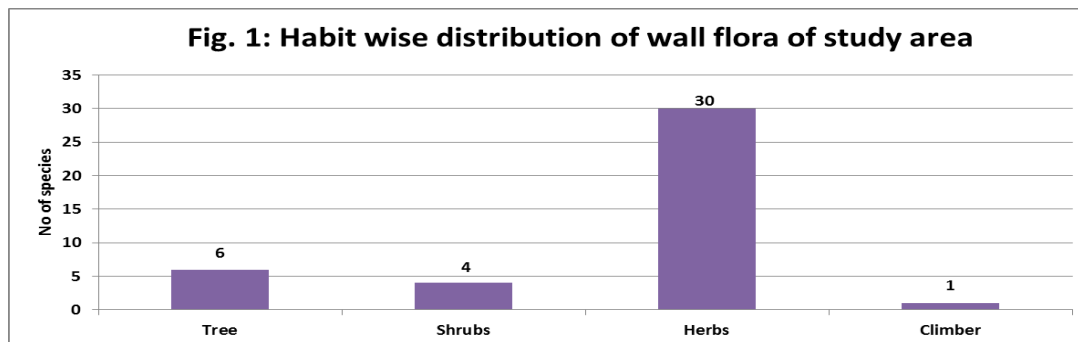


Table 1: List of the plant species recorded during the investigation from study area.

Sr. No.	Botanical Name	Family	Local Name	Habit
1	<i>Acalypha indica</i> L.	Euphorbiaceae		Herb
2	<i>Achyranthes aspera</i> L.	Amaranthaceae	Aghada	Herb
3	<i>Adiantum lunulatum</i> Burm. f.	Pteridaceae		Herb
4	<i>Ageratum conyzoides</i> (L.) L.	Compositae		Herb
5	<i>Alternanthera sessilis</i> (L.) R.Br. ex DC.	Amaranthaceae		Herb
6	<i>Amaranthus viridis</i> L.	Amaranthaceae		Herb
7	<i>Annona squamosa</i> L.	Annonaceae	Sitaphal	Tree
8	<i>Azadirachta indica</i> A.Juss.	Meliaceae	Neem	Tree
9	<i>Biophytum sensitivum</i> (L.) DC.	Oxalidaceae		Herb
10	<i>Blumea lacera</i> (Burm.f.) DC.	Compositae		Herb
11	<i>Calotropis gigantea</i> (L.) Dryand.	Apocynaceae	Rui	shrub
12	<i>Calotropis procera</i> (Aiton) Dryand.	Apocynaceae	Rui	shrub
13	<i>Catharanthus roseus</i> (L.) G.Don	Apocynaceae	Jagannath	Herb
14	<i>Celosia argentea</i> L.	Amaranthaceae		Herb
15	<i>Chrysothemis pulchella</i> (Donn ex Sims) Decne.	Gesneriaceae		Herb
16	<i>Cleome viscosa</i> L.	Cleomaceae		Herb
17	<i>Coccinia grandis</i> (L.) Voigt	Cucurbitaceae		climber
18	<i>Commelina benghalensis</i> L.	Commelinaceae	Kenya	Herb
19	<i>Cyanthillium cinereum</i> (L.) H.Rob.	Compositae		Herb
20	<i>Cynodon dactylon</i> (L.) Pers.	Poaceae	Durva	Herb
21	<i>Cyperus difformis</i> L.	Cyperaceae		Herb
22	<i>Desmodium triflorum</i> (L.) DC.	Leguminosae		Herb
23	<i>Eclipta prostrata</i> (L.) L.	Compositae	Bhrungraj	Herb
24	<i>Euphorbia hirta</i> L.	Euphorbiaceae		Herb
25	<i>Euphorbia prostrata</i> Aiton	Euphorbiaceae		Herb
26	<i>Ficus benghalensis</i> L.	Moraceae	Bad, Bargad	Tree
27	<i>Ficus hispida</i> L.f.	Moraceae	Katambar	Tree
28	<i>Ficus racemosa</i> L.	Moraceae	Umbar	Tree
29	<i>Ficus religiosa</i> L.	Moraceae	Pipal	Tree
30	<i>Lantana camara</i> L.	Verbenaceae		shrub
31	<i>Laportea interrupta</i> (L.) Chew	Urticaceae		Herb
32	<i>Lindernia ciliata</i> (Colsm.) Pennell	Linderniaceae		Herb
33	<i>Mimosa pudica</i> L.	Leguminosae	Lajari	Herb
34	<i>Oldenlandia corymbosa</i> L.	Rubiaceae		Herb
35	<i>Oxalis corniculata</i> L.	Oxalidaceae		Herb
36	<i>Phyllanthus amarus</i> Schumach. & Thonn.	Euphorbiaceae	Bhuineem	Herb

37	<i>Pilea microphylla</i> (L.) Liebm.	Urticaceae		Herb
38	<i>Pteris vittata</i> L.	Pteridaceae		Herb
39	<i>Senna tora</i> (L.) Roxb.	Leguminosae	Tarota	Herb
40	<i>Tridax procumbens</i> (L.) L.	Compositae	Kamarmodi	Herb
41	<i>Urena lobata</i> L.	Malvaceae	HansPadi	shrub



A. *Ficus benghalensis*, B. *Ficus hispida*, C. *Ficus religiosa*, D. *Ficus racemosa*



Euphorbia hirta

Pteris vittata



Ficus religiosa

Acalypha indica



Annona squamosa

Phyllanthus amarus

*Laportea interrupta**Azadirachta indica*

CONCLUSION

The study of the wall cracks and crevices flora of Western part of Nagpur city, it can be concluded that wall of the study area dominated by Family Moraceae. Herbs species are found during the July to October. Ficus species were found throughout the year on the wall of study area. Herbs species can be observe on top of the walls such as *Phyllanthus amarus*, *Biophytum sensitivum*, *Agetatum conyzoides* etc.

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