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Assesment of Climbers of Mata Jija Bai Government P.G. College Moti Tabela Indore

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Abstract-- Climbers are the important part of vegetation. This vegetation is very much important from biodiversity point of view. The present study deals with the study of climbers in college campus of Mata Jija Bai Govt. P.G. college Moti Tabela Indore. The study reveals that college campus reach in climber diversity. The study duration January 2025 to January 2026. The collection and identification of climber plants during survey period, Total number of climber 24 were recorded from college campus. The dominant Family are Menispermaceae, Liliaceae, Areaceae, Cucurbitaceae.

Keywords-- Climber, campus

I. INTRODUCTION

Climbers are the plants that germinate on the floor and grow for part of their life by winding ground anchoring or adhering to other plants (Jongkind and Hawthorne, 2005) to attain great height (Swaine, 2005). The plants rely on other plants for Mechanical support. The climbers show great diversity in their climbing behaviour depending on which they are classified as hook climber, tendril climbers, leaf climbers, stem climbers or twiners (Agrawal, 2013). These climbers are divided into two groups - woody vines or lianas and herbaceous (non woody) vines. The present study is made to analyze the diversity of climbers of college campus, as climbers represent a large sector of medicinal and ornamental plants. The survey involved field work and collecting information for multipurpose use of climbers. The climber plants were identified with the help of relevant

literature. Information was also collected from local people. A large number of researchers and organizations were worked in the field of RET Climbers plants in India (Singh, 1990; Ghosh and Mukherjee, 2006; Narayan et. al., 2008; Seliya and Patel, 2009; Usha, 2010; Bandopadhyay and Mukherjee, 2010; Jangid and Sharma, 2011; Patel et. al., 2013; Sarvalingam and Rajendran, 2016;)

II. STUDY SITE

"Our study focuses on the climber diversity present in College campus of Indore District in Madhya Pradesh, India, specifically at Mata Jijabai Govt. Girls P.G. (auto.) College" Indore. College campus botanical garden are the main study area of our research. Our college campus is graced with four to five beautiful gardens, each adding to the campus's natural charm. However, for our research project, the designated area of study is the college's botanical garden and campus. The college campus, in particular, offers a unique opportunity for research due to its diverse collection of plants and its educational value. It provides a perfect setting to explore and understand various aspects of climbers.

District Indore lies in Madhya Pradesh, India. Indore located 192 km near from Bhopal city (Aerial Distance). The study area is situated at Latitude 22.705981° and Longitude 75.8512°. Specifically, Mata Jijabai Govt. Girls P.G. College is located in Moti Tabela, Indore, Madhya Pradesh, India, with the address being Collectorate Road, Moti Tabela, Indore.



Figure 1.:- INDORE LOCATION IN M.P. MAP





III. MATERIAL AND METHODS

During field visit and survey in college campus we have collected climber plants for the study purposes in order to adapt identification by using physical methods, such as . Personal interviews were used to collect all of the plants, and the information gathered was recorded in a field note book. Taking photographs in the field and creating a digital herbarium with identify with floras (Gamble and Fischer, 1915-1935).

IV. REVIEW OF LITERATURE

It is estimated that there are about 25,000 climber plant species in the world. According to the comprehensive checklist data, there are 2624 climber plant species across India.

India hosts 2,624 species of climbing plants, making up about 12% of the country's total flowering plants. Literature on Indian climbing flora spans broad national checklists, regional biodiversity surveys, and horticultural field guides.

In Madhya pradesh the rare endangered. and threatened plants are relatively relatively Well documented (Sharma, 2005, Lainkhediya and Ray. 2014; Bharti : 2015. Pandey 2016 Gianoli (2015) documented climber representation in 171 plant families including gymnosperms. Pteridophyta and (91.2022) angiosperm. Recently(Vivek etal 2022)reported a total of 194 flower 194 flowering plant families roughly constitute 50% of the globally know angiosperm families. Climbers and climbing Mechanisms have evolved Several times Within the 9-Baena eti at 2018).



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V. OBSERVATION TABLE

Table No. 1 Plant list with their scientific name family & local name.

S.N.	Botanical Name	Family	Local Name
1	Cissus quadrangularis	Vitaceae	Harjora
2	Jasminum curilatam	Oleaceae	Indian jasmine
3	Thaumatococcus bipinnatifidum	Araceae	Split /leaf/philodendron
4	Monstera deliciosa	Araceae	Swiss cheese plant
5	Epipremnum aureum	Araceae	Money plant
6	Ipomoea cairica	Convolvulaceae	Railway creeper
7	Taraxacum officinale	Fabaceae	Moosha parna
8	Combretum indicum/Quisqualis indica	Combretaceae	Rangoon Creeper
9	Cocculus hirsutus	Menispermaceae	Broom creeper
10	Bristly greenbrier	Smilacaceae	Smilax lamnoides
11	Luffa Acutangula	Cucurbitaceae	Jangali turiya
12	Momordica charantia	Cucurbitaceae	Jangali karela
13	Phaseolus lunatus	Fabaceae	Sieva bean/ butter bean
14	Dioscorea bulbifera	Dioscoreaceae	Air Pateto/air yam
15	Causonis trifolia	Vitaceae	Bush grape/ fox grape
16	Vernonia elliptica	Asteraceae	Curtain creeper
17	Ipomoea purpurea	Convolvulaceae	Morning glory
18	Clitoria ternatea	Fabaceae	Gokarn
19	Cuscuta reflexa	Convolvulaceae	Amarbel
20	Asparagus racemosus	Liliaceae	Satavar
21	Coccinia grandis L.	Cucurbitaceae	Kundru
22	Gymnema sylvestris	Asclepiadaceae	Gurmar
23	Tinospora cordifolia	Menispermaceae	Giloy
24	Coccinia cordifolia	Cucurbitaceae	kundri

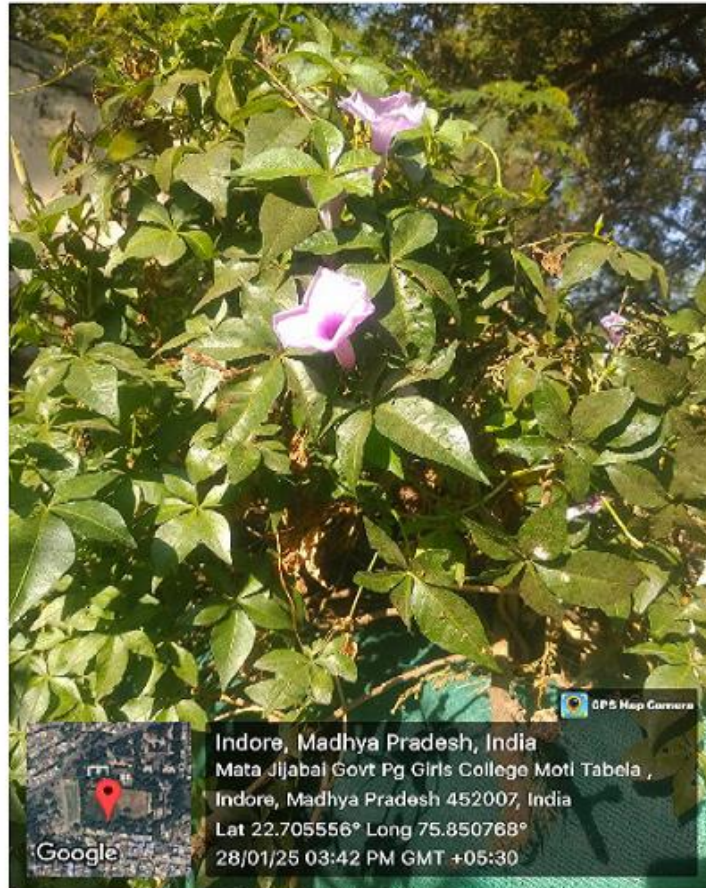
Table No.2 LIST OF FAMILY NAME

S.N.	Name of family	Number of plants
1	Araceae	3
2	Vitaceae	2
3	Fabaceae	3
4	Convolvulaceae	3
5	Cucurbitaceae	3
6	Oleaceae	1
7	Asteraceae	1
8	Dioscoreaceae	1
9	Combretaceae	1
10	Menispermaceae	2
11	Smilacaceae	1
12	Asclepiadaceae	1
13	Liliaceae	1

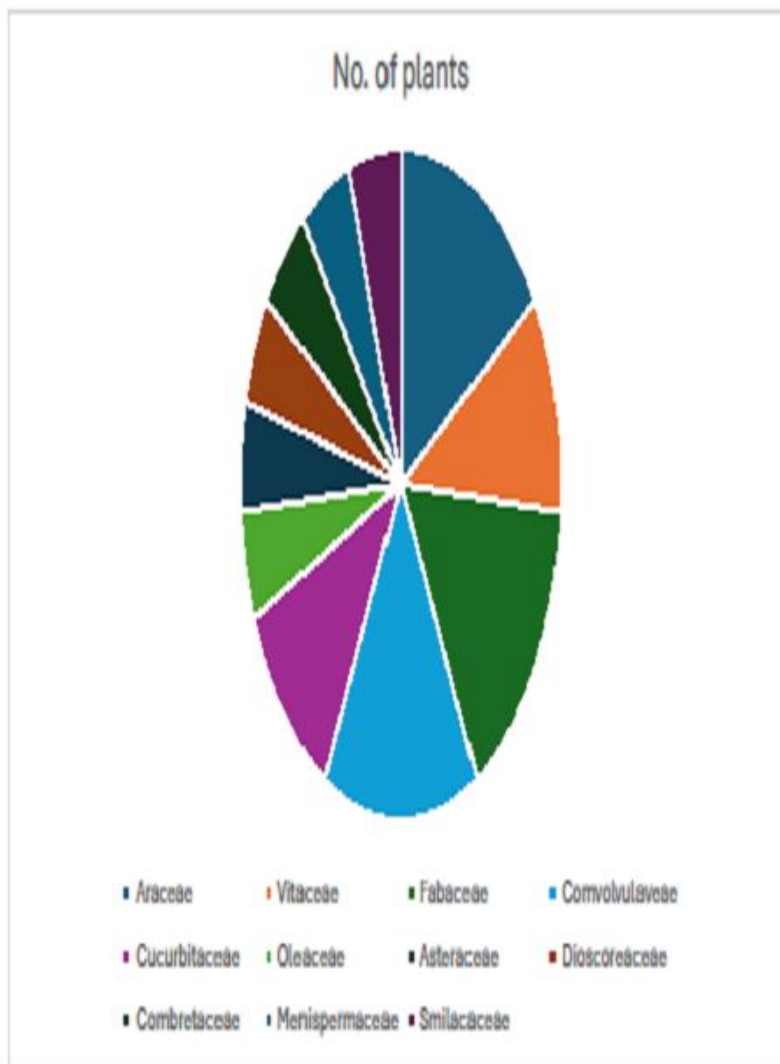
VI. RESULTS AND DISCUSSION

The species recorded in that survey have been listed and classified as per the accepted system in the present investigation. The plant specimens collected were classified as per Bentham and Hookers system of angiospermic ray. During the present research work, various canes of Mata Jijabai Govt.College Indore .(M.p) Were college campus .surveyed and samples were collected and identified with the help of literature and botanicals.

19 climbing species were recorded from the study area. The nomenclature, botanical name, family and common name are shown in Table 1. The major families found are Convolvulaceae, Araceae, Fabaceae, Cucurbitaceae. Some of the common climbers of this area are *Cissampelos Pareirs* L., *Cocculus villosus* DC. *Tinospora cordifolia* (Willd) Miers., *Ipomoea aquatica* Forsk., *Ipomoea obscura* (L.) Kar Gawl. *Merremia aegyptia* (L.) *Clitoria ternatea* L. *Pergularia daemia* (Forsk.) Chiov., *Coccinia grandis* (L.) *Luffa cylindrica*.



Ipomoea cairica



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