

Plant Diversity of Kalamboli area

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Article Info	Abstract
<p>Available online on http://www.ijlsci.in</p> <p>ISSN: 2320-964X (Online) ISSN: 2320-7817 (Print)</p> <p>Editor: Dr. Arvind Chavhan</p> <p>Cite this article as: Kamalinee Deodhar (2015) Plant Diversity of Kalamboli area, <i>Int. J. of Life Sciences</i>, Special Issue, A4: 73-75.</p> <p>Copyright: © Author, This is an open access article under the terms of the Creative Commons Attribution-Non-Commercial - No Derives License, which permits use and distribution in any medium, provided the original work is properly cited, the use is non-commercial and no modifications or adaptations are made.</p>	<p>Plant Diversity study is important aspect of botany. It is directly and indirectly related to the formation of environmental conditions. It also indicates the presence of dominant flora of particular area when data is analyzed. In this paper plant diversity of Kalamboli area is included. The present data includes plants of different families mostly Malvaceae, Tiliaceae, Cucurbitaceae, Asteraceae, Amaranthaceae, Solanaceae, Acanthaceae, Cruciferae, Portulacaceae, Scrophulariaceae etc. The plants mentioned in the data are considered as roadside or weed plants but all of them are having some medicinal properties or useful properties and hence data collection for biodiversity should be done. It will help to make awareness among people for the conservation of such plants.</p> <p>Keywords: plant diversity, conservation, dominant flora, Awareness, data collection.</p> <p>INTRODUCTION</p> <p>India is mega biodiversity country of the world and consists of 17,000 flowering plant species. It accounts for 8% of the global biodiversity with only 2.4% of the total land area in the world (Reddy, 2008; Hajra and Mudgal, 1997). Plants represent one of the important element of biodiversity, thus the knowledge of plant species found in the different areas of the world is a pre-requisite to conserve the ecological biodiversity. It helps us to understand the overall structure and function of an ecosystem (Sumeet <i>et al.</i>, 2010). For this reason accurate and precise information of the known plant species from a given area is essential. The information is important as it allows us to prevent or avoid the potential chances of biodiversity loss and to plan future policy for the protection of our environment. According to Nair (2004) "taxonomy is an integral</p>

component of biodiversity protection, remediation and ecodevelopment". The present study aims to highlight the plant diversity of Kalamboli area, which in turn will provide important source for use in various other fields of biology in general and botany in particular.

MATERIALS AND METHODS

To carry out work on plant diversity in Kalamboli area of Navi Mumbai in India (Figure 1), first of all, the study area was selected and divided into different regions for the sake of convenience and

systematic study. A general survey of the vegetation was made and observed different plants such as herbs, shrubs and trees. Extensive field surveys were conducted in the district during different seasons through regular field visits in order to get maximum representation of the different plant species. During our field visits plant samples were collected and photographs are taken of particular species. The collected plants species were identified using of various floras of Cook (1958) and flora of Maharashtra by Almeida (1996). Additional information of plants about their habit was also recorded and incorporated in the study.

Table 1: Plant species from different families.

Sr. No	Botanical Name	Family	Common Name	Habit
1.	<i>Heliotropium indicum</i>	Boraginaceae	Indian heliotrop	Herb
2.	<i>Brassica juncea</i>	Brassicaceae	Mustard greens	Herb
3.	<i>Portulaca oleracea</i>	Portulacaceae	Pigweed	Herb
4.	<i>Celosia argentia</i>	Amaranthaceae	Cocks comb	Herb
5.	<i>Astracantha longifolia</i>	Acanthaceae	kulikhara	Herb
6.	<i>Muntingia calabura</i>	Muntingiaceae	Jamaica cherry	Shrub/tree
7.	<i>Celosia spicata</i>	Amaranthaceae	Spiked cocks comb	Herb
8.	<i>Sida acuta</i>	Malvaceae	wireweed	Herb
9.	<i>Cleome burmani</i>	Capparaceae		Herb
10.	<i>Cucurbita pepo</i>	Cucurbitaceae	Pumpkin	Climber
11.	<i>Chenopodium</i>	Chenopodiaceae	Lamb's quarters	Herb
12.	<i>Ipomoea purpurea</i>	convolvulaceae	Morning glory	Climber
13.	<i>Hibiscus esculentus</i>	Malvaceae	Okra	Herb
14.	<i>Ipomoea batata</i>	Convolvulaceae	Sweet potato	Climber
15.	<i>Malachra capitata</i>	Malvaceae	Brazil jute	Herb
16.	<i>Alysicarpus longifolius</i>	Fabaceae	Moneywort	Herb
17.	<i>Solanum melongena</i>	Solanaceae	Eggplant	Herb
18.	<i>Urena lobata</i>	Malvaceae	Congo jute	Herb
19.	<i>Impatiens minor</i>	Balsaminaceae	Lesser balsum	Herb
20.	<i>Momordica charantia</i>	Cucurbitaceae	Bitter gourd	Climber
21.	<i>Delonix regia</i>	Caesalpiniae	Gulmohar	Tree
22.	<i>Mangifera indica</i>	Anacardiaceae	Mango	Tree
23.	<i>Eucalyptus</i>	Myrtaceae	Neelgiri	Tree
24.	<i>Ficus religiosa</i>	Moraceae	Pipal	Tree
25.	<i>Azadirachta indica</i>	Miliaceae	Neem	Tree
26.	<i>Calotropis gigantea</i>	Asclepiadaceae	Rui	Shrub
27.	<i>Acacia auriculiformis</i>	Fabaceae	Earleaf acacia	Tree
28.	<i>Moringa oleifera</i>	Moringaceae	Shevga	Tree
29.	<i>Peltophorum pterocarpum</i>	Caesalpiniae	Sonmohar	Tree
30.	<i>Hibiscus rosa-sinesis</i>	Malvaceae	Jaswand	Shrub
31.	<i>Vinca rosea</i>	Apocynaceae	Sadaphuli	Herb
32.	<i>Plumeria alba</i>	Apocynaceae	White Chapha	Tree

33.	<i>Plumeria pudica</i>	Apocynaceae	White Chapha	Tree
34.	<i>Ipomoea quamoclit</i>	Convolvulaceae	Cypress vine	Climber
35.	<i>Lantana camara</i>	Verbenaceae	Ghaneri	Shrub
36.	<i>Ocimum basilicum</i>	Lamiaceae	Tulasi	Herb
37.	<i>Clitoria ternatea</i>	fabaceae	Butterfly pea	Climber
38.	<i>Ricinus communis</i>	Euphorbiaceae	Castor	Shrub
39.	<i>Caesalpinia pulcherrima</i>	Fabaceae	Shankasur	Shrub
40.	<i>Baugainvella glabra</i>	Nyctaginaceae	Baugainvella	Trees/shrubs

RESULT AND DISCUSSION

The study includes 40 plants from different families. The plants are categorized as herb, shrub, trees and climbers etc. Species diversity and variability of plant and animal species are the most striking feature of life, which reflects the complexity, uniqueness, and intactness of natural ecosystems (Mohammad *et al.*, 2009). An appropriate biodiversity management strategy should take into account the distribution patterns of species (Perring and Lovett, 1999). Conservation of ecosystem and maintenance of biodiversity is matter of both national and international concern. The maximum numbers of plant species were identified for family Malvaceae followed by Apocynaceae, Convolvulaceae while minimum for most of the remaining family. Plants together with trees, shrubs and herbs on the earth represent one of the vital elements of biodiversity; therefore the understanding of plant species occur in the different areas of the world is a pre-requirement to preserve and maintain the natural biodiversity. It helps us to appreciate the accurate information of the known plant species from a given area. The information is significant as it allows us to prevent or avoid the potential chances of biodiversity loss and to plan future policy for the protection of our environment.

CONCLUSION

Taxonomy is a great tool for identification of the different plant species. It is of fundamental importance for understanding biodiversity and

ecosystem functioning, as it provides us with the data to explore and describe biodiversity through scientific analysis.

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