

A survey of phyto-resources in and around Mahishadal Raj Garh area, Purba Medinipur, West Bengal

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Abstract

The present work is a preliminary survey of angiospermic plant species in Mahishadal Raj Garh area, Purba Medinipur. It is the historical place of the district. It is the basic database of local flora with their common name, family, habit and present status. As many as 60 plant species of 28 families have been documented during the course of study.

Key words : Magnoliophyta, floral diversity, inventorisation, revegetation, Mahishadal.

The inventory of Magnoliophyta (Angiosperms) in the Raj Garh area of Mahishadal Raj Bari, Mahishadal, Purba Medinipur have been explored, which is composed of as many as 60 plant species of 28 families. The area is located only 100 km away from Kolkata on way to Digha and Haldia. We found it to be ideal for a historic drive out, particularly if one includes Tamruk, the birth place of revolutionary Bengal. The survey work has been conducted in and around Raj Bari areas. The present work is a basic attempt to plant census as well as a glimpse of plant diversity inventorisation of that area.

This is also a basic need for local floral diversity documentation and prepares a data base for future references. The phyto-resources have been documented with field notes and the herbarium sheet have been made for proper identification following standard literature^{2,10,12,19}. During the course of study some important medicinal plants are also recorded, that are the asset of the local flora. Further work can be done in value addition of the medicinal plants, and finally there is a possibility of successful revegetation and restoration of the flora studied.

Table-1. Angiospermic plant species with their family, common name, habit and present status.

Scientific Name	Family	Common Name	Habit	Present status
<i>Achyranthes aspera</i> L.	Amaranthaceae	Apang	Herb	Very common
<i>Aerva lanata</i> (L.) Juss.	Amaranthaceae	Chaldhoa	Herb	Common

<i>Ageratum conyzoides</i> (L.) L.	Asteraceae	Dochunti	Herb	Common
<i>Alternanthera sessilis</i> (L.) R. Br. Ex. DC.	Amaranthaceae	joylata	Herb	Very common
<i>Amaranthus spinosus</i> L.	Amaranthaceae	Kantanote	Herb	Common
<i>Amaranthus viridis</i> L.	Amaranthaceae	Noitesak	Herb	Common
<i>Andrographis paniculata</i> (Burm. f.) Nees.	Acanthaceae	Kalmegh	Herb	Common
<i>Azadirachta indica</i> A. Juss.	Meliaceae	Neem	Tree	Common
<i>Bignonia aequinoctialis</i> L.	Bignoniaceae	Baghnak	climber	Less common
<i>Blumea lacera</i> (Burm.f.) DC.	Asteraceae	Kukursunga	Herb	Very common
<i>Boerhavia diffusa</i> L.	Nyctaginaceae	Punarnava	Herb	Common
<i>Bougainvillea glabra</i> Choisy	Nyctaginaceae	Kagajful	Lianas	Common
<i>Caesalpinia pulcherrima</i> (L.) Sw.	Leguminosae	krishnachura	Tree	common
<i>Calotropis gigantea</i> (L.) Dryand.	Apocynaceae	Akanda	Shrub	Common
<i>Cassia fistula</i> L.	Leguminosae	Banarlathi	Tree	Very common
<i>Cayratia pedata</i> (Lam.)	Vitaceae	Goyale lata	Climber	Less common
<i>Chromolaena odorata</i> (L.) R. M. King & H. Rob.	Asteraceae	Ayapan	Shrub	Very common
<i>Chrozophora rotleri</i> (Geiseler) A. Juss. ex Spreng	Euphorbiaceae	Dudhematane	under- shrub	Very common
<i>Chrysopogon aciculatus</i> (Retz.) Trin.	Poaceae	Chorkanta	Herb	Very common
<i>Cleome viscosa</i> L.	Cleomaceae	Hurhuria	Herb	Very common
<i>Clerodendrum infortunatum</i> Dennst.	Lamiaceae	Ghetu	Under shrub	Very common
<i>Coccinia grandis</i> (L.) Voigt	Cucurbitaceae	Telakochu	climber	common
<i>Cocos nucifera</i> L.	Arecaceae	Nirkel	Tree	Very common
<i>Colocasia esculenta</i> (L.) Schott	Araceae	Kochu	Herb	Very common
<i>Commelina benghalensis</i> L.	Commelinaceae	kansira	Herb	Less common
<i>Croton bonplandianus</i> Baill.	Euphorbiaceae	Churchuri	Under shrub	Very common
<i>Datura metel</i> L.	Solanaceae	Dhutura	Shrub	Very common
<i>Delonix regia</i> (Hook.) Raf.	Leguminosae	Radhachura	Tree	Very common
<i>Euphorbia hirta</i> L.	Euphorbiaceae	Boradudhe	Herb	Very common
<i>Ficus hispida</i> L. f.	Moraceae	Dumur	Tree	Less common
<i>Glycosmis pentaphylla</i> (Retz.) DC.	Rutaceae	Arseora	Shrub	Very common
<i>Lantana camara</i> L.	Verbenaceae	Putus	Shrub	Very common
<i>Leonotis nepetifolia</i> (L.) R. Br.	Lamiaceae	Raktadrone	Under shrub	Common
<i>Luffa cylindrica</i> (L.) M. Roem.	Cucurbitaceae	Porol	Climber	Common

<i>Mangifera indica</i> L.	Anacardiaceae	Amm	Tree	Very common
<i>Mikania scandens</i> (L.) Willd.	Asteraceae	janglilata	Climber	Very common
<i>Mimosa pudica</i> L.	Leguminosae	Lojjabati	Herb	Common
<i>Mimusops elengi</i> L.	Sapotaceae	Bokul	Tree	Very common
<i>Musa paradisiaca</i> L.	Musaceae	Kola	Tree	Very common
<i>Nerium oleander</i> L.	Apocynaceae	Kalke	Shrub	Very common
<i>Ocimum tenuiflorum</i> L.	Lamiaceae	Tulsi	Herb	Common
<i>Parthenium hysterophorus</i> L.	Asteraceae	Parthenium	Herb	Very common
<i>Phoenix sylvestris</i> (L.) Roxb.	Arecaceae	Khejur	Tree	Very common
<i>Phyllanthus niruri</i> L.	Euphorbiaceae	Bhuiamla	Herb	Common
<i>Physalis minima</i> L.	Solanaceae	Bantepari	Herb	Common
<i>Plumeria rubra</i> L.	Apocynaceae	Kathgulancha	Tree	Common
<i>Scoparia dulcis</i> L.	Scrophulariaceae	Bondhone	Herb	Common
<i>Senna sophora</i> (L.) Roxb.	Caesalpiniaceae	Kalkasunda	Herb	Very common
<i>Sida cordifolia</i> L.	Malvaceae	Berela	Herb	Very common
<i>Sida rhombifolia</i> L.	Malvaceae	Berela	Herb	Common
<i>Solanum americanum</i> Mill.	Solanaceae	Kakmachi	Herb	Common
<i>Spondias pinnata</i> (L. f.) Kurz	Anacardiaceae	Amra	Tree	Less common
<i>Swietenia macrophylla</i> King.	Meliaceae	Mehogani	Tree	Common
<i>Tephrosia purpurea</i> (L.) Pers.	Leguminosae	Banneel	Herb	Very common
<i>Thespesia populnea</i> (L.) Sol. Ex Correa.	Malvaceae	Habal	Tree	Very common
<i>Tragia involucrata</i> L.	Euphorbiaceae	Bichutipata	Climber	Common
<i>Tridax procumbens</i> (L.) L.	Asteraceae	Tridakha	Herb	Less common
<i>Vernonia cinerea</i> (L.) Less.	Asteraceae	Sahadevi	Herb	Common
<i>Vigna trilobata</i> (L.) Verdc.	Fabaceae	Tripatra	Herb	Less common
<i>Xanthium strumarium</i> L.	Asteraceae	Kanta gach	Shrub	Very common

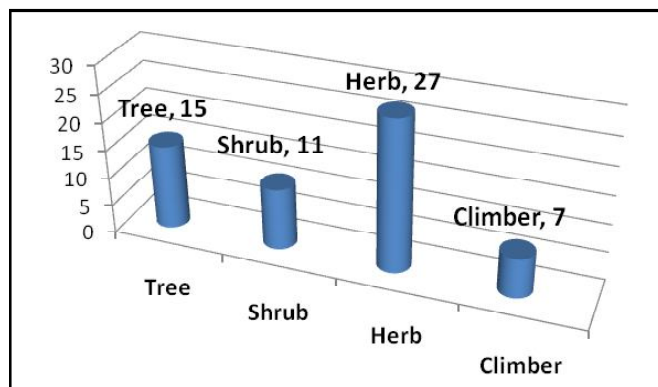


Fig. 1. Habit analysis of the local flora.

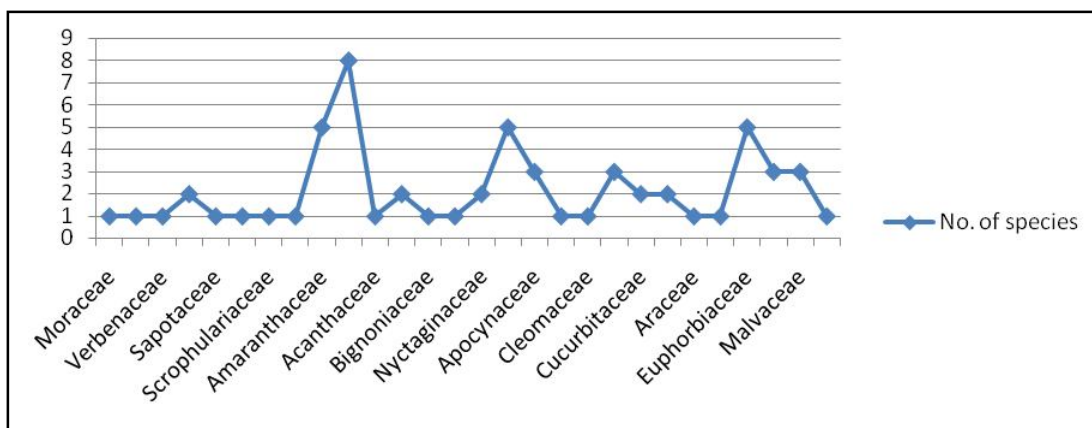


Fig. 2. No. of species distribution in respect of family.

In the present work among the 60 plant species (Table-1) 15 are trees, 11 shrubs, 7 climbers and maximum areas have been occupied by the herbaceous vegetation and it is 27. The ratio of Monocot and Dicot plant is (1:9). Considering the status of magnoliophytes *Commelina benghalensis*, *Bignonia aequinoctialis*, *Ficus hispida*, *Sapindus mombin*, *Cayratia pedata* are less common. The dominant families are Asteraceae bearing 8 species, 5 species of Amaranthaceae, Euphorbiaceae, Leguminosae have been noted (Fig. 2). The same types of field study have been under taken by Mukherjee,¹⁷ in Midnapur district, Bhattacharya and Mukherjee,^{3-5 a,b,c} in Garh Jungle of Durgapur Forest, Ramnabagan wildlife sanctuary and Bhalki-Machan forest of Bardhaman, West Bengal; Chanda and Mukherjee,⁹ in Ayodhya hills of Purulia district; Bouri and Mukherjee,⁸ in Burdwan forest. Panigrahi and Murti,¹⁸; Malik *et al.*,¹⁴; Ghosh *et al.*,¹¹; Biswas *et al.*,^{6,7 a,b}; Mandal and Mandal,¹⁶; Banerjee and Mukherjee,¹ in different parts of the West Bengal. In 1996 Swain and Behera²⁰ emphasized on the qualitative

analysis of herbaceous vegetation in a regenerating Teak forest floor from Orissa. They discussed about 31 herbaceous plant species. Further Krishnamurthy *et al.*,¹³ studied the vegetation structure and floristic composition of a tropical dry deciduous forest in Bhadra wildlife Sanctuary in Karnataka.

The present primary data is helpful for identification of the local plant specimens. Herbarium sheet have also made for future references and identification. Many documented plant species have medicinal values among the local inhabitants. Further work can be done on medicinal property, biochemical analysis, pharmacological evaluation and therapeutic proving which may hand over new medicine to mankind. This data is helpful for further restoration of the vegetation of the area.

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