

**Species Diversity Of Vascular Plants Of Sunabeda Wildlife Sanctuary, Odisha, India**B. Kandi<sup>1</sup>, S.C. Sahu<sup>2</sup>, N.K. Dhal<sup>2</sup> and R.C. Mohanty<sup>1</sup>

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**Abstract:** Sunabeda Wildlife Sanctuary (20° 24 to 20° 44 latitude and 82° 20 0 to 82° 34 42 longitude), one of the 18 protected areas of Odisha is situated in the north-west corner of Nuapada district. An extensive study has been carried out from 2008 to 2010 to assess the floristic diversity of the sanctuary. A total of 188 angiospermic plants and 2 gymnosperms were recorded from the sanctuary belonging to 157 genera and 59 families. Out of that 154 species belong to dicotyledons (128 genera and 52 families), 34 species belong to monocotyledons (27 genera & 5 families) and 2 species of gymnosperms (2 genera and 2 families). Habit wise grouping shows 90 (47.36%) are trees followed by 18 (9.47%) shrubs, 36 (18.94%) herbs, 27 (14.21%) climbers and 19 (10%) grasses. Among the families of angiosperms, Poaceae with 22 species is the dominant family followed by Fabaceae, Euphorbiaceae, Asteraceae, Combretaceae, Anacardiaceae, Mimosaceae, Apocynaceae and Caesalpiniaceae. *Dioscorea* is the dominant genus with 8 species followed by *Terminalia*, *Ficus*, *Acacia*, *Ziziphus*, *Butea*, *Anogeisus* and *Bauhinia*. Among the plants *Tectona grandis*, *Shorea robusta*, *Acacia nilotica*, *Anogeisus latifolia*, *Terminalia alata*, *Bauhinia vahlii* and *Ziziphus oenoplia* are predominant. The present study provides the preliminary knowledge about floristic composition and phytodiversity of the area, which will be helpful for management and conservation of the sanctuary. New York Science Journal 2011;4(3):63-69]. (ISSN: 1554-0200). <http://www.sciencepub.net/newyork>.

**Keywords:** Species diversity: Vascular plants: Sunabeda Wildlife Sanctuary: Odisha**Introduction**

Any plant or animal which is neither domesticated nor cultivated and inhabits a wild landscape are coming under the purview of wildlife. From the ancient period, forests play a vital role in life supporting system and livelihood for the entire human kind. The importance of wildlife for maintaining the stability of forest ecosystem and also for biodiversity point of view is very much felt along with the forest cover. The significance of biodiversity is known to human beings ever since they began to observe the nature and natural resources and making use of these for their survival. Thus biodiversity forms the backbone of ecological and economic efficiency and security of the nation.

Plant community plays an important role in sustainable management by maintaining biodiversity and conserving the environment (Farooque & Saxena, 1999). Floristic study is not only important to know the variety of plants present in an area but also socio-economically significant. It provides shelter, food, medicine and everything for the human being and other species of that area. Right now phytodiversity of our planet is under severe threat. So this is the need of the hour to safeguard this precious

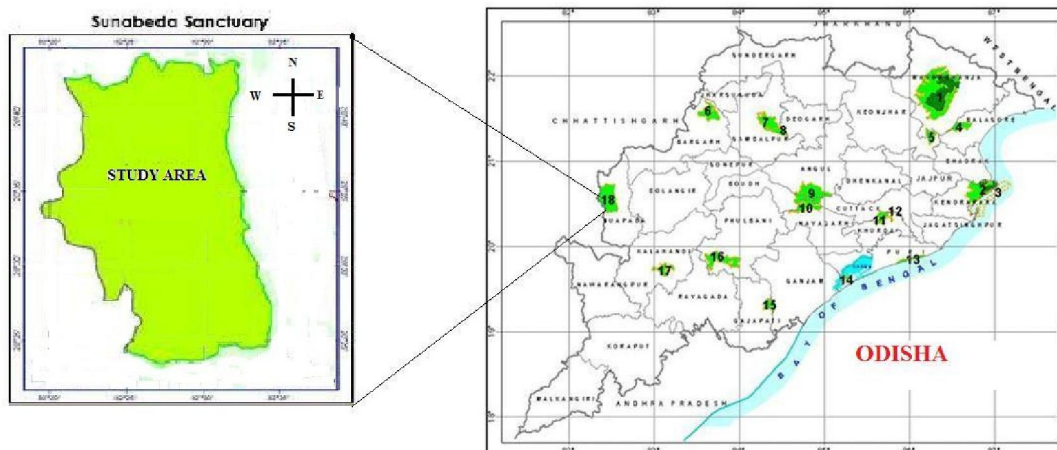
wealth. To tackle this issue several conservation measures are taken at governmental level. Protected area/Sanctuaries are one of them. The main role of wildlife sanctuaries is the conservation of biological diversity at a global scale. In addition to this scientific approach needed to identify and document the diversity and create awareness about the significance of these valuable resources.

**Study area**

Sunabeda Wildlife Sanctuary (20° 24 to 20° 44 N latitude and 82° 20 0 to 82° 34 42 E longitude) represents a nearly pristine ecosystem of dry deciduous forest, river valleys, hills and waterfalls. Sunabeda plateau recognized for its phenomenal richness in floral, faunal, geomorphological and ecological values for which it is notified accordingly. It is located in the north-west corner of Nuapada district, adjoining the inter state boundary between Odisha and Chhattisgarh. The total land area of the Sanctuary is 600 sq km out of which 243.60 sq km comes under core and rest 356.40 sq km under buffer zone. The geology is admixture of igneous, sedimentary as well as metamorphic rocks. But the proportion of igneous and sedimentary rocks to metamorphic is very high.

The soil is very fine grained, dark coloured and contains high percentage of magnesium carbonate and calcium carbonate. The texture of the soil very often is clay, silt, less proportion of sand and high proportion of clay and silt. The lateritic and red soils are noticed in the slopes and ridges of mountain ranges. The Sanctuary comes under Deccan Peninsular Zone, Eastern plateau Province &

Chhattisgarh-Dandakaranya bio-geographic zones. The forests of Sunabeda Wildlife Sanctuary can be classified according to Champion and Seth's revised classification (1968) of "Forest Types of India" into (1) Southern Tropical Dry Deciduous Forest, (2) Northern Tropical Dry Deciduous Forests, (3) Dry Peninsular Forests, (4) Dry Sal Forests, (5) Dry Teak Forests.



**Fig. Location Map Of The Study Area**

### Methodology

The study area was extensively surveyed during 2008-10 in different seasons to assess the diversity of vascular plants. Necessary field information were collected to record distinguished features of plants. Two to three voucher specimens in flowering/fruited stage were collected and identified with the help of regional flora (Gamble, 1915-36; Haines, 1921-25; Mooney, 1950; Saxena & Brahmam, 1994-1996) and herbarium of IMMT (RRL-B) CSIR, Bhubaneswar. The herbarium specimens were deposited in the Department of Botany, Govt. College, Bhawanipatna. The species were arranged alphabetically with correct botanical name, family, local name, form and habit.

### Results and Discussion

The findings of the study are given in the Table 1. A total of 190 vascular plants were recorded from the sanctuary belonging to 157 genera and 59 families. Among them 154 species belongs to dicotyledons (128 genera and 52 families), 34 species belong to monocotyledons (27 genera & 5 families) and 2 species of gymnosperms (2 genera and 2 families). Habit wise grouping shows 90 (47.36%) were tree, 18 (9.47%) were shrubs, 36 (18.94%) were herbs, 27 (14.21%) were climbers and 19 (10 %) were grasses.

Among the families Poaceae with 22 species is the dominant family followed by Fabaceae, Euphorbiaceae, Asteraceae, Combretaceae, Anacardiaceae, Mimosaceae, Apocynaceae and Caesalpiniaceae. *Dioscorea* is the dominant genus with 8 species followed by *Terminalia*, *Ficus*, *Acacia*, *Ziziphus*, *Butea*, *Carex*, *Anogeissus* and *Bauhinia*. Among the species *Tectona grandis*, *Shorea robusta*, *Acacia nilotica*, *Anogeissus chebula*, *Terminalia alata*, *Bauhinia vahlii*, *Ziziphus oenoplia* are predominant. In gymnosperms Cycadaceae (1 species & 1 genus) and Gnetaceae (1 species & 1 genus) were the 2 families present in the sanctuary.

Floristically the tropical dry deciduous forests are less complex than the other types of forest (Murphy and Lugo, 1986). But Sunabeda Sanctuary was found to be very rich in phytodiversity. Exploration and monitoring of biodiversity of any area is prerequisite for conservation and management planning. This study reveals that the study area serves as a source of livelihood for many tribes inhabiting the area. This has resulted in the damage of plant diversity and the fragmentation of the vegetation of the sanctuary. The present study is very preliminary and subsequent study required to know the vegetation dynamics, ecology and

climate change occurring inside the Sanctuary which will be helpful in management and conservation. The future health of the sanctuary depends on maintaining and restoring the

diversity of ecological communities and in restricting the rates of exploitation.

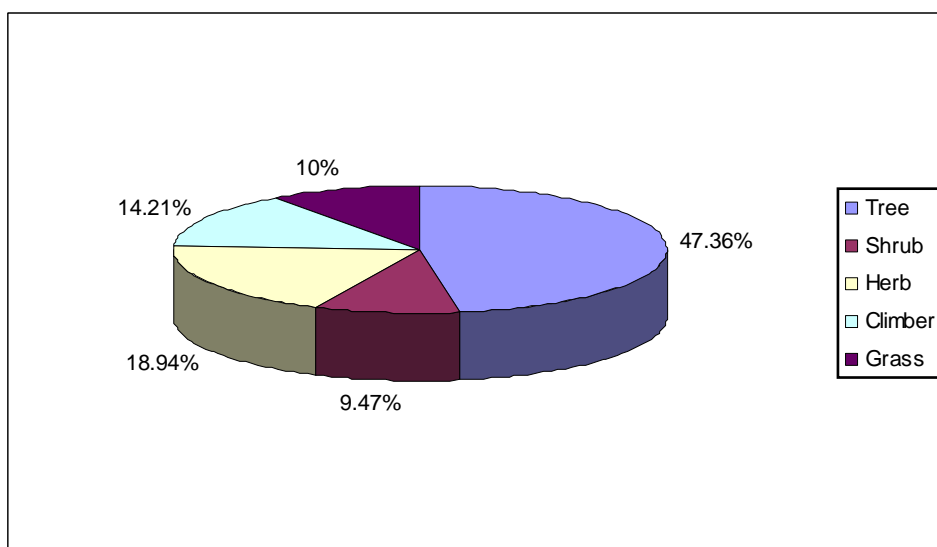


Fig 1. Life form of Species

Table 1. List of species of Sunabeda Wildlife Sanctuary, Odisha

Table 1. List of species of Sunabeda

Wildlife Sanctuary, Odisha	FAMILIES	LOCAL NAME	FORM	HABIT
<b>SPECIES</b>				
<i>Abrus precatorius</i> L.	Fabaceae	Kaincha	Twiner	Dicot
<i>Acacia catechu</i> (L.f.) Willd.	Mimosaceae	Khair	Tree	Dicot
<i>Acacia leucophloea</i> (Roxb.) Willd.	Mimosaceae	Gohira	Tree	Dicot
<i>Acacia nilotica</i> (L.) Delile	Mimosaceae	Babul	Tree	Dicot
<i>Acacia sinuata</i> (Lour.) Merr.	Mimosaceae	Dantari	Climber	Dicot
<i>Aegle marmelos</i> (L.) Corr.	Rutaceae	Bel	Tree	Dicot
<i>Aganosma caryophyllata</i> (Roxb.ex Sims) G. Don	Apocynaceae	Malti	Climber	Dicot
<i>Ageratum conyzoides</i> L.	Asteraceae	Poksunga	Herb	Dicot
<i>Ailanthus excelsa</i> Roxb.	Simaroubaceae	Mahalimba	Tree	Dicot
<i>Alangium salvifolium</i> (L.f.) Wang.	Alangiaceae	Ankula	Tree	Dicot
<i>Albizia lebbek</i> (L.) Benth.	Mimosaceae	Siris	Tree	Dicot
<i>Albizia procera</i> (Roxb.) Benth.	Mimosaceae	Siri	Tree	Dicot
<i>Alstonia scholaris</i> (L.) R.Br.	Apocynaceae	Chhatanda	Tree	Dicot
<i>Ampelocissus tomentosa</i> (Roth.) Planch.	Vitaceae	Kanjanoi	Climber	Dicot
<i>Anacardium occidentale</i> L.	Anacardiaceae	Lanka bhelua	Tree	Dicot

<i>Andrographis paniculata</i> (Burm.f.) Wall. ex. Nees	Acanthaceae	Bhuin nimb	Herb	Dicot
<i>Annona squamosa</i> L.	Annonaceae	Sita phal	Tree	Dicot
<i>Anogeissus accuminata</i> (Roxb.exDC.) Guill.&Perr	Combretaceae	Phaseseng	Tree	Dicot
<i>Anogeissus latifolia</i> (Roxb.exDC.) Wall.ex.Guill&Perr.	Combretaceae	Dhainra	Tree	Dicot
<i>Argemone mexicana</i> L.	Papaveraceae	Agora	Herb	Dicot
<i>Argyreia setosa</i> (Roxb.)Choisy	Convolvulaceae	Baghchar	Climber	Dicot
<i>Aristida setacea</i> Retz.	Poaceae	Kantabadhun	Grass	Dicot
<i>Artocarpus heterophyllus</i> Lam.	Moraceae	Panasa	Tree	Dicot
<i>Artocarpus lacucha</i> Roxb.ex Buch.-Ham.	Moraceae	Jentha	Tree	Dicot
<i>Asparagus racemosus</i> Willd.	Liliaceae	Satakari	Under shrub	Monocot
<i>Atylosia cajanifolia</i> Haines.	Fabaceae	Kandula	Shrub	Dicot
<i>Azadirachta indica</i> A. Juss.	Meliaceae	Nimba	Tree	Dicot
<i>Bambusa arundinacea</i> (Retz.) Willd.	Poaceae	Katabauns	Bamboo	Monocot
<i>Bauhinia semla</i> Wunderl.	Caesalpiniaceae	Amthi	Tree	Dicot
<i>Bauhinia vahlii</i> Wight & Arn.	Caesalpiniaceae	Sial	Climber	Dicot
<i>Bidens biternate</i> (Lour.) Merr. & Sherff	Asteraceae	Magh latenga	Herb	Dicot
<i>Blumea fistulosa</i> (Roxb.) Kurz.	Asteraceae	San poksunga	Herb	Dicot
<i>Bombax ceiba</i> L.	Bombacaceae	Simili	Tree	Dicot
<i>Boswellia serrata</i> Roxb.ex Colebr.	Burseraceae	Salia	Tree	Dicot
<i>Bothriochloa pertusa</i> (L.) A.Camus.	Poaceae	Basan	Herb	Monocot
<i>Bridelia retusa</i> (L.) Spreng.	Euphorbiaceae	Kasi	Tree	Dicot
<i>Buchanania lanzan</i> Spreng.	Anacardiaceae	Char	Tree	Dicot
<i>Butea monosperma</i> (Lam.) Taub.	Fabaceae	Falsa	Tree	Dicot
<i>Butea parviflora</i> Roxb.	Fabaceae	Laha falsa	Climber	Dicot
<i>Butea superba</i> Roxb.	Fabaceae	Budli	Climber	Dicot
<i>Caesalpinia decapetala</i> (Roth) Alston	Caesalpiniaceae	gilo	Shrub	Dicot
<i>Caesalpinia pulcherrima</i> (L.) Sw.	Caesalpiniaceae	Radhachuda	Tree	Dicot
<i>Calamus guruba</i> Buch.-Ham	Arecaceae	Kanta bet	Climber	Monocot
<i>Calamus viminalis</i> Willd. var. <i>fascicularis</i> Becc.	Arecaceae	Bet	Climbing Shrub	Monocot
<i>Calotropis procera</i> (Ait.) R. Br.	Asclepiadaceae	Arakh	Shrub	Dicot
<i>Canavalia virosa</i> (Roxb.) Wight & Arn.	Fabaceae	Maharata	Climber	Dicot
<i>Capparis zeylanica</i> L.	Capparaceae	Asadhra	Climber	Dicot
<i>Carex baccans</i> Nees	Cyperaceae	San baber	Weed	Monocot
<i>Carex cruciata</i> Wahlenb.	Cyperaceae	Baber	Weed	Monocot
<i>Cassia siamea</i> Lam.	Caesalpiniaceae	sakunda	Tree	Dicot
<i>Catunaregam spinosa</i> (Thunb.) Tirveng.	Rubiaceae	Kharal	Tree	Dicot

<i>Ceriscoides turgida</i> (Roxb.) Tirveng.	Rubiaceae	Karadha	Tree	Dicot
<i>Chloroxylon swietiana</i> DC.	Rutaceae	Bherua	Tree	Dicot
<i>Chrysopogon aciculatus</i> (Retz.) Trin.	Poaceae	Guguchia	Weeds	Monocot
<i>Cissampelos pareira</i> L.	Menispermaceae	Akarbindu	Climber	Dicot
<i>Cleistanthus collinus</i> (Roxb.) Benth.ex Hook.f.	Euphorbiaceae	Karada	Tree	Dicot
<i>Coccinia grandis</i> (L.) Voigt	Cucurbitaceae	Bana kunduri	Climber	Dicot
<i>Combretum roxburghii</i> Spreng.	Combretaceae	Atundi	Shrub	Dicot
<i>Commelina benghalensis</i> L.	Commelinaceae	Kanisira	Weed	Monocot
<i>Cordia obliqua</i> Willd.	Ehretiaceae	Dhuanl	Tree	Dicot
<i>Crateva adansonii</i> DC.	Capparaceae	Baruna	Tree	Dicot
<i>Curcuma amada</i> Roxb.	Zingiberaceae	Amada	Herb	Monocot
<i>Curcuma longa</i> L.	Zingiberaceae	Haldi	Herb	Monocot
<i>Cuscuta reflexa</i> Roxb.	Cuscutaceae	Nirmuli	Parasite	Dicot
<i>Cycas circinalis</i> L.	Cycadaceae	Regnuva	Small tree	Gymnosperm
<i>Cymbopogon martinii</i> (Roxb.)Wats.	Poaceae	Tikhari	Grass	Monocot
<i>Cynodon barberi</i> Rang.& Tad.	Poaceae	Dobijhar	Grass	Monocot
<i>Cynodon dactylon</i> (L.) Pers.	Poaceae	Dubaghasa	Grass	Monocot
<i>Cyperus rotundus</i> L.	Cyperaceae	Mutha	Weed	Monocot
<i>Cyperus alopecuroides</i> Rottb.	Cyperaceae	Santara	Weed	Monocot
<i>Cyperus esculentus</i> L.	Cyperaceae	Benua	Weed	Monocot
<i>Dalbergia paniculata</i> Roxb.	Fabaceae	Barbakulia	Tree	Dicot
<i>Datura stramonium</i> L.	Solanaceae	Dudura	Herb	Dicot
<i>Dendrocalamus strictus</i> (Roxb.) Nees.	Poaceae	Salia banso	Bamboo	Monocot
<i>Desmodium oojeinensis</i> (Roxb.) Ohashi	Fabaceae	Bandhan	Tree	Dicot
<i>Dichanthium annulatum</i> (Forssk.) Stapf.	Poaceae	Kaila	Grass	Monocot
<i>Dillenia aurea</i> Sm.	Dilleniaceae	Chhot rai	Tree	Dicot
<i>Dillenia pentagyna</i> Roxb.	Dilleniaceae	Rai	Tree	Dicot
<i>Dioscorea belophylla</i> Voigt.ex Haines	Dioscoreaceae	Korondia alu	Climber	Monocot
<i>Dioscorea bulbifera</i> L.	Dioscoreaceae	Pita alu	Climber	Monocot
<i>Dioscorea puber</i> Bl.	Dioscoreaceae	Kasa alu	Climber	Monocot
<i>Dioscorea wallichii</i> Hook.f.	Dioscoreaceae	Tunga alu	Climber	Monocot
<i>Diospyros melanoxydon</i> Roxb.	Ebenaceae	Kendu	Tree	Dicot
<i>Diospyros montana</i> Roxb.	Ebenaceae	Kendu	Tree	Dicot
<i>Discorea alata</i> L.	Dioscoreaceae	Khamba alu	Climber	Monocot
<i>Discorea hispida</i> Dennst.	Dioscoreaceae	Bana alu	Climber	Monocot
<i>Discorea oppositifolia</i> L.	Dioscoreaceae	Pani alu	Climber	Monocot
<i>Discorea pentaphylla</i> L.	Dioscoreaceae	Korba alu	Climber	Monocot
<i>Eclipta prostrata</i> (L.) L.	Asteraceae	Bhrungraj	Herb	Dicot
<i>Eleusine coracana</i> (L.) Gaertn.	Poaceae	Mandia	Grass	Monocot

<i>Elephantopus scaber</i> L.	Asteraceae	Tutmuli	Herb	Dicot
<i>Entada rheedii</i> Spreng.	Mimosaceae	Gila	Climber	Dicot
<i>Eremopogon faveolatus</i> (Del.) Stapf.	Poaceae	Kanda ghas	Grass	Monocot
<i>Erythrina suberosa</i> Roxb.	Fabaceae	Baldia	Tree	Dicot
<i>Erythrina variegata</i> L.	Fabaceae	Paldhua	Tree	Dicot
<i>Eulalia trispicata</i> (Schult. & Sctult. f.) Henrard.	Poaceae	Banga serum	Grass	Monocot
<i>Evolvulos alsinoides</i> L.	Convolvulaceae	Bichhamalia	Herb	Dicot
<i>Ficus amplissima</i> Sm.	Moraceae	jari	Tree	Dicot
<i>Ficus bengalensis</i> L.	Moraceae	Bara	Tree	Dicot
<i>Ficus racemosa</i> L.	Moraceae	Dimiri	Tree	Dicot
<i>Ficus religiosa</i> L.	Moraceae	Pipal	Tree	Dicot
<i>Fimbristylis falcata</i> (Vahl) Kunth	Cyperaceae	Swanli	Weed	Monocot
<i>Fioria vitifolia</i> (L.) Mattei.	Malvaceae	Bana kapa	Under shrub	Dicot
<i>Gardenia gummifera</i> L.	Rubiaceae	Gurudu	Shrub	Dicot
<i>Gardenia latifolia</i> Ait.	Rubiaceae	Dangurudu	Tree	Dicot
<i>Glochidion lanceolarium</i> (Roxb.) Dalz.	Euphorbiaceae	Chikni (Kalicha)	Tree	Dicot
<i>Glycosmis pentaphylla</i> (Retz.) DC.	Rutaceae	Chauldhua	Tree	Dicot
<i>Gmelina arborea</i> Roxb.	Verbenaceae	Gambhari	Tree	Dicot
<i>Gnetum ula</i> Brongn.	Gnetaceae	Munjalendi	Climber	Gymnosperm
<i>Gouania leptostachya</i> DC.	Rhamnaceae	Pichhali moi	Shrub	Dicot
<i>Grewia elastica</i> Royle.	Tiliaceae	Mirigachara	Tree	Dicot
<i>Gymnema sylvestris</i> (Retz) R. Br. ex Schult.	Asclepiadaceae	Gudamari	Climber	Dicot
<i>Haldinia cordifolia</i> (Roxb.) Ridsd.	Rubiaceae	Girta	Tree	Dicot
<i>Hemidesmus indicus</i> (L.)R.Br.	Periplocaceae	Anantamula	Twining herb	Dicot
<i>Heteropogon contortus</i> (L.) P.Beauv. ex Roem.	Poaceae	Dauria	Grass	Monocot
<i>Hibiscus aculeatus</i> Roxb.	Malvaceae	Periperika	Under shrub	Dicot
<i>Hiptage benghalensis</i> (L.) Kurz.	Malphiaceae	Latanageswar	Climber	Dicot
<i>Holarrhena pubescens</i> (Buch.-Ham.) Wall. ex G.	Apocynaceae	Kurchi	Tree	Dicot
<i>Hymenodictyon orixense</i> (Roxb.) Mabb.	Rubiaceae	Kanso	Tree	Dicot
<i>Imperata cylindrica</i> (L.) Raeusch.	Poaceae	Jhun	Grass	Monocot
<i>Ipomoea carnea</i> Jacq.Enum.	Convolvulaceae	Amardi	Shrub	Dicot
<i>Iseilema prostratum</i> (L.) Anders.	Poaceae	Musakani	Grass	Monocot
<i>Justicia adhatoda</i> L.	Acanthaceae	Basing	Shrub	Dicot

<i>Lagerstromia parviflora</i> Roxb.	Lathyraceae	sidha	Tree	Dicot
<i>Lannea coromandelica</i> (Houtt.) Merr.	Anacardiaceae	Mai	Tree	Dicot
<i>Lantana camara</i> L.	Verbenaceae	Naguari	Shrub	Dicot
<i>Limonia acidissima</i> L.	Rutaceae	Kainth	Tree	Dicot
<i>Litsea glutinosa</i> (Lour.) Robins.	Lauraceae	Jaisanda	Tree	Dicot
<i>Macaranga peltata</i> (Roxb.) Muell.-Arg.	Euphorbiaceae	Manda	Tree	Dicot
<i>Madhuca indica</i> Gmel.	Sapotaceae	Mahul	Tree	Dicot
<i>Mallotus philippensis</i> (Lam.) Muell.-Arg.	Euphorbiaceae	Kamalagundi	Tree	Dicot
<i>Mangifera indica</i> L.	Anacardiaceae	Aam	Tree	Dicot
<i>Melia dubia</i> Cav.Diss.	Meliaceae	Batra	Tree	Dicot
<i>Michelia champaca</i> L.	Magnoliaceae	Champa	Tree	Dicot
<i>Miliusa velutina</i> (Dunal) Hook.f.&Thoms	Annonaceae	Domgaru	Tree	Dicot
<i>Millettia racemosa</i> (Roxb.) Benth.	Fabaceae	Swabhang	Climber	Dicot
<i>Mimosa pudica</i> L.	Mimosaceae	Nachkuli	Herb	Dicot
<i>Mitragyna parvifolia</i> (Roxb.) Korth.	Rubiaceae	Mundi	Tree	Dicot
<i>Momordica dioica</i> Roxb.ex.Willd.	Cucurbitaceae	Korkot	Climber	Dicot
<i>Morinda pubescans</i> Sm.	Rubiaceae	Anchhu	Tree	Dicot
<i>Mucuna pruriens</i> (L.) DC.	Fabaceae	Baidhanka	Twiner	Dicot
<i>Murdannia nudiflora</i> (L) Brenan.	Commelinaceae	Kanduli	Weed	Monocot
<i>Nyctanthes arbor-tristis</i> L.	Oleaceae	Khar khasa	Tree	Dicot
<i>Opilia amentacea</i> Roxb.	Opiliaceae	Bhadalia	Shrub	Dicot
<i>Oryza sativa</i> L.	Poaceae	Dhan	Grass	Monocot
<i>Paederia foetida</i> L.	Rubiaceae	Prasarini	Climber	Dicot
<i>Parthenium hysterophorus</i> L.	Asteraceae	Gandri	Herb	Dicot
<i>Phyllanthus emblica</i> L.	Euphorbiaceae	Jhar ainla	Tree	Dicot
<i>Pongamia pinnata</i> (L.)Pierre.	Fabaceae	Karanja	Tree	Dicot
<i>Protium serratum</i> (Wall.ex Colebr.) Engl.	Burseraceae	Niuburu moi	Tree	Dicot
<i>Pterocarpus marsupium</i> Roxb.	Fabaceae	Bija	Tree	Dicot
<i>Rauvolfia serpentina</i> ( L) Benth. ex Kurz.	Apocynaceae	Patalgarud	Under shrub	Dicot
<i>Saccharum bengalense</i> Retz.	Poaceae	Munja ghas	Grass	Monocot
<i>Santalum album</i> L.	Santalaceae	Chandan	Tree	Dicot
<i>Schleichera oleosa</i> (Lour.) Oken	Sapindaceae	Kusum	Tree	Dicot
<i>Semecarpus anacardium</i> L.f.	Anacardiaceae	Bhelua	Tree	Dicot
<i>Shorea robusta</i> Gaertn.f.	Dipterocarpaceae	Sal	Tree	Dicot
<i>Sida acuta</i> Burm.f.	Malvaceae	Bajramuli	Herb	Dicot
<i>Smilax perfoliata</i> Lour.	Smilacaceae	Mutri	Climber	Dicot
<i>Smilax zeylanica</i> L.	Smilacaceae	Muturi	Climber	Dicot
<i>Solanum nigrum</i> L.	Solanaceae	Bhejibaigan	Herb	Dicot
<i>Solanum xanthocarpum</i> Schrad. &	Solanaceae	Bhejri	Herb	Dicot

## Wendle

<i>Soymida febrifuga</i> (Roxb.) A.Juss.	Meliaceae	Rohini	Tree	Dicot
<i>Sterculia urens</i> Roxb.	Sterculiaceae	Genduli	Tree	Dicot
<i>Streblus asper</i> Lour.	Moraceae	Sahra	Tree	Dicot
<i>Streospermum chelonoides</i> (L.f.) DC.	Bignoniaceae	Padal	Tree	Dicot
<i>Strychnos nux-vomica</i> L.	Strychnaceae	Kuchila	Tree	Dicot
<i>Symplocos racemosa</i> Roxb.	Symplocaceae	Lodha	Tree	Dicot
<i>Tectona grandis</i> L.f.	Verbenaceae	Sabun	Tree	Dicot
<i>Tephrosia purpurea</i> (L.) Pers.	Fabaceae	Kulothia	Under shrub	Dicot
<i>Terminalia alata</i> Heyne ex Roth.	Combretaceae	Sahaj	Tree	Dicot
<i>Terminalia arjuna</i> (Roxb.exDC) Wight.&Arn.	Combretaceae	Kha gachh	Tree	Dicot
<i>Terminalia chebula</i> Retz.	Combretaceae	Harda	Tree	Dicot
<i>Terminalia bellirica</i> (Gaertn.) Roxb.	Combretaceae	Bahada	Tree	Dicot
<i>Themeda laxa</i> (Anderss.) A.Camus.	Poaceae	bhatajhar	Grass	Monocot
<i>Themeda triandra</i> Forssk.	Poaceae	Jhipa jhar	Grass	Monocot
<i>Thysanolaena maxima</i> (Roxb.) Kuntze	Poaceae	Phuljharughas	Grass	Monocot
<i>Tragia plukenetii</i> R.Sm.	Euphorbiaceae	Bichhuati	Climber	Dicot
<i>Trewia nudiflora</i> L.	Euphorbiaceae	Panigambhar	Tree	Dicot
<i>Trichosanthes cucumerina</i> L.	Cucurbitaceae	Bana putal	Climber	Dicot
<i>Tridax procumbens</i> L.	Asteraceae	Bisalyakarni	Herb	Dicot
<i>Vetiveria zizaniodes</i> (L.) Nash	Poaceae	Khas khas	Grass	Monocot
<i>Vitex negundo</i> L.	Verbenaceae	Begonia	Tree	Dicot
<i>Vitis heyneana</i> Roem.&Schult.	Vitaceae	Deblia	Climber	Dicot
<i>Xylia xylocarpa</i> (Roxb.) Taub.	Mimosaceae	Kongra	Tree	Dicot
<i>Zanthoxylum armatum</i> DC.	Rutaceae	Tundupoda	Tree	Dicot
<i>Zea mays</i> L.	Poaceae	Maka	Grass	Monocot
<i>Zizyphus glabrata</i> Heyne ex Roth.	Rhamnaceae	Ghanto	Small tree	Dicot
<i>Zizyphus mauritiana</i> Lam.	Rhamnaceae	Boir	Tree	Dicot
<i>Zizyphus oenoplia</i> (L.) Mill.	Rhamnaceae	Kanteikoli	Tree	Dicot

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