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## DISTRIBUTIONAL STATUS OF THE TREES OF GORAKHPUR, UTTAR PRADESH

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### ABSTRACT

India is one of the 17 mega diverse countries in the world with four biodiversity hotspots. The country consists of approximately 19399 flowering plants. The study area Gorakhpur, which is at the foot hills of Himalayas is rich in diversity. Gorakhpur district lies between the Nepal terai in the north and river Ghaghra in the south. The western boundary is Basti and Deoria in the east. This paper describes the tree diversity of Gorakhpur. The floristic survey was conducted during the years 2011 to 2015.

**Keywords:** Trees, Biodiversity, Gorakhpur, Uttar Pradesh.

### INTRODUCTION

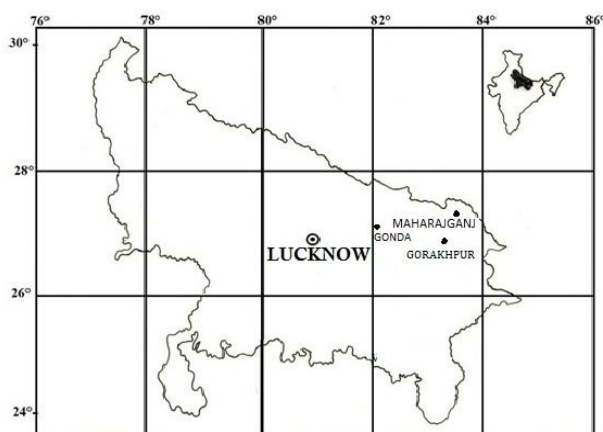
The flora of India is one of the richest of the world due to a wide range of climate, topology and environments in the country. It is thought there are over 19399 flowering plants (Karthikeyan,2000) out of which ca.2570 species have been estimated as trees (Rao,1994). The first systematic account on tree species of the entire country was brought out by Brandis (1906) in his famous book "Indian Trees" in which he has mentioned a total of 4,400 species including trees, shrubs and woody climbers from the British India. As far as Uttar Pradesh is concerned, the Province does not have any checklist or a flora of its own since the publication of "Flora of Upper Gangetic Plains" By Duthie (1906). Due to the wide range of climatic conditions, India holds

rich variety of flora that no other country can boast of. India covers more than 45,000 species of flora, out of which there are several species that are not found anywhere else. Since ancient times, use of plants as a source of medicines has been the inherent part of life in India. There are more than 3000 officially documented plants in India that holds great medicinal potential. India comprises seven percent of world's flora. India is divided into main eight floristic regions namely - Western Himalayas, Eastern Himalayas, Assam, Indus plain, Ganga plain, the Deccan, the Malabar and the Andamans. India is one of the 17 mega diverse countries in the world with four biodiversity hotspots.

### AREA OF STUDY:

Gorakhpur is a city along the banks of Rapti river in the eastern part of the state of Uttar Pradesh in India, near the Nepal border. It is the administrative headquarter of Gorakhpur District and Gorakhpur Division. The district of Gorakhpur lies between Lat. 26°13'N and 27°29'N and Long. 83°05'E and 83°56'E. The district occupies the north-eastern corner of the state along

with the district of Deoria, and comprises a large stretch of land lying to the north of the river Rapti, which forms the southern boundary with the Azamgarh district. Ambedkar Nagar district On the west Basti and east adjoins Deoria and the Chhoti Gandak Nadi and further south the Jharna Nala forms the dividing line. To the north it meets with Maharajganj, Padrauna and Nepal.



Courtesy: [www.gosur.com](http://www.gosur.com)



### MATERIAL & METHOD:

The present data is outcome of field work carried out in different place of St. Andrew's College campus. Identification of plants in the field was made with the help of appropriate floras, manuals and monographs, "Flora Gorakhpurensis"

(T.N.Srivastava 1976). All the specimens were collected in duplicate and they are deposited in Centre for Plant Species Biology, Department of Botany, St. Andrew's College Gorakhpur, Uttar Pradesh.

### OBSERVATION:

S.N.	Name of the Plants	Family
1.	<i>Magnolia grandiflora</i> L.	Magnoliaceae
2.	<i>Michelia champaca</i> L.	Magnoliaceae
3.	<i>Annona squamosa</i> L.	Annonaceae
4.	<i>Annona muricata</i> L.	Annonaceae
5.	<i>Polyalthia longifolia</i> (Sonn.)	Annonaceae
6.	<i>Crataeva religiosa</i> L.	Capparaceae
7.	<i>Bixa orellana</i> L.	Bixaceae
8.	<i>Flacourtia indica</i> (Burm.f.) Merr.	Flacourtiaceae
9.	<i>Shorea robusta</i> Roxb.ex. Gaertn.f.	Dipterocarpaceae
10.	<i>Hibiscus rosa-sinensis</i> L.	Malvaceae
11.	<i>Thespesia populnea</i> (L.)	Malvaceae

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12.	<i>Bombax ceiba</i> L.	Bombacaceae
13.	<i>Grewia asiatica</i> L.	Tiliaceae
14.	<i>Aegle marmelos</i> (L.)	Rutaceae
15.	<i>Citrus medica</i> L.	Rutaceae
16.	<i>Murraya koenigii</i> (L.)	Rutaceae
17.	<i>Commiphora wightii</i> (Arn.) Bhandari	Burseraceae
18.	<i>Azadirachta indica</i> A. Juss	Meliaceae
19.	<i>Melia azedarach</i> L.	Meliaceae
20.	<i>Swietenia mahagoni</i> Jacq.	Meliaceae
21.	<i>Toona cilita</i> M. Roem	Meliaceae
22.	<i>Ziziphus</i> sp.	Rhamnaceae
23.	<i>Mangifera indica</i> L.	Anacardiaceae
24.	<i>Moringa oleifera</i> Lamk.	Moringaceae
25.	<i>Butea monosperma</i> (Lam.) Taub.	Fabaceae
26.	<i>Dalbergia sisso</i> Roxb.	Fabaceae
27.	<i>Bauhinia variegata</i> L.	Caesalpinoideae
28.	<i>Cassia fistula</i> L.	Caesalpinoideae
29.	<i>Delonix regia</i> (Boj.ex.Hook.) Raf.	Caesalpinoideae
30.	<i>Saraca asoca</i> (Roxb.)de Wild	Caesalpinoideae
31.	<i>Tamarindus indica</i> L.	Caesalpinoideae
32.	<i>Acacia nilotica</i> (L.)	Mimosoideae
33.	<i>Pithecellobium dulce</i> (Roxb.) Benth.	Mimosoideae
34.	<i>Prosopis cineraria</i> (L.)	Mimosoideae
35.	<i>Prosopis juliflora</i> (Sw.) Dc.	Mimosoideae
36.	<i>Prunus persica</i> (L.)	Rosaceae
37.	<i>Terminalia arjuna</i> (Roxb. ex. Dc.)Wight & Arn	Combretaceae
38.	<i>Terminalia chebula</i> Retz.	Combretaceae
39.	<i>Callistemon lanceolatus</i> DC.	Myrtaceae
40.	<i>Eucalyptus citriodora</i> Hook.	Myrtaceae
41.	<i>Psidium guajava</i> L.	Myrtaceae
42.	<i>Syzygium cumini</i> (L.)	Myrtaceae
43.	<i>Lagerstroemia speciosa</i> (L.)	Lythraceae
44.	<i>Lawsonia inermis</i> L.	Lythraceae
45.	<i>Punica granatum</i> L.	Punicaceae
46.	<i>Carica papaya</i> L.	Caricaceae
47.	<i>Hamelia patens</i> Jacq.	Rubiaceae
48.	<i>Ixora pavatta</i> Andrews	Rubiaceae
49.	<i>Madhuca longifolia</i> (J.Koenig. ex L.)	Sapotaceae
50.	<i>Nyctanthes arbor-tristis</i> L.	Oleaceae
51.	<i>Alstonia scholaris</i> (L.) R.Br.	Apocynaceae
52.	<i>Carissa carandas</i> L.	Apocynaceae
53.	<i>Nerium indicum</i> Mill.	Apocynaceae
54.	<i>Thevetia peruviana</i> (Pers.) K. Schun.	Apocynaceae
55.	<i>Calotropis gigantea</i> (L.) Alt.	Asclepiadaceae
56.	<i>Tabebuia aurea</i> (Silva Manso) Benth. & Hook. f. ex S.Moore	Bignoniaceae
57.	<i>Tabebuia rosea</i> (Bertol) DC.	Bignoniaceae

58.	<i>Clerodendrum phlomidis</i> L.f.	Verbenaceae
59.	<i>Duranta repens</i> L.	Verbenaceae
60.	<i>Vitex negundo</i> L.	Verbenaceae
61.	<i>Tectona grandis</i> L.f.	Verbenaceae
62.	<i>Santalum album</i> L.	Santalaceae
63.	<i>Emblica officinalis</i> Gaertn.	Euphorbiaceae
64.	<i>Euphorbia nerifolia</i> L.	Euphorbiaceae
65.	<i>Jatropha curcas</i> L.	Euphorbiaceae
66.	<i>Mallotus philippensis</i> (Lam.) Muell. Arg.	Euphorbiaceae
67.	<i>Ricinus communis</i> L.	Euphorbiaceae
68.	<i>Artocarpus heterophyllus</i> Lam.	Moraceae
69.	<i>Artocarpus lakoocha</i> Roxb.	Moraceae
70.	<i>Ficus benghalensis</i> L.	Moraceae
71.	<i>Ficus carica</i> L.	Moraceae
72.	<i>Ficus elastica</i> Roxb. Ex Hornem.	Moraceae
73.	<i>Ficus hispida</i> L. f.	Moraceae
74.	<i>Ficus racemosa</i> L.	Moraceae
75.	<i>Ficus religiosa</i> L.	Moraceae
76.	<i>Streblus asper</i> Lour.	Moraceae
77.	<i>Morus alba</i> L.	Moraceae
78.	<i>Musa paradisiaca</i> L.	Musaceae
79.	<i>Heliconia rostrata</i> Ruiz & Pavon	Heliconiaceae
80.	<i>Caryota urens</i> L.	Arecaceae
81.	<i>Cocos nucifera</i> L.	Arecaceae

## RESULT & DISCUSSION:

A total number of 81 species belonging to 36 families were recorded from the Study area with Moraceae- 10 species, Euphorbiaceae- 05 species, Magnoliaceae-02 species, Annonaceae- 03 species, Capparaceae- 01 species Bixaceae- 01 species, Flacourtiaceae- 01 species, Dipterocarpaceae- 01 species, Malvaceae- 02 species, Bombacaceae- 01species, Tiliaceae-01species, Rutaceae -03 species, Burseraceae- 01 species, Meliaceae- 04 species, Rhamnaceae-01species, Anacardiaceae-01 species, Moringaceae- 01

species, Fabaceae-02 species, Caesalpinoideae- 05 species, Mimosoideae- 04 species, Rosaceae- 01 species, Combretaceae- 02 species, Myrtaceae- 04 species, Lythraceae- 02 species, Punicaceae – 01 species, Caricaceae- 01 species, Rubiaceae- 02 species, Sapotaceae- 01 species, Oleaceae- 01 species, Apocynaceae- 04 species, Asclepiadaceae- 01 species, Bignoniaceae- 02 species, Verbenaceae- 04 species, Santalaceae- 01 species, , Musaceae-01 species, Heliconiaceae- 01 species, Arecaceae- 02 species.

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