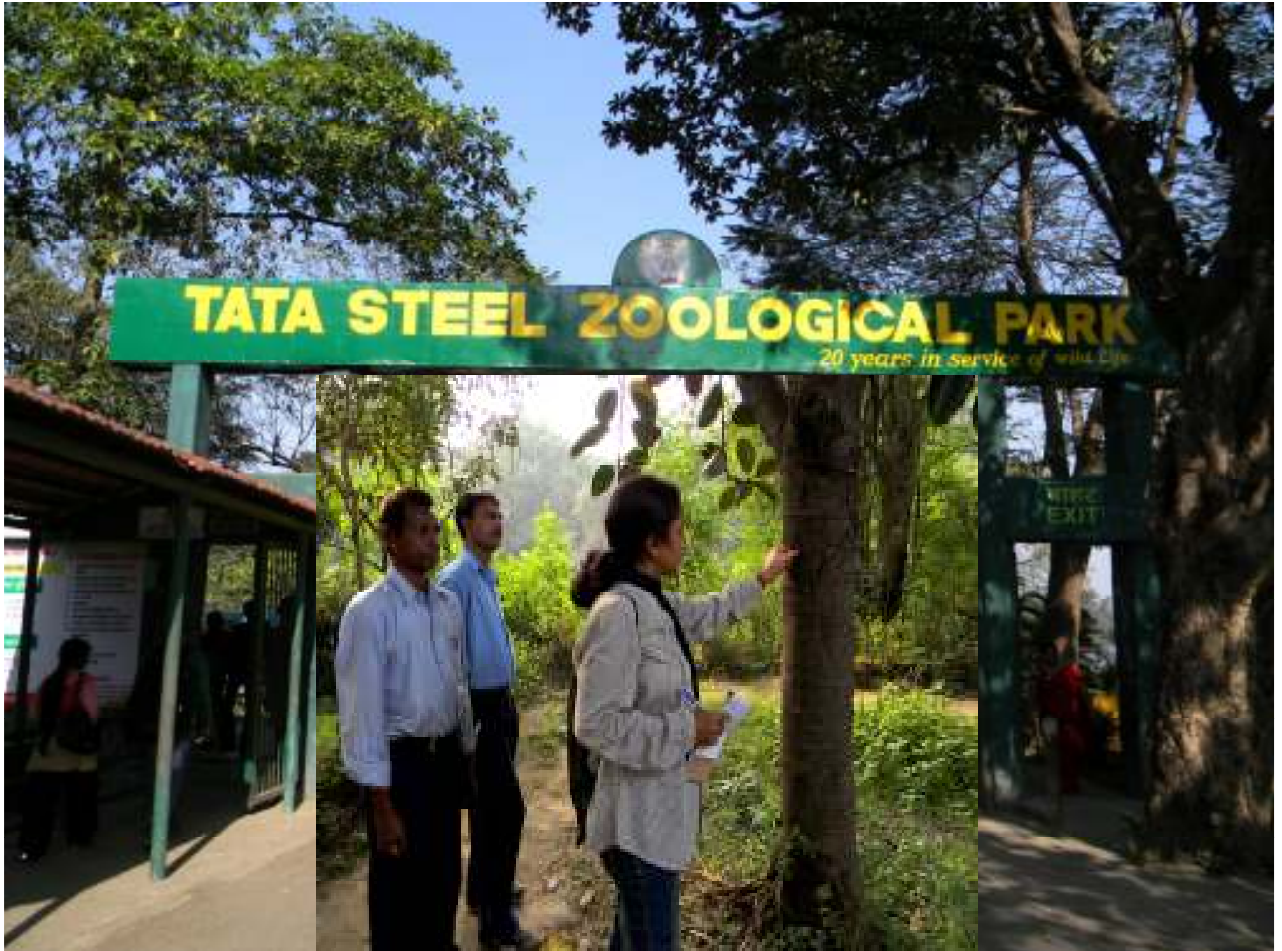


## TECHNICAL REPORT-1

# *ENUMERATION OF TREE SPECIES INSIDE TATA STEEL ZOOLOGICAL PARK, JAMSHEDPUR*



***Tata Steel Zoological Society  
Jamshedpur***



# **ENUMERATION OF TREE SPECIES INSIDE TATA STEEL ZOOLOGICAL PARK, JAMSHEDPUR**

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**“Whatever objectives a man thinks in his mind and works in that direction,  
he is able to achieve the same”**

**-Rig veda.**



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**Seema Rani**

## INTRODUCTION

In the present circumstances when the whole universe is facing a severe environmental problem due to major biodiversity threats created by human beings for their undiminished desires, it has become our social and moral responsibility to conserve whatever natural assets are present in and around our society.

The present project work i.e. **“Identification and listing of tree species inside the campus of Tata Steel Zoological Park (TSZP), Jamshedpur”** has also been carried out by keeping in mind the above aim and objective. During the period of work a total of **92 tree species** belonging to 35 families with their nativity have been identified so far of which 23 Species were found to be exotic and 69 species were found to be native. The exotic species were found to have high adapting ability for the surroundings (Table-1).

Although it is a short term project (November-January) when maximum trees were not blooming, it has been attempted that all large and short tree species which were healthy, except a few, were identified.

Recently the zoo celebrated its 22<sup>nd</sup> anniversary. It's a long journey that the Zoo has completed successfully. During the duration of the project, it has been found that the zoo campus has rich floral diversity. There were a huge number of natural and planted tree species present inside the zoo campus. Out of which some are young but maximum are found in fully mature condition. Some of the trees of species like *Adina cordifolia*, *Albizia procera*, *Calophyllum inophyllum*, *Couroupita guianensis*, *Bombax ceiba*, *Swietenia macrophylla*, *Tectona grandis* etc. are having well dense crown with straight bole which may be considered as a plus tree for seed collection for regeneration. The other tree species found like *Adenanthera pavonina*, *Bixa orellana*, *Couroupita guianensis*, *Enterolobium cyclocarpum*, *Gliricidia sepium*, *Kleinhovia hospita* are not very common in this region but have adapted successfully to the conditions of the area and the tree species like *Ficus krishnae*, *Oroxylum indicum*, *Holarrhena antidysenterica*, *Melia azedarach*, *Saraca asoca*, *Terminalia arjuna* etc. found are of high medicinal value. Of which, value of *Ficus krishnae* and *Oroxylum indicum* is more than others because the specimen of *Ficus krishnae* is the only one of this region and the latter comes under endangered species of Jharkhand.

The tree species present in the zoo campus also consists of a number of fruit bearing tree species like *Aegle marmelos*, *Anthocephalus cadamba*, *Diospyros melanoxylon*, *Madhuca indica*, *Mangifera indica*, *Mimusops elengi*, *Odina wodier*, *Psidium guajava*, *Pithecolobium dulce*, *Syzygium cumini*, *Ziziphus mauritiana* etc. and trees having attractive flowers like *Bauhinia vareigata*, *Bombax ceiba*, *Cassia fistula*, *Cassia siamea*, *Delonix regia*, *Gliricidia sepium*, *Jacaranda acutifolia*, *Lagerstromia speciosa*, *Peltophorum pterocarpum*, *Thevetia peruviana*

etc. These species are favourable to the animals and serve as better shelter to many birds and butterflies.

So conservation of these species is very important because we know that the trees are important, valuable and a necessary asset for us because without trees we humans would not exist on this beautiful planet. Most trees and shrubs in cities or in parks are planted to provide beauty or shade. These are two excellent reasons for their use. Woody plants also serve several other architectural and engineering functions such as they direct pedestrian traffic, provide privacy, emphasize views, reduce glare and reflection etc.

Nowadays apart from above mentioned roles, they also play an important role in the field of Environmental Education. The present study will also provide the knowledge about the trees to the students of schools and colleges and other visitors who visit the zoo so that they can get familiar with the scientific and common name of the standing trees along with those of wild animals. The tree species found inside the zoo campus are listed below:

**Table 1: List of trees inside TSZP**

Sl.No.	Name of Species	Common/Local name	Family	Nativity
1.	<i>Acacia auriculaeformis</i>	Acacia	Mimosaceae	Exotic
2.	<i>Acacia arabica</i>	Babul	Mimosaceae	Native
3.	<i>Adenanthera pavonina</i>	Red sandal wood/Rakta-chandan	-do-	-do-
4.	<i>Adina cordifolia</i>	Karam	Rubiaceae	-do-
5.	<i>Aegle marmelos</i>	Bael	Rutaceae	-do-
6.	<i>Ailanthus excelsa</i>	Mahanimb	Simaroubaceae	-do-
7.	<i>Alangium salvifolium</i>	Dhela	Alangiaceae	-do-
8.	<i>Albizia lebbek</i>	Black Seris	Mimosaceae	-do-
9.	<i>Albizia procera</i>	White Seris	-do-	-do-
10.	<i>Alstonia scholaris</i>	Chatna	Apocynaceae	-do-
11.	<i>Anthocephalus cadamba</i>	Kadam	Rubiaceae	-do-
12.	<i>Antidesma diandrum</i>	Amta/Matha sura	Euphorbiaceae	-do-
13.	<i>Artocarpus heterophyllus</i>	Kathal	Moraceae	Native
14.	<i>Azadirachta indica</i>	Neem	Meliaceae	-do-
15.	<i>Barringtonia acutangula</i>	Indian oak/Samundarphal	Lecythidaceae	Exotic
16.	<i>Bauhinia purpurea</i>	Koinar	Caesalpiniaceae	Native
17.	<i>Bauhinia vareigata</i>	Kachnar	Caesalpiniaceae	-do-
18.	<i>Bixa orellana</i>	Lipstick tree /Sinduri	Bixaceae	Exotic
19.	<i>Bombax ceiba</i>	Semal	Bombacaceae	Native
20.	<i>Bridelia montana</i>	Kasai	Euphorbiaceae	-do-
21.	<i>Butea monosperma</i>	Palas	Papilionaceae	-do-
22.	<i>Calophyllum inophyllum</i>	Alexandrian laurel/ Sultanachampa	Guttiferae	-do-
23.	<i>Caryota mitis</i>	Fishtail palm	Arecaceae	-do-
24.	<i>Casearia graveolens</i>	Nuri	Flacourtiaceae	-do-

25.	<i>Cassia angustifolia</i>	Indian Senna	Caesalpiniaceae	-do-
26.	<i>Cassia fistula</i>	Amaltash	Caesalpiniaceae	-do-
27.	<i>Cassia siamea</i>	Chakundi	Caesalpiniaceae	-do-
28.	<i>Cleistanthus collinus</i>	Porasi	Euphorbiaceae	-do-
29.	<i>Cocus nucifera</i>	Coconut Palm	Arecaceae	-do-
30.	<i>Cordia myxa</i>	Buch	Boraginaceae	-do-
31.	<i>Couroupita guianensis</i>	Shivlingam/Cannon Ball Tree	Lecythidaceae	Exotic
32.	<i>Dalbergia lanceolaria</i>	Takoli/Chapot	Papilionaceae	Native
33.	<i>Dalbergia latifolia</i>	Black Shisam	Papilionaceae	-do-
34.	<i>Dalbergia sissoo</i>	Sisham	Papilionaceae	-do-
35.	<i>Delonix regia</i>	Gold mohar	Caesalpinaceae	Exotic
36.	<i>Diospyros melanoxylon</i>	Kendu	Ebenaceae	Native
37.	<i>Enterolobium cyclocarpum</i>	Monkey Ear/Elephant ear	Mimosaceae	Exotic
38.	<i>Eucalyptus spp.</i>	Eucalyptus	Myrtaceae	Exotic
39.	<i>Ficus benghalensis</i>	Bargad	Moraceae	Native
40.	<i>Ficus elastica</i>	Rubber plant	-do-	-do-
41.	<i>Ficus glomerata</i>	Gular	-do-	-do-
42.	<i>Ficus hispida</i>	Dumer	-do-	-do-
43.	<i>Ficus krishnae</i>	Makhan Katori	-do-	-do-
44.	<i>Ficus religiosa</i>	Pipal	-do-	-do-
45.	<i>Gliricidia sepium</i>	Gliricida	Papilionaceae	Exotic
46.	<i>Gmelia arborea</i>	Gamhar	Verbenaceae	Native
47.	<i>Grevillea robusta</i>	Silver oak	Proteaceae	Exotic
48.	<i>Hamelia patens</i>	Firebush	Rubiaceae	-do-
49.	<i>Holarrhena antidysenterica</i>	Kurchi	Apocynaceae	Native
50.	<i>Holoptelea integrifolia</i>	churla	Ulmaceae	-do-
51.	<i>Jacaranda acutifolia</i>	Jacarandha	Bignoniaceae	Exotic
52.	<i>Kleinhovia hospita</i>	Bataria teak/Bola	Sterculiaceae	-do-
53.	<i>Lagerstromia parviflora</i>	Sidha	Lythraceae	Native
54.	<i>Lagerstromia speciosa</i>	Pride of India	Lythraceae	Exotic
55.	<i>Madhuca indica</i>	Mahua	Sapotaceae	Native
56.	<i>Mangifera indica</i>	Mango	Anacardiaceae	-do-
57.	<i>Manilkara zapota</i>	Chikoo	Sapotaceae	Exotic
58.	<i>Melia azedarach</i>	Bakain	Meliaceae	Native
59.	<i>Michelia champaca</i>	Champa	Magnoliaceae	-do-
60.	<i>Mimusops elengi</i>	Bokul	Sapotaceae	-do-
61.	<i>Mitragyna parvifolia</i>	Gurikaram	Rubiaceae	-do-
62.	<i>Murraya koenigii</i>	Karry-patta	Rutaceae	-do-
63.	<i>Odina wodier</i>	Doka	Anacardiaceae	-do-
64.	<i>Oroxylum indicum</i>	Sonapatha	Bignoniaceae	-do-
65.	<i>Peltophorum pterocarpum</i>	Copper-pod	Caesalpiniaceae	-do-
66.	<i>Pithecolobium dulce</i>	Jangle Jalebi	Mimosaceae	Exotic
67.	<i>Plumeria rubra</i>	Plumeria (White/Pink/Red)	Apocynaceae	-do-
68.	<i>Polyalthia longifolia</i>	Mast tree	Annonaceae	Native

69.	<i>Pongamia glabra</i>	Karanz	Papilionaceae	-do-
70.	<i>Prosopis juliflora</i>	Vilaiti Kikar	Mimosaceae	Exotic
71.	<i>Psidium guajava</i>	Amrud	Myrtaceae	-do-
72.	<i>Pterospermum acerifolium</i>	Kanak-Champa /Muchkunda	Sterculiaceae	Native
73.	<i>Pterygota alata</i>	Buddha coconut	-do-	-do-
74.	<i>Roystonea regia</i>	Royal Palm Tree	Arecaceae	Exotic
75.	<i>Saraca asoca</i>	Sita ashok	Caesalpiniaceae	Native
76.	<i>Schleichera trijuga</i>	Kusum	Sapindaceae	-do-
77.	<i>Shorea robusta</i>	Sal	Dipterocarpaceae	-do-
78.	<i>Streblus asper</i>	Sahra	Moraceae	-do-
79.	<i>Swietenia macrophylla</i>	Mahogani (Big leaf)	Meliaceae	Exotic
80.	<i>Swietenia mahagoni</i>	Mahogani (Short leaf)	-do-	-do-
81.	<i>Syzygium cumini</i>	Jamun	Myrtaceae	Native
82.	<i>Tabebuia rosea</i>	Rosy trumpet	Bignoniaceae	Exotic
83.	<i>Tamarindus indica</i>	Imli	Caesalpiniaceae	Native
84.	<i>Tecoma stans</i>	Chandaprabha (Yellow elder)	Bignoniaceae	Exotic
85.	<i>Tectona grandis</i>	Sagwan	Verbenaceae	Native
86.	<i>Terminalia arjuna</i>	Arjun	Combretaceae	-do-
87.	<i>Terminalia belerica</i>	Bahera	-do-	-do-
88.	<i>Terminalia tomentosa</i>	Asan	-do-	-do-
89.	<i>Thevetia peruviana</i>	Kaner (Yellow oleander)	Apocynaceae	Exotic
90.	<i>Trewia nudiflora</i>	Pindalu/Pani Gamhar	Euphorbiaceae	Native
91.	<i>Wrightia tinctoria</i>	Padal	Apocynaceae	-do-
92.	<i>Ziziphus mauritiana</i>	Ber	Rhamnaceae	-do-



***Ficus krishnae***



***Oroxylum indicum***





***Bixa orellana***



***Cassia siamea***



**Bauhinia purpurea/ variegata**



***Tecoma stans***



***Hamelia patens***



***Kleinhovia hospita***



***Delonix regia***



*Cassia fistula*



*Lagerstromia speciosa*



*Mitragyna parvifolia*



*Holarrhena antidysenterica*



*Saraca asoca*



*Michelia champaca*



*Lagerstromia parviflora*



*Artocarpus heterophyllus*



