

ARBOREAL FLORA OF SOLAPUR CORPORATION

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Abstracts- Solapur is basically found on the south-eastern border of Maharashtra state and touches the border of Karnataka state. The Solapur city is spread on 180 Sq. Km. It covers 30 private, Institutional, Corporate gardens and one park. There are two lakes in corporation area, also some private government nurseries. Sideheshwar Van Vihar, a forest developed by Social forest department which is nearby the city belongs from corporation area. The arboreal flora of corporation is mostly of cultivated tree species and a very few number belongs from wild tree species. The present study reveals the tree species planted in private places, corridor, private garden, along roadside, institutional and government garden, nurseries and parks which reports 136 tree species belongs from 42 Families. Out of which 130 species are from dicotyledonae, 6 species from monocotyledonae. In the present paper the checklist of tree species along with the flower colour, period of flowering and vernacular names if any are provided.

Key words: Arboreal Flora, Solapur Corporation area,

INTRODUCTION

Solapur is located on the south-eastern border of Maharashtra state and touches the border of Karnataka state. Solapur lies in the Seena and Bhima basins. It is located between 17.10 to 18.32 degrees to the north latitude while it is about 74.42 to 76.15 degrees to the east longitude. The elevation of Solapur city is 483.63 m above mean sea level. The total area of the city is 180 sq. m. Solapur city has variety of soil types which like black soil, coarse gray soil and reddish soil. The soil is shallow and poor, and does not retain moisture. The Average Rainfall is - 545.4 mms. (Min.415.3 mms and Max.1128.4 mms. in last 10 years) Solapur stands last in rainfall in Maharashtra state. The maximum temperature is 46 degrees Celsius and minimum temperature is 9 degrees Celsius.

The arboreal flora of Solapur is includes majority of cultivated species and very few number of wild tree species, which is very typical and interesting. No authentic Flora of Solapur district has been published until today. A very little attention has been paid to study the plant diversity of Solapur district and corporation area. Cooke has published a, 'Flora of the Presidency of Bombay'. But he has covered very few plants from Solapur district. The 'Flora of Maharashtra' is published by B. S. I. in 3 volumes (2000). In this recent research work only 80 plants are reported from entire Solapur district. There is no any separate authentic report on the arboreal flora of Solapur city is available in literature, so present work has been undertaken. The present work is outcome of two years innovations.

MATERIAL AND METHOD

The frequent visits were arranged from last two years to city corporation area in different seasons. All the collected specimens were numbered and properly processed. Specimens were identified by using various regional and national floras and available literature of, Cooke, T. (1901-1908), Kate, Y. G. (1987) , Mahajan and Vaidya (1987), Naik, V.N (1998), Sharma B. D., S. Karthikeyan and N. P. Singh (1996), Singh N. P., and S. Karthikeyan, (2000), Singh, N. P., P. Lakshminarasimhan, S. Karthikeyan; and P. V. Prasanna. (2001), Yadav, S. R., Sardesai, M. M. 2002. Identification was confirmed by the plant experts of Shivaji University, Kolhapur and Taxonomists of affiliated college of Solapur and Shivaji University. The voucher specimens were deposited in the Herbarium, Botany Department, Vidnyan Mahavidyalaya, Sangola.

In the enumeration the sequence of families has been followed as per Bentham and Hooker's classification. The nomenclature has been based on the latest taxonomic literature for each species; botanical name is followed by local name if any, colour of flowers and period of flowering.

RESULT AND DISCUSSION

The present work reports 136 species of angiosperms belonging to 42 families. Out of 136 species, 130 species are of dicotyledons and 6 species are of monocotyledons. The family Mimosaceae has the largest number of species followed by Caesalpinaeae.

Groups	Families	Genera	Species
Dicotyledons	40	96	130
Monocotyledons	02	06	06
Total	42	102	136

Families	No. of Species
Mimaceae	16
Caesalpinaeae	14
Moraceae	10
Bignoniaceae	09
Fabaceae	08

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Table 1-

Name of Family & Plant	Local Name	Flower Colour	Flr. & Fru. Period
Magnoliaceae			
<i>Michelia champaca</i> L.	Pivla-chafa	BY	April - Sept.
Annonaceae			
<i>Annona reticulata</i> L.	Ramphal	GW	July - Nov.
<i>Annona squamosa</i> L.	Sitaphal	G	Mar. - Dec.
<i>Polyalthia longifolia</i> (Sonn.) Thw.	Ashok	GW	Mar. - Sept.
<i>Polyalthia longifolia</i> (Sonn.) Thw. var. <i>pendula</i>	Ulta Ashok	GW	Mar. - Sept.
Capparaceae			
<i>Capparis decidua</i> (Forssk.) Edgew.	Nepti	O Y	Throughout year
<i>Capparis divaricata</i> Lam.	Pachunda	YG	Feb. - Sept.
Flacourtiaceae			
<i>Flacourtie indica</i> (Burm.f.) Merr.	Hekal	GW	Jan. - July
Malvaceae			
<i>Thespesia populnea</i> (L.) Soland. ex Corr.	Parosa pimpal	LY	Feb. - Sept.
Bombacaceae			
<i>Adansonia digitata</i> L.	Gorakh chinch	W	May - Oct.
<i>Bombax ceiba</i> L.	Kate Savar	R	Feb. - June
<i>Ceiba pentandra</i> (L.) Gaertn.	Panhari - Savar	W	Jan. - June
Sterculiaceae			
<i>Dombeya acutangula</i> Cav.		W	Dec. - Jan.
<i>Guazuma ulmifolia</i> Lam.	Rudrakshi	Y	Mar. - Oct.
<i>Pterospermum acerifolium</i> (L.) Willd.	Muchkund	W	Dec. - June
<i>Sterculia urens</i> Roxb.	Kandol	R	Dec. - May
Rutaceae			
<i>Aegle marmelos</i> (L.) Corr.	Bel	GW	April – Nov.
<i>Citrus aurantifolia</i> (Christm. & Pranz.) Swing.	Limbu	W	Throughout year
<i>Limonia acidissima</i> L.	Kavath	R	Mar. - Aug.
<i>Murraya koenigii</i> (L.) Spr.	Kadi-patta	GW	Feb. - June

Simaroubaceae			
<i>Ailanthus excelsa</i> Roxb.	Maharukh	G	Jan. - July
Balanitaceae			
<i>Balanites aegyptiaca</i> (L.) Del.	Hingan bet	GW	Mar. - June
Meliaceae			
<i>Azadirachta indica</i> A. Juss.	Neem	W	Mar. - June
<i>Melia azedarach</i> L.	Limbara	V	Jul. - Aug.
Rhamnaceae			
<i>Ziziphus mauritiana</i> Lam.	Bor	GW	Sept. - Oct.
<i>Ziziphus nummularia</i> (Burm. f.) Wight & Arn.	Bor	GW	Oct. - Dec.
Sapindaceae			
<i>Sapindus emarginatus</i> Vahl	Ritha	W/GW	Feb. - May
<i>Sapindus laurifolius</i> Vahl	Ritha	W/GW	Nov. - Mar.
Anacardiaceae			
<i>Anacardium occidentale</i> L.	Kaaju	Y	Dec. - May
<i>Mangifera indica</i> L.	Amba	W	Jan - June
Moringaceae			
<i>Moringa oleifera</i> Lam.	Shevaga	W	Jan. - April
Fabaceae			
<i>Butea monosperma</i> (lam.) Taub.var. <i>monosperma</i>	Palas	O	Jan. - June
<i>Dalbergia latifolia</i> Roxb.	Shisav	CW	Aug - Dec.
<i>Dalbergia sissoo</i> Roxb.	Shisahm	W	Feb. - Oct.
<i>Erythrina variegata</i> L.	Pangara	R	Jan. - June
<i>Gliricidia sepium</i> (Jacq.) Kunth ex Walp.	Giripushpa	P	Feb. - Mar.
<i>Pongamia pinnata</i> (L.) Pierre	Karanj	W, Pr	Feb - May
<i>Sesbania grandiflora</i> (L.) Poir.	Hadaga	W	Nov. - Feb.
<i>Sesbania sesban</i> (L.) Merr.	Shevari	Y	Feb. - Mar.
Caesalpiniaceae			
<i>Bauhinia purpurea</i> L.	Rakta-Kanchan	Pr	Oct. - Jan.
<i>Bauhinia racemosa</i> Lam.	Apta	W, Y	Apr. - Oct.
<i>Bauhinia variegata</i> L.	Kanchan	W, Pr	Throughout year
<i>Caesalpinia pulcherrima</i> (L.) Sw.	Shankasur	Y/R	Throughout year
<i>Cassia fistula</i> L.	Bahava,	Y	Apr. - Oct.

<i>Cassia javanica</i> L.		P	April - June
<i>Cassia siamea</i> lam.	Kashid	Y	Aug. - June
<i>Delonix elata</i> (L.) Gamble	Pivala Gulmohor	Y	June - Dec.
<i>Delonix regia</i> (Boj. ex Hook.) Raf.	Gul - mohor	S/R O	April - Sept.
<i>Hardwickia binata</i> Roxb.	Anjan	YG	Aug. - Jan.
<i>Parkinsonia aculeata</i> L.	Vilayati Khair	Y	Apr. - Nov.
<i>Peltophorum pterocarpum</i> DC. Baker ex K. Heyne	Sommohor	Y	Jan. - June
<i>Saraca asoca</i> (Roxb.) de Wilde	Sitecha Ashok,	O-Y	Jan. - June
<i>Tamarindus indica</i> L.	Chinch	Y	Feb. - June
Mimosaceae			
<i>Acacia catechu</i> (L.f.) Willd.	Khair	PY	Jul. - Feb.
<i>Acacia chundra</i> (Roxb. ex Rottl.) Willd.	Lal Khair	PY	Throughout year
<i>Acacia leucophloea</i> (Roxb.) Willd.	Hiwar	W-Y	Aug. - Feb.
<i>Acacia longifolia</i> Willd.	Australian Babhul	BY	Aug. - Nov.
<i>Acacia mangium</i> Willd.	Australian Babhul	Y	Jan. - Mar.
<i>Acacia nilotica</i> (L.) Willd. ssp. <i>indica</i> (Bth)	Babul	Y	Throughout year
<i>Acacia nilotica</i> (L.) Willd. ssp. <i>cupressiformis</i> (J. L. Stewart)	Ramkathi	Y	Aug. - Feb.
<i>Adenanthera pavonina</i> L.	Thorla-gunj	PY	Mar. - May
<i>Albizia labbeck</i> (L.) Bth. Var <i>lebbeck</i>	Shirish, Chinchola	W	Apr. - Aug.
<i>Dichrostachys cinerea</i> (L.) Wight & Arn. var. <i>indica</i> Branen & Brummit	Durangi babhul	Y, R/P	Aug. - Dec.
<i>Leucaena latisiliqua</i> (L.) Gillis	Subabhal	W	Throughout year
<i>Parkia biglandulosa</i> Wight & Arn.	Chenduphal	W	Dec. - May
<i>Pithecellobium dulce</i> (Roxb.) Bth.	Wilayati Chinch	DW	Jan.- June
<i>Prosopis cineraria</i> (L.) Druce	Shami, Sondad	Y	Nov. - April

<i>Prosopis juliflora</i> (Swartz.) DC.	Wilayati Babhul	PY	Feb. - May
<i>Samanea saman</i> (Jacq.) Merr.	Parjanya Vruksha	P	May - Sept.
Combrataceae			
<i>Anogeissus latifolia</i> (Roxb. ex DC.) Wall. ex Guill. & Perr.	Dhawda	G-Y	Mar - Sept.
<i>Terminalia bellirica</i> (Gaertn.) Roxb.	Behada	YB	May - Sept.
<i>Terminalia catappa</i> L.	Deshi Badam	W/ YG	Apr. - Oct.
<i>Terminalia cuneata</i> Roth.	Arjun Sadada	G	Feb. - Nov.
Myrtaceae			
<i>Callistemon citrinus</i> (Curtis) Skeels	Bottle brush	CR	Throughout year
<i>Eucalyptus globulus</i> Labill.	Nilgiri	WY	Feb. - May
<i>Psidium guajava</i> L.	Peru	W	Nov. - June
<i>Syzygium cumini</i> (L.) Skeels	Jambhul	W	Mar. - June
Lecythidaceae			
<i>Couroupita guianensis</i> Abul.	Kailashpati	R	Sept. - Nov.
Lythraceae			
<i>Lagerstroemia reginae</i> Roxb.	Tamas	Pr	Aug - Oct.
<i>Lawsonia inermis</i> L.	Mehndi	W	Jan. - Dec.
Punicaceae			
<i>Punica granatum</i> L.	Dalimb	R	Aug. - Nov.
Caricaceae			
<i>Carica papaya</i> L.	Papai	G-Y	Throughout year
Alangiaceae			
<i>Alangium salvifolium</i> (L.f.) Wangerin ssp. <i>salvifolium</i>	Ankol	CW	Feb. - Apr.
Rubiaceae			
<i>Catunaregam spinosa</i> (Thunb.) Tirveng.	Gela	W	Mar. - Nov.
<i>Gardenia resinifera</i> Roth.	Dikamali	W	Jan. - Sept.
<i>Ixora pavetta</i> Andr.	Lokhandi	W	Throughout year
<i>Mitragyna parvifolia</i> (Roxb.) Korth	Kalamb	G-Y	Throughout year
<i>Morinda citrifolia</i> L.	Bartondi	W	Aug. - Mar.

<i>Morinda pubescens</i> J.E. Sm.	Bartondi	CW	Mar - Dec.
<i>Neolamarckia cadamba</i> (Roxb.)	Kadamb	W/CY	Nov. - Feb.
Sapotaceae			
<i>Manilkara zapota</i> (L.) van Royen	Chikku	W	Throughout year
<i>Mimusops elengi</i> L.	Bakul	W	Jan. - Mar.
Ebenaceae			
<i>Diospyros melanoxylon</i> Roxb.	Tembhurni	Br	Feb - April
Oleaceae			
<i>Nyctanthes arbor-tristis</i> L.	Parijatak	W	Throughout year
Salvadoraceae			
<i>Salvadora persica</i> L. var. <i>wightiana</i> (Planch. ex Thw.)	Pilu	G-Y	Nov. - Feb.
Apocynaceae			
<i>Alstonia scholaris</i> (L.) R. Br.	Saptparni	GW	Dec. - Mar.
<i>Plumeria rubra</i> L.	Lal Chapha	W/R	Mar - Sept.
<i>Wrightia tinctoria</i> R. Br. ssp. <i>Tinctoria</i>	Kala Kuda	W	Mar. - May
Boraginaceae			
<i>Cordia dichotoma</i> Forst. f.	Bhokar	W	Feb - June
<i>Cordia gharaf</i> (Forssk.) Ehrenb & Asch.	Gondani	W	April - Oct.
<i>Cordia sebestena</i> L.		O R	Jan. - Jully
Bignoniaceae			
<i>Dolichandrone falcata</i> (Wall. ex DC.) Seem	Medsingi	W	Mar. - Dec.
<i>Jacaranda acutifolia</i> Humb. & Bonpl.	Nil-Mohar	Bl	Mar. - Oct.
<i>Kigelia africana</i> (Lam.) Bth.	Hattiphal	DPr	Mar. - Oct.
<i>Millingtonia hortensis</i> L. f.	Booch/Akash Neem	W	Sept. - Dec.
<i>Spathodea campanulata</i> P. Beauv.	Pichkari	O C	Jul. - Mar.
<i>Tabebuia argentea</i> (Bru. & Schum.) Britt.		BY	Mar. - May
<i>Tabebuia pallida</i> (Lindl.) Miers		P/W	Mar. - May
<i>Tabebuia rosea</i> (Bertol.) DC.		P	Dec - April
<i>Tecoma stans</i> (Linn.) H. B. & K.	Pivali Phutani	Y	Throughout year

Verbenaceae			
<i>Gmelina arborea</i> Roxb.	Shivan	Y	Feb. - Jul.
<i>Tectona grandis</i> L. f.	Saag	W	Aug. - Dec.
<i>Vitex negundo</i> L. var. <i>negundo</i>	Nirgudi	BP	Jan. - June
Proteaceae			
<i>Grevillea robusta</i> A. Cunn. ex. R. Br.	Silver Oak	G-Y	Mar - July
Santalaceae			
<i>Santalum album</i> L.	Chandan	Br-Pr	Mar. - Aug.
Euphorbiaceae			
<i>Drypetes roxburghii</i> (Wall.) Hurusawa	Putranjiv	GW	April - Oct.
<i>Emblica officinalis</i> Gaertn.	Avala	GW	Feb - Oct
<i>Ricinus communis</i> L.	Erand	Y	Feb. - June
Ulmaceae			
<i>Holoptelea integrifolia</i> (Roxb.) Planch.	Wavli	Br	Jan. - June
Moraceae			
<i>Artocarpus incisus</i> L.f.	Kapa Phanas	G	Sept -Jan
<i>Ficus amplissima</i> J. E. Sm.	Pimparni	WY	April - Sept.
<i>Ficus benghalensis</i> L.	Wad	WY	April - June
<i>Ficus benjamina</i> L.		WY	Apr. - May
<i>Ficus carica</i> L.	Anjir	WY	March - May
<i>Ficus elastica</i> Roxb. ex. Horn	Rubber tree	WY	not seen
<i>Ficus microcarpa</i> L. f.	Nandruk	WY	March - June
<i>Ficus racemosa</i> L.	Umbar	WY	Feb. - June
<i>Ficus religiosa</i> L.	Pimple	WY	March - Aug.
<i>Morus alba</i> L.	Tuti	WY	Jul. - Mar.
Casuarinaceae			
<i>Casuarina equisetifolia</i> L.	Suru	G	Feb. - March
Araceae			
<i>Areca catechu</i> L.	Supari	Y	Throughout year
<i>Caryota urens</i> L.	Bherli-mad	Y	Throughout year

<i>Cocos nucifera</i> L.	Naral	GW	Throughout year
<i>Phoenix sylvestris</i> (L.) Roxb.	Shindi	W	Jan. - Oct.
<i>Roystonea regia</i> (H.B& K.) Cooke	Bottle Palm	GW	Sept. - Mar.
Poaceae			
<i>Bambusa aurundinacea</i> (Retz.) Willd	Kalak	Br	Once in life, Sept. - May.

ABBREVIATIONS

Bl – Blue	BP - Bluish-Purple	Br – Brownish	BrP - Brownish-Purple
BY - Bright Yellow	C – Crimson	CR - Crimson-Red	CW - Creamy-white
CY - Creamy-yellow	DPr - Dark Purple	DW - Dull White	G -Green, Greenish
GW - Greenish-White	LY - Light-Yellow	O – Orange	OY - Orange-Yellow
P – Pink	Pr – Purple	PY - Pale-Yellow	R – Red, Reddish
RO - Reddish-Orange	S – Scarlet	V – Violet	W - White, Whitish
WY -Whitish-Yellow	Y – Yellow	YB - Yellowish-Brown	YG - Yellowish-Green