

Index Copernicus Value

2011:5.09, 2012:6.42,
2013:15.8, 2014:89.16,
2015:78.30, 2016:91

NAAS Rating

2012:1.3; 2013-16: 2.69
2017-19: 3.98

Received on:

25th January 2019

Revised on:

10th February 2019

Accepted on:

25th February 2019

Published on:

1st March 2019

Volume No.

Online & Print
109 (2019)

Page No.

07 to 15

Life Sciences Leaflets is an international open access print & e journal, peer reviewed, worldwide abstract listed, published every month with ISSN, RNI Free-membership, downloads and access.

STUDY OF ANGIOSPERMS FROM HANSAPUR CHOKDI TO MANDOTRY ROAD SIDE, PATAN

SNEHAL THAKOR, CHETANA LELAUCHA, PAYAL DESAI,
DIPAL DESAI, SUNITA DESAI AND DHARATI JOSHI

DEPARTMENT OF BOTANY,
SHETH M.N. SCIENCE COLLEGE,
PATAN – 384 265. (GUJARAT-INDIA).

Corresponding author's e-mail: thakorsnehal66@gmail.com

ABSTRACT:

The Patan is historical place. It has so many historical importance. It is situated in the northern Gujarat region of Gujarat state. Here studied angiosperm plants from Hansapur Chokdi to Mandotry village. Recorded total 59 angiosperm plant species. During the study we located and identified species from the Hansapur Chokdi to Mandotry village.

KEY WORDS: *Hansapur chokdi to Mandotry Road side, Angiosperms, Patan.*

INTRODUCTION:

Patan is well-known for its world heritage site “Rani ki vav” and Patola sarees. Patan is the former capital of Gujarat. This historic town was founded in 796 A.D by Vanraj Chavda and was originally known as Anhilpur patan or Anhilwad patan . The Solanki periods, Gujarat’s golden age, served as the pinnacle of Patan’s glory. During those days, the rulers were great patrons of fine arts and Architecture, thus erecting many civic and religion and edifices in the city . Destroyed by time and looted for religion and riches. Very little of the cities earlier magnificence remains now. We are carried out field work during year 2018-2019. Listed all angiosperm plants from Patan city of Patan taluka. Forest area is 1000812 hectares. Grazing land is 81614 hectare and irrigation area is 37082 hectare of Patan taluka.

STUDY AREA:

It is one of 7 Talukas of Patan district. There are 139 villages and 2 towns

in Patan taluka is 1023.87 Km². Patan district is located in the northern part of the state with its headquarters at patan town. The district covers an area of 5730 Km² with total population 11, 81,941. The district is surrounded by Banaskantha district in the north and northeast, Mehsana in its south and southeast and Kutch and Little Rann of Kutch in east. Total 1037 wet lands are mapped including 416 small wet lands (<2.25 ha) with 34.268 ha area. This region is having minimum temperature as low as 5°C to 10°C and maximum temperature as high as 40°C to 48°C.

Study area covered total 4.4km from Hansapur chokdi to Mandotry road side.

METHODOLOGY:

The collected plants species were photographed wherever possible and collected from study area. The collected species were identified by Saxton and Sedgwick (1918), Sutaria (1941), Cooke (1958), Patel (1971), Shah (1978) and Patel (2001).

RESULT AND DISCUSSION:

This floristic survey conducted for the first time in this study area of Hansapur chokdi to Mandotry road of Patan taluka, Gujarat. Total of 58 species of 54 genera and 36 angiosperm families were recorded for the first time during present survey conducted in from the study area. Dicotyledons consisted of 93% whereas, Monocotyledons of 7%. In Dicotyledonous we found 19 Polypetalae, 10 Gamopetalae and 3 Monochlamydae plants. In Dicotyledonous 50 genera and 54 species and in Monocotyledons 4 genera and 4 species were recorded. On the basis of this survey we recorded 7% Climber, 20% Herbs, 36% Shrubs and 37% Trees. Mostly dominant family followed by Asteraceae, Euphorbiaceae, Apocynaceae and Arecaceae in the study area.

ACKNOWLEDGMENTS:

I am very heartily thankful to Dr. N.K. Patel Associated Professor & Head of the Botany Department, Sheth M.N. Science College, Patan and for giving me an excellent and perfect guidance at any moment during this work. I want thank Dr. P.J. Vyas, Principal, Sheth M.N. Science College, Patan for providing us the facility of the laboratory for research work. I also express my deep sense of gratitude to Dr. A.J. Parmar, Snehalben R Thakor and Baldevbhai V Panchal for helping me during my field work.

REFERENCES:

- Blatter, E. and W.S Millard (1954): some beautiful Indian trees, 2nd ex. Revised by W.T. Stearn, Bombay.
- Bor, N.L. (1941): Common grasses of the united provinces, Ind. For. Rec. (Botany) 2(1).
- Bor, N.L. and M.B. (1941): Some beautiful Indian climbers and shrubs, Bombay.
- Brandis, D. (1905): Indian trees, London, 484.
- Hooker, J. D. (1872-1879): The Flora of British India, Vol 1-7, London.

Patel .N .K And Parmar. A . J (2011): Study of angiospermic plants of patan (North Gujarat), *Life science Leaflets* 14:472-480.

Patwl R.T(1971): Forest flora of Gujarat state, Vallabh Vidyanagar.

Saxton, W. T. and Sedgwick, L.J. (1918): Records of Botanical Survey of India, Vol. IV No. 7, *Plants of Northern Gujarat*, Calcutta superintendent government printing, India.

Shah G. L. (1978): *Flora Of Gujarat State*, Part-I, II, S. P. University, Vallabh Vidyanagar.

Singh, H.S.(1998): *Gujarat ni prakrutik virasat*, Gir foundation, Gandhinagar.

Vardhana, R.(2007): *Floristic Plants of the world*, Vol.1-3, New Delhi.

Shah, G. L. 1978. Flora of Gujarat State-I & II. Sardar Patel University, V. V. Nagar.

<https://sites.google.com/site/efloraofindia/>

<https://www.theplantlist.org/>

<https://www.mapsofindia.com/maps/gujarat/gujarat-forest-map.html>

<https://www.efloraofgandhinagar.in/>

https://en.wikipedia.org/wiki/List_of_plants_by_common_name

<https://goo.gl/maps/Sr72PCxSuEU2>

<https://goo.gl/maps/hMgjW6A6ezC2>

<https://goo.gl/maps/ThNUn5LUVko>

Table 1: List of Angiospermic Plants

Sr.No.	Scientific name	Common name	Family	Habitat
1.	<i>Quisqualis indica</i> L.	Madhumalati	Combretaceae	Climber
2.	<i>Euphorbia hirta</i> L.	Dudheli	Euphorbiaceae	Climber
3.	<i>Momordica charantia</i> L.	Karela	Cucurbitaceae	Climber
4.	<i>Ipomea cairica</i> L.	padada vel	Convolvulaceae	Climber
5.	<i>Solanum surettense</i> Burm.	Bhoy Ringani	Solanaceae	Herb
6.	<i>Launea procumbens</i> Roxb.	Moti Bhonpatri	Asteraceae	Herb
7.	<i>Achyranthus aspera</i> L.	Andhedi	Amaranthaceae	Herb
8.	<i>Amaranthus lividus</i> L.	Tandaljo	Amaranthaceae	Herb
9.	<i>Physalis minima</i> L.	<i>Sarpopata</i>	Solanaceae	Herb
10.	<i>Brassica jancea</i> L.	Rai	Brassicaceae	Herb
11.	<i>Parthenium hysterophorus</i> L.	Congress grass	Asteraceae	Herb
12.	<i>Catharanthus roseus</i> L.	Barmashi	Apocynaceae	Herb
13.	<i>Calotropis procera</i> (Ait.)	Aakado	Asclepiadaceae	Herb
14.	<i>Ipomea fistulosa</i> Mart.	Naffat vel	Convolvulaceae	Herb
15.	<i>Xanthan strumarium</i> L.	Gadriyu	Asteraceae	Herb
16.	<i>Croton on perineum</i> L.		Euphorbiaceae	Herb
17.	<i>Artabotrys hexapetalus</i> (L.f.)	Champo	Annonaceae	Shrub
18.	<i>Hibiscus rosasinensis</i> L.	Jashud	Malvaceae	Shrub
19.	<i>Murraya koinigii</i> L.	Mitho limado	Rutaceae	Shrub
20.	<i>Caesalpinia pulcherrima</i> L.	Galtoro	Caesalpiniaceae	Shrub
21.	<i>Musa paradisiaca</i> L.	Kela	Musaceae	Shrub
22.	<i>Thevetia peruviana</i> (Pers.)	Pili karen	Apocynaceae	Shrub
23.	<i>Nerium indicum</i> Mill.	Lal karen	Apocynaceae	Shrub
24.	<i>Euphorbia nerifolia</i> L.	Thor	Euphorbiaceae	Shrub
25.	<i>Jatropha gossypifolia</i> L.	Ratan jyot	Euphorbiaceae	Shrub
26.	<i>Alstonia scholaris</i> (L.)R.Br	saptaparni	Apocynaceae	Shrub
27.	<i>Lantana camera</i> L.	Gandhati	Verbenaceae	Shrub
28.	<i>Bougainvillea glabra</i> Choisy.	Boganvel	Nyctaginaceae	Shrub
29.	<i>Carica papaya</i> L.	Papaya	Caricaceae	Shrub
30.	<i>Capparis decidua</i> (Forsk.)	Kerado	Capparidaceae	Shrub
31.	<i>Punica granatum</i> L.	Dadam	Punicaceae	Shrub
32.	<i>Bauhinia purpurea</i> L.	Kachana	Fabaceae	Shrub
33.	<i>Hyphaene indica</i> Becc.	Pankhatad	Arecaceae	Shrub
34.	<i>Lawsonia alba</i> L.	Mahendi	Lythraceae	Shrub
35.	<i>Adhatoda vasica</i> L.	Ardusi	Acanthaceae	Shrub
36.	<i>Lxora coccinea</i> L.	Ixora	Rubiaceae	Shrub
37.	<i>Citrus limon</i> (L.)Brum.	Limbu	Rutaceae	Shrub
38.	<i>Polyalthia longifolia</i> (Sonn.)Thw.	Ashopalav	Annonaceae	Tree
39.	<i>Azadirachta indica</i> A.Juss.	Limado	Meliaceae	Tree

40.	<i>Ziziphus nummularia</i> (Burm.f.)	Chani bor	Rhamnaceae	Tree
41.	<i>Ziziphus mauritiana</i> Lam.	Bor	Rhamnaceae	Tree
42.	<i>Mangifera indica</i> L.	Ambo	Anacardiaceae	Tree
43.	<i>Moringa oleifera</i> Lam.	Sargavo	Moringaceae	Tree
44.	<i>Cassia fistula</i> L.	Garmalo	Caesalpiniaceae	Tree
45.	<i>Terminslia catapa</i> L.	Badam	Combretaceae	Tree
46.	<i>Syzygium cumini</i> L.	Jambu	Myrtaceae	Tree
47.	<i>Psidium guajava</i> L.	Jamfal	Myrtaceae	Tree
48.	<i>Phoenix sylvestris</i> L.	Khajoori	Arecaceae	Tree
49.	<i>Ficus religiosa</i> L.	Pipalo	Moraceae	Tree
50.	<i>Ficus benghalensis</i> L.	Vad	Moraceae	Tree
51.	<i>Ailanthus excels</i> Roxb.Pl.Cor.	Ardusho	Simaroubaceae	Tree
52.	<i>Prasapis juliflora</i> (Sw.)DC.	Gando baval	Fabaceae	Tree
53.	<i>Holoptelea integrifolia</i> Roxb.	Kanjo	Ulmaceae	Tree
54.	<i>Millingtonia hortensis</i> L.f.	Indian Cork tree	Bignoniaceae	Tree
55.	<i>Cocos nucifera</i> L.	Nariyali	Arecaceae	Tree
56.	<i>Acalypha indica</i> L.	Vaichikanto	Euphorbiaceae	Tree
57.	<i>Acalypha spices</i>		Euphorbiaceae	Tree
58.	<i>Balanites roxburghii</i> Planch.	Ingariyo	Zygophyllaceae	Tree
59.	<i>Cordia sebestena</i> L.	Geiger tree	Boraginaceae	Tree

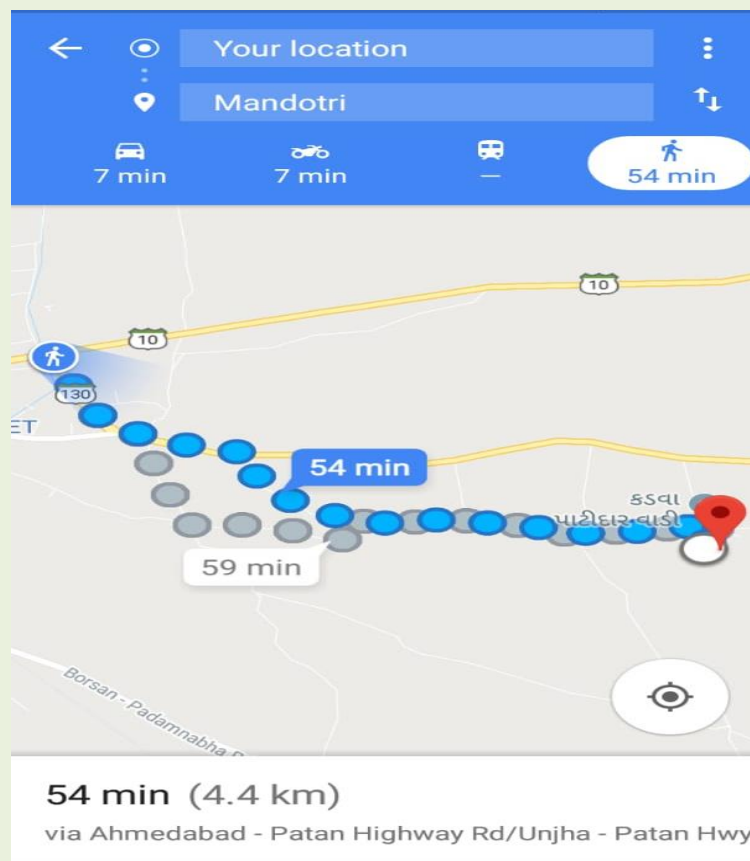


Fig.1: Study Area

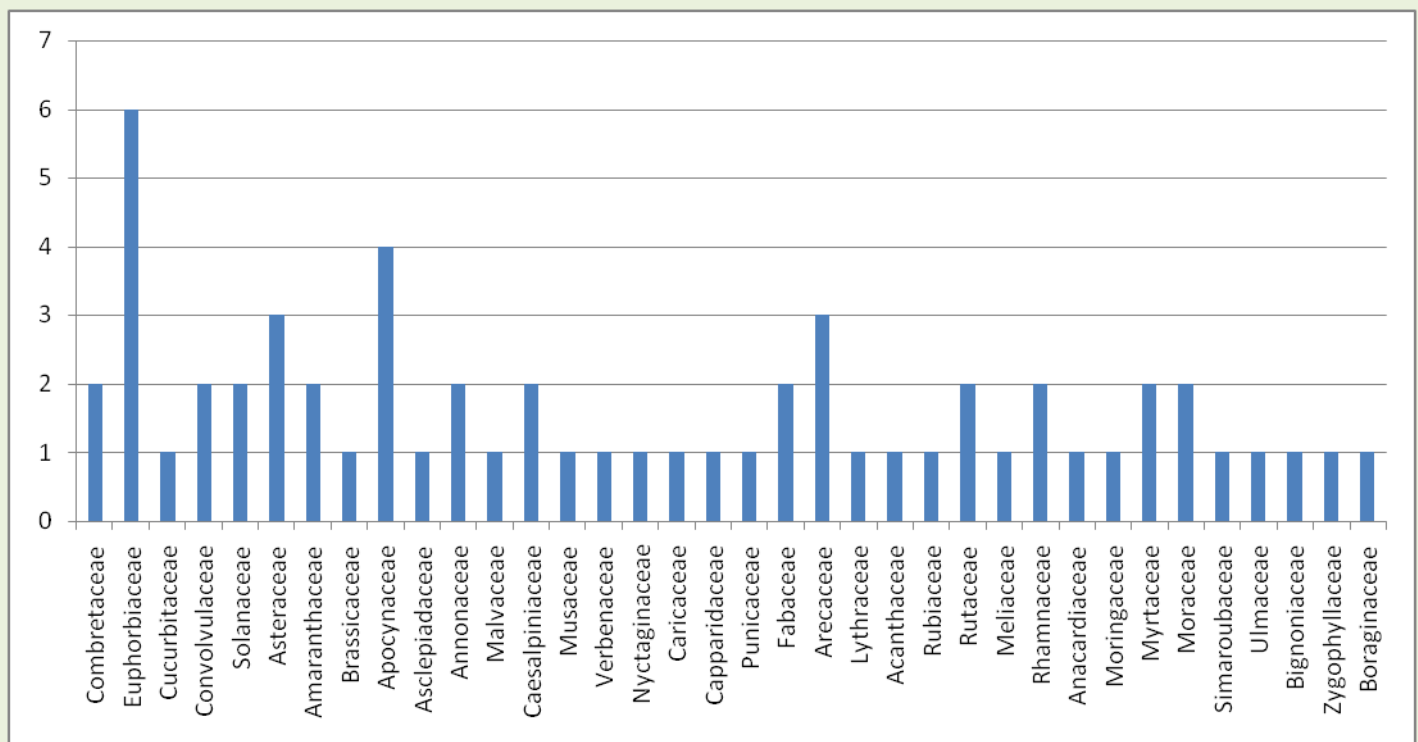


Fig. 2: Showing Family wise maximum number of species

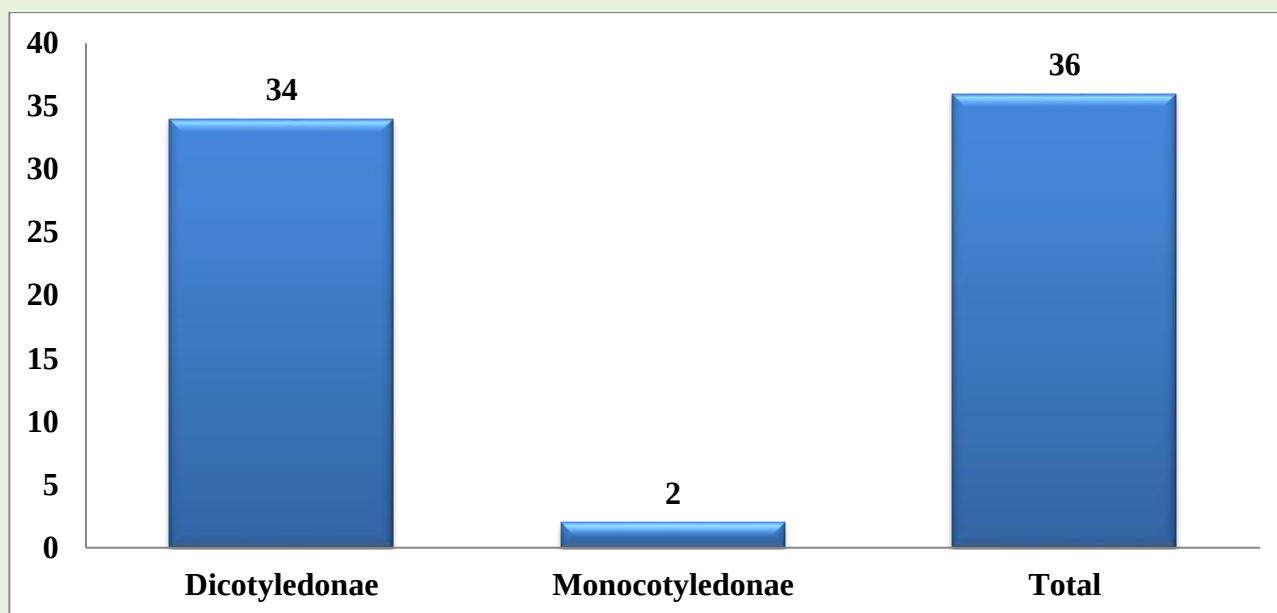


Fig.3: Comparison of Dicotyledonous and Monocotyledons

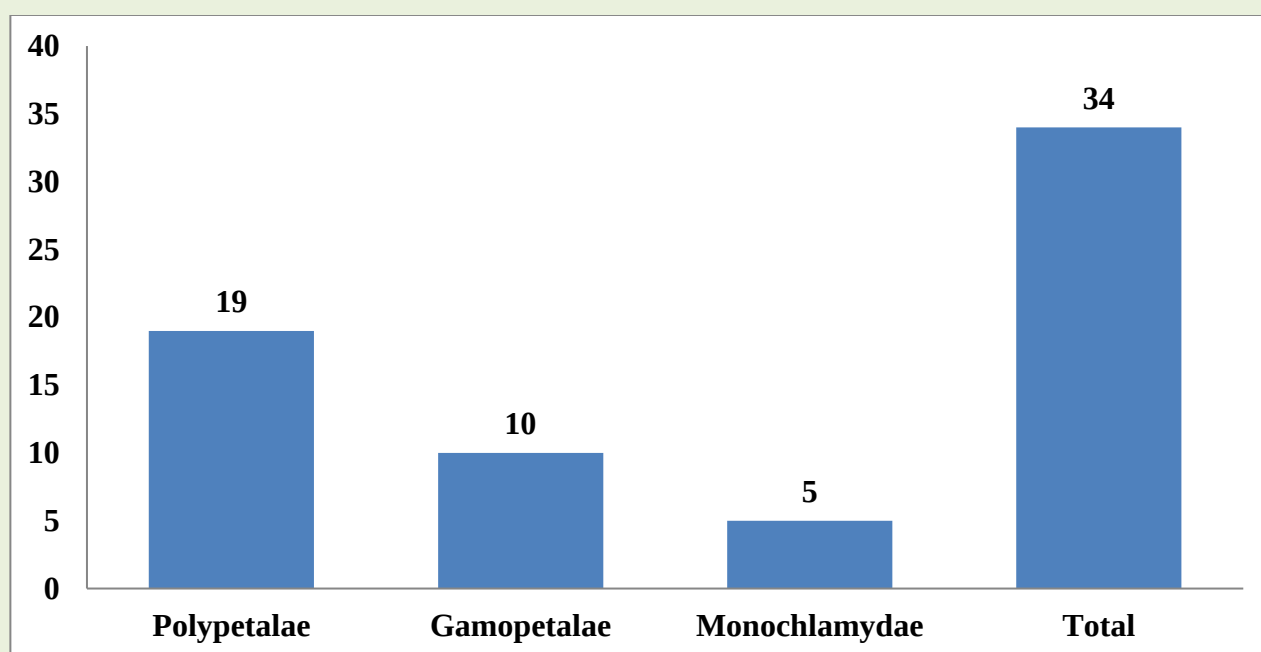


Fig. 4: Comparison of Dicotyledonous Sub Class

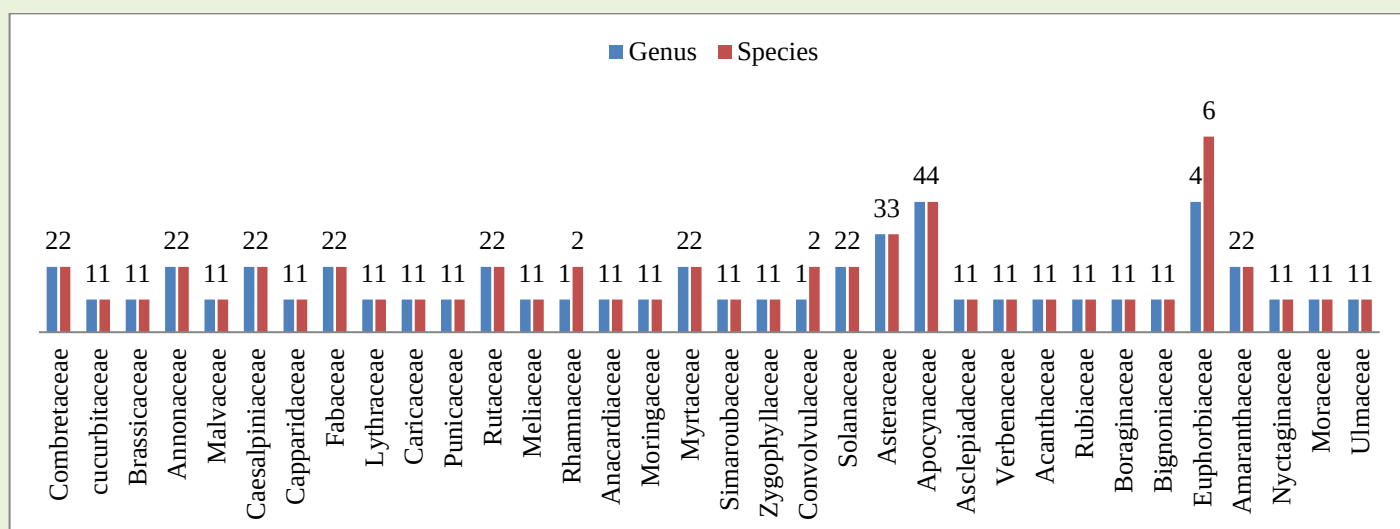


Fig. 5: Comparison of Dicotyledonous Genus and Species

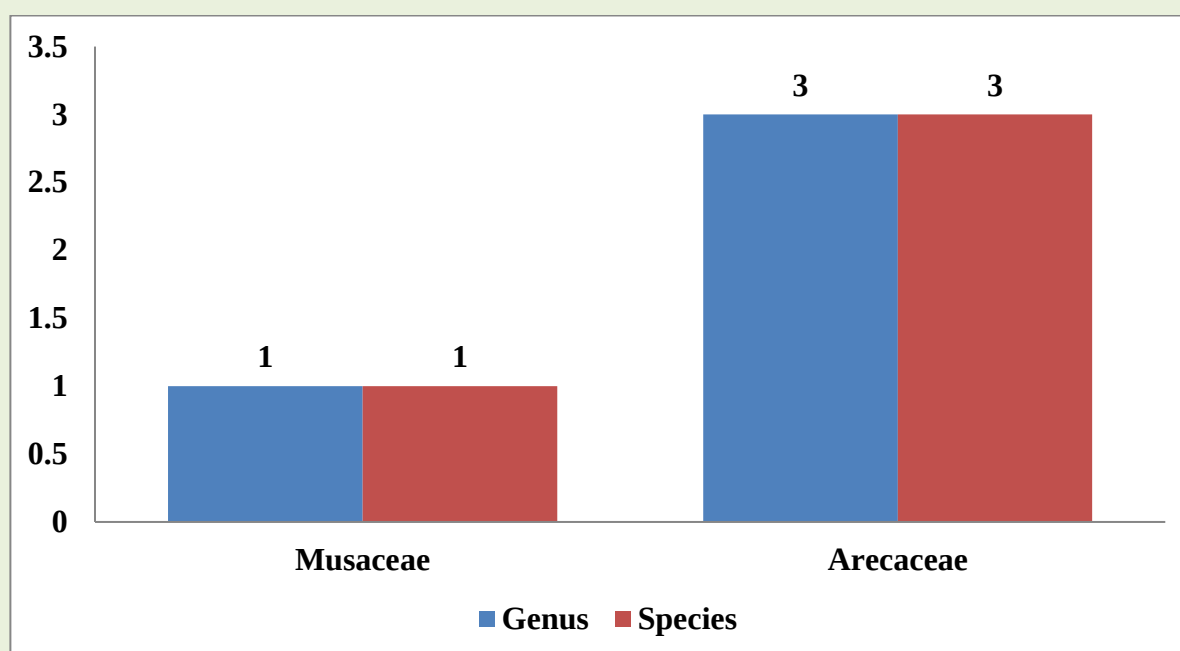


Fig. 6: Comparison of Monocotyledons Genus and Species

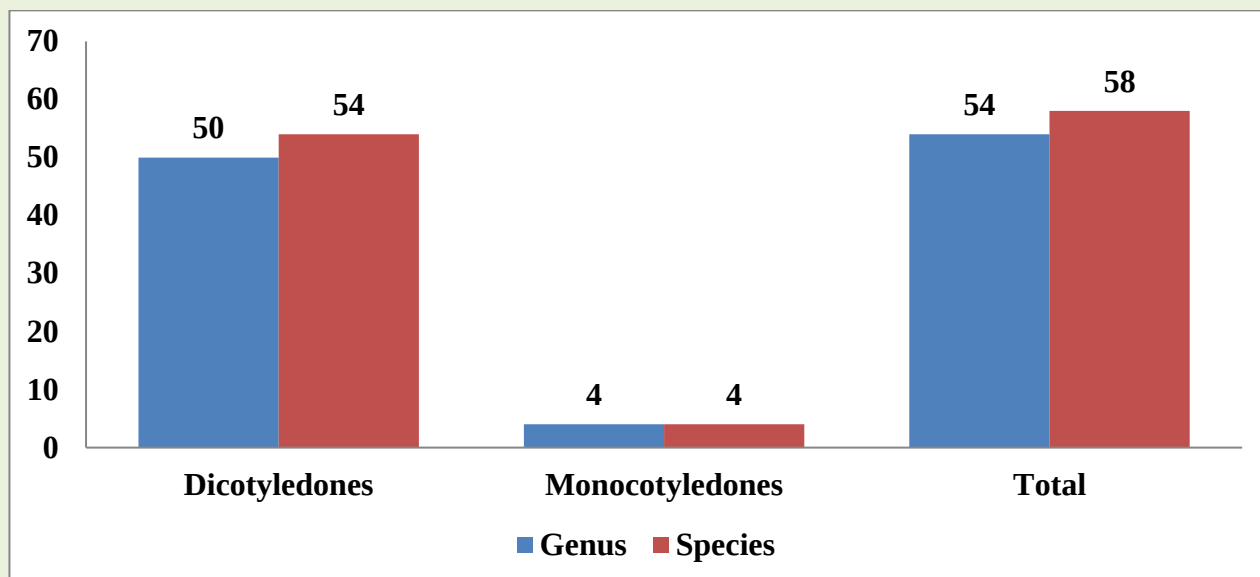


Fig. 7: Class wise comparison of Genus and Species

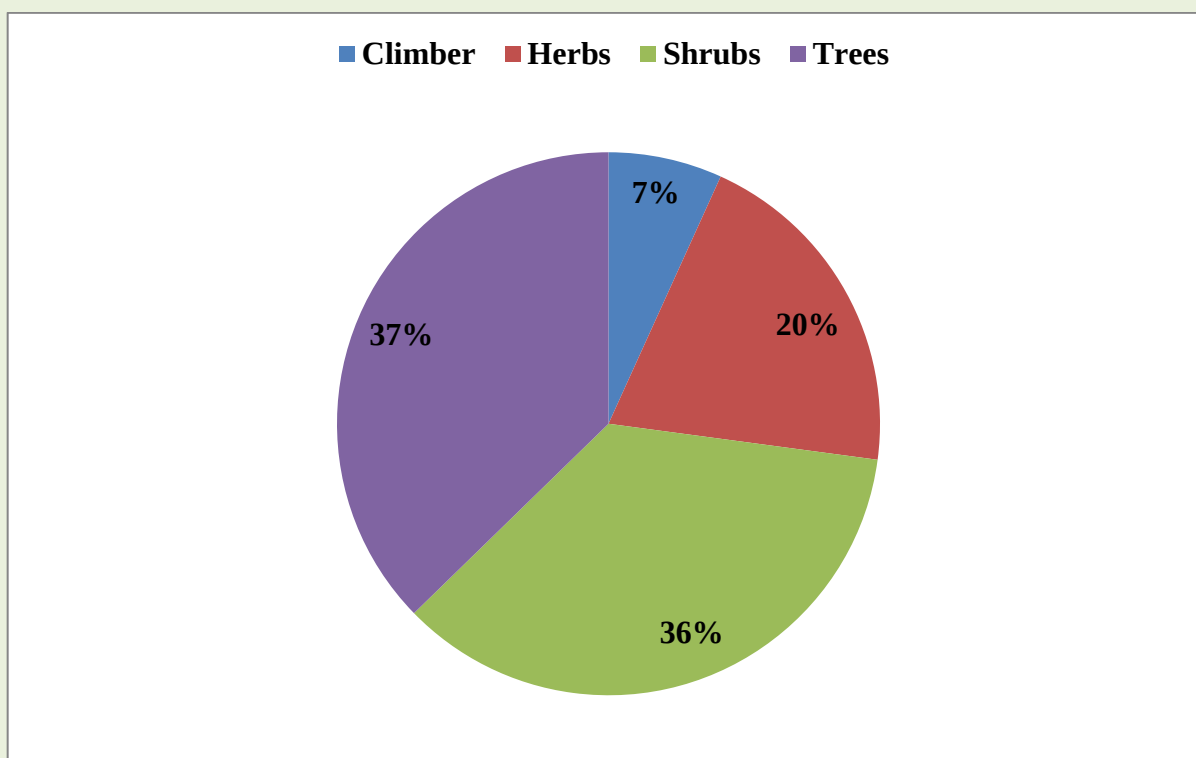


Fig. 8: Habit wise Comparison of Road side Plants