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Preliminary Analysis of Ornamental Flora of Karimnagar District, Concern with Exploration of Wild Flora. Karimnagar, Telangana, India

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ABSTRACT

Wild flora always grows on its own way of association with other flowering or non flowering flora. The flora which is endangered, vulnerable flora also conserved successful in some extent. After collection and preservation of flora can be compare with ornamental flora and conclude to the final decision. India is one of the 34 mega biodiversity centres. The total enumerated plants are 107 species, 90 genera belonging to 49 families. In this 107 species 91 from dicotyledons, 16 from monocotyledons. Some are have medicinal values, Gloriosasuperba, Aristelochia, Cardiospermum, Tinospora cardifolia, Gymnema sylvestre, Plumbago zylanica.

Key words: *Ornamental Flora, Convalvulaceae, Industrialization, Pollution,Urbanization, Sacred plants*

INTRODUCTION

Wild flora are naturally exist its natural habitat. The people who are living with vegetation or forests to near used the natural resources in the form of food, fodder to them and their belongings like cattle, poultry etc. elder people of that area always trained them which plants are useful in which necessity. mainly the flowers has its own aesthetic and recreational value. Some plants have economic importance .Wild flora always grow on its own way of association with other flowering or non flowering flora. This is happened by natural resource availability and competition with inter and intra specific competitions From our fore fathers generations beautiful flowers producing species always progenitors of ornamental flora. Civilization starting day to present day human beings interested to collect wild floral parts, branches seeds and carried towards their villages, towns, cities. The beauty of ornamental plants, which big size flowers or different with native biota in some features like leaf arrangement, twisted, climbing nature. Due to the rapid development, urbanization in the globe there is a need for plantation of plants. Some areas are favorable for planting of ornamental plants like high density population towns, cities, head quarters, avenues, indoor, play grounds, apartments, houses etc.

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As a result of industrialization pollution of air major issue to survive of human beings high amount of gases are released to our environment. In another hand deforestation also associated threat to environment. So there is a need for social forests at massive areas as like waste land usage. But the area of land much cost than villages compare to towns and cities, especially junctions. In other point of view the flora which is endangered, vulnerable flora also conserved successful in some extent. In some areas who people near to forest carry with are endangered flora and they sensitive to pollution, it causes they will not survive as ornament and no longer to survive due to the lack of knowledge on that type of flora. Some extent some wild flora survives as ornamental plants. Ornamental plants divided by their morphological and habit, fall under avenue trees, climber's herbs, shrubs, lianes, epiphytes' etc. The climber flora very useful in parks, gardens decorative and bordered. Some of the ornamental flora grows in shady places behind rocks, at houses and its terrace. Todays one of good area of deification, marketing, grafting of wild flora which is used as ornamentals. Biodiversity in the sentenced as, the composition of variation in life forms. Within specie, ecosystem, biome. India is one of the 34 mega biodiversity centre's .in this two main hot spots are north east Himalayas and western and Eastern Ghats. The introduction of plants or animals to new place called as introduction of new exotic species, which are show some times negative effects on native biota like Lantana camara introduced by believe that Britishers due to their flowers ,today it is one the major weed almost everywhere in India, after Partheinium hysterophorus, which is number one ranking weed in India by several authors.

MATERIALS AND METHODS

The main theme of collection and study of whole research part divided into two parts one is observation, collection of taxa and identification from various urban and rural ornamental plants occurring sites secondly go to forest area collection of which species we suspect to may that species related to that. After collection and preservation of flora can be compare with ornamental flora and conclude to the final decision. Through field work from selected sites of public gardens, tours, parks, during 2013-till.Evaluation of native species to wild explorative ornamental plants sometimes complexity and also controversial, which classification we follow of IUCN threat categories discussed on threatened flora .Enumeration of plant species by Jain and Rao 1977. Some species like Gloriosasuperba naturally grown in villages in towns known as ornamental plant. The collected taxa used for preparation of Herbaria, preserved in department of Botany, GDC with voucher numbers. During the process of evaluation, we can identify with the help of taxonomy literature The Flora of Madras Presidency by Gamble, Flora of Andhra Pradesh by Prof. T. Pullaiah, experts and internet facility. The main method of identification by observation and comparatively with wild flora.

STUDY AREA:

East forest division of karimnagar and some part of Warangal north division forest area they are Manthani, malhar, Mahamutharam, Bhupalapally, Chityal. This area as under deciduous and shrub like forestarea.the floristic survey of this area not particular to this, by late A.M. Naqui, he was concentrate on flora of karimnagar. Work on this ornamental flora was done by *S. Rajagopal* Reddy in united Andhra Pradesh from Y.S.R. Cuddapa district they reported nearly 356 species from their study area. Ornamental plants collect from various urban and head quarters of thehesils, Karimnagar (four sites), Huzurabad, Siricilla, Jagithyal, Peddapally, Ramagundam, Manthani, Koratla etc.

RESUTS AND DISCUSSION

Present study indicates that the wild flora can be at least protected in some areas. Due to some people having the habit of collect and planting of new or beautiful flower producing plants. Present scenario of some reserve forest are in critical conditions due the policies of the

government .in this forest areas covered with good plantation but in the middle or adjacent to villages the canopy of the forest bare. It is happy to inform by author the Telangana government takes a step forward for plantation of all types of trees, shrubs in all the areas. At least it may fulfill some of the gap above mentioned. present study identify some ferns, gymnosperms also but author mainly concentrated on Monocot species and Dicot species. Some of that not included are Pteris, Adiantum, Actinopteris radiata, Thuja oxidentalis, Cycas species. The total enumerated plants are 107 species, 90 genera belonging to 49 families. In this 107 species 91 from dicots, 16 from monocotyledons monospecious families are 25. The family with highest species is Convalvulaceae and Fabaceae sharing equal number of species (09), followed by Malvaceae (06), Acanthaceae and Caesalpinaceae (05), Asclipiadaceae, Lamiaceae and Poaceae (04) etc. in this suvrey we observed some ornamentals are endangered in wild. The genus with highest species is Ipomea (04) followed by Passiflora, Portulaca, Bahinia, Aristelochia. Analysis in morphological forms of their habit Herbs -38, Trees-24 Climbers -21,Shrubs-08,Lianes-07,Cactus-06 Creepers-03. God faith on human beings to watch the beauty of nature and swallow the aesthetic view of nature and its components. But misusage of our nature by the means of human beings always tries to catch the luxurious life as much as the available. Due to the industrialization and urbanization directly or indirectly effect on nature (IUCN). Due to the result of urbanization the houses office areas are very narrow ,which does not allow the plants grow as like natural ways so we care on that to grow at least some extent. Now days people understood the value of plants, its flowers which give the pleasant fragrance. They prefer their houses which are compulsory eco friendly type, gardens, lawn; some are show interest to grow plants in their house terrace. If we grow ornamental plants as economic basis it is also useful, in the form of self employment schemes of various government or NGO organizations. To improve socio-economic status of whoare living near to fort areas. In these some are have medicinal values, *Gloriosasuperba, Aristelochia, Cardiospermum, Tinospora cardifolia, Gymnema sylvestre, Plumbago zylanica* etc. Some are sacred plants like Beutiamonosperma, have the capability to refine the mud water to fresh water, Aeglemarmilos, *Cynodon dactylon* were used in lord Ganesha'spooja. *Indigo feralinnaei* one of most important plant to protect soil from soil erosion from speed water flows, some areas this species spread over one meter .

Table No.1.The Ornamental Flora of Enumerated

Sl.No	Scientific name of the plant	Family	Habit
1	*Abrus precatorius L.*	Fabaceae	Climber
2	*Aegle marmelos*	Rutaceae	Tree
3	*Aristalochia bracteata*	Aristalochiaceae	Climber
4	*A.indica L.*	Aristalochiaceae	Climber
5	*Barringtonia acutangula*	Lecythidiaceae	Tree
6	*Bauhinia purpurea*	Caesalpiniaceae	Tree
7	*B.racemosa*	Caesalpiniaceae	Tree
8	*Butea monosperma*	Fabaceae	Tree
9	*Cassia fistula* L.	Caesalpiniaceae	Tree
10	*Bombax ceiba,*	Malvaceae	Tree
11	*Ficus microcarpa*	Moraceae	Tree
12	*F.hispida*	Moraceae	Tree
13	*Cassia montana*	Caesalpiniaceae	Tree
14	*Gyrocarpusasiaticus*	Gyrocarpaceae	Tree
15	*Melia azedairach*	Meliaeae	Tree

16	*Dichrostachys cinerea*	Mimosaceae	Tree
17	*Dolichandronfalcata*Seem.	Bignoniaceae	Tree
18	*Hibiscus platanifolius*(Wild) Sweet.	Malvaceae	Tree
19	*Mimusopselangi*	Sapotaceae	Tree
20	*Mitragynaparviflora*	Rubiaceae	Tree
21	*Morindapubescens*	Rubiaceae	Tree
22	*Pterocarpussantalinus*	Fabaceae	Tree
23	*Sterculiaurens*	Sterculiaceae	Tree
24	*Vitexaltissima*	Verbinaceae	Tree
25	*Chlorisvirgata*	Poaceae	Herb
26	*Cynodondactylon*	Poaceae	Herb
27	*Cyperusexaltatus*	Cyperaceae	Herb
28	*Eragrastiellabifaria*(Vahl) Bor	Poaceae	Herb
29	*Fimbristylisargentea*	Cyperaceae	Herb
30	*Pycreuspolystachyos*	Cyperaceae	Herb
31	*Saccharumspontaneum,*	Poaceae	Herb
32	*Typhaangustata*	Typhaceae	Herb
33	*Crinum asiaticum*	Amarillydaceae	Cactus
34	*Euphorbia barnhartii*	Euphorbiaceae	Cactus
35	*Sarcostemmaacidum*	Asclepiadaceae	Cactus
36	*Portulacapilosa,*	Portulacaceae	Cactus
37	*P.grandiflora*	Portulacaceae	Cactus
38	*Talinumcuneifolium.*	Portulacaceae	Cactus
39	*Cappariszeylanica*	Capparaceae	Climber
40	*Canavaliagladiata*(Jacq) DC	Fabaceae	Climber
41	*Cassythafiliformis*	Lauraceae	Climber
42	*Cissusquadrangularis*	Vitiaceae	Climber
43	*Clitoriaternatea*	Fabaceae	Climber
44	*Gloriosasuperba*	Liliaceae	Climber
45	*Ipomoea cairica*	Convolvulaceae	Climber
46	*I.mauritiana*	Convolvulaceae	Climber
47	*I.obscura*	Convolvulaceae	Climber
48	*Merremiaaegyptia*	Convolvulaceae	Climber
49	*Oxystelmaesculentum*	Asclepiadaceae	Climber
50	*Cardiospermumcanescens*	Sapindaceae	Climber
51	*I.pes- tigridis L*	Convolvulaceae	Climber
52	*Jasminumazoricum L.*	Oliaceae	Climber
53	*Mukiamaderaspatana*	Fabaceae	Climber
54	*Passifloraedulis Sims.*	Passifloraceae	Climber
55	*P.foetida.*	Passifloraceae	Climber
56	*Tinosporacordifolia*	Menispermiceae	Climber
57	*Argyreiapilosa*	Convolvulaceae	Liane
58	*Cryptostegiagrandiflora,*	Asclepiadaceae	Liane
59	*Gymnemasylvestre,*	Asclepiadaceae	Liane
60	*Anisochiluscarnosus*(L.f) Wall	Lamiaceae	Herb
61	*Barlerialongifolia*	Acanthaceae	Herb
62	*Clerodendrumserratum*	Lamiaceae	Shrub
63	*Commelinamaculata,*	Lamiaceae	Herb
64	*Curculigoorchioides*	Zingiberaceae	Herb
65	*Desmodiumheterocarpon*	Fabaceae	Herb
66	*Heliotropiumstrigosum,*	Boraginaceae	Herb
67	*Hibiscus ovalifolius*	Malvaceae	Herb

68	*Indigoferalinnaei*	Fabaceae	Procumbent
69	*Lepidagathismitis*Dalzell	Acanthaceae	Procumbent
70	*Pavoniaodorata,*	Malvaceae	Herb
71	*Polygonumglabrum*	Polygoniaceae	Herb
72	*Scillahyacinthina*	Asparagaceae	Herb
73	*Stachytarphetajamaicensis*	Verbinaceae	Herb
74	*Vicoaindica*	Austaraceae	Herb
75	*Abutilon hirtum*	Malvaceae	Herb
76	*Asystasiagangetica*	Acanthaceae	Herb
77	*Barleriaprionotis*	Acanthaceae	Herb
78	*Biophytumsensitivum,*	Oxalidaceae	Herb
79	*Cassia angustifolia*	Caesalpiniaceae	Tree
80	*Celosia argentea*	Amaranthaceae	Herb
81	*Celosia argenteavar,*	Amaranthaceae	Herb
82	*Cereus pterogonus*	Cactaceae	Shrub
83	*Crotalaria verrucosa,*	Fabaceae	Herb
84	*Evolvulusalsinoides,* (Linn).Linn	Convolvulaceae	Procumbent
85	*Haldiniacordifolia*	Rubiaceae	Tree
86	*Ipomoea staphylina,*	Convolvulaceae	Liane
87	*Oxalis corniculatavaratropurpure*	Oxalidaceae	Herb
88	*Plumbagozylanica*	Plumbaginaceae	Shrub
89	*Pavoniazeylanica* (L).Cav.	Malvaceae	Herb
90	*Tamarixericoides*L.	Tamariaceae	Shrub
91	*Turneraulmifolia*	Passifloraceae	Herb
92	*Aponogetonnatans*	Aponogetonaceae	Herb
93	*Bacopamonnieri*	Scorpulariaceae	Herb
94	*I.aquatica*	Convolvulaceae	Liane
95	*Nymphaeanouchali*	Nymphaeaceae	Herb
96	*N.pubescens*	Nymphaeaceae	Herb
97	*Pistiastratiotes,*	Araceae	Herb
98	*Asparagus racemosus*	Asparagaceae	Herb
99	*Barleriabuxifolia*	Acanthaceae	Herb
100	*Breyniavitis-idaea*(Burm.f.) C.E.C.Fischer	Euphorbiaceae	Herb
101	*Calycopteris floribunda*	Combertaceae	Liane
102	*Clerodendruminerme*	Lamiaceae	Shrub
103	*Helicteresisora*L.	Sterculiaceae	Tree
104	*Jasminumcuspidatum*	Oliaceae	Shrub
105	*Lawsoniainermis*	Myrtaceae	Shrub
106	*Mimosa intsia*	Mimosaceae	Shrub
107	*Allamandacathartica*	Apocynaceae	Liane

SOME OFENUMARATED PLANTS FIGURES

***Lepidagathis mitis* Dalzell**

***Aristalochia bracteata* L.**

Hibiscus platanifolius

***Tamarix ericoides* L.**

***Dolichandron falcata* Seem.**

***Cassia fistula* L.**

***Evolvulus alsinoides,* (Linn). Linn**

***Anisochilus carnosus* (L.f) Wall**

***Canavalia gladiate* (Jacq) DC**

***Eragrastiella bifaria* (Vahl) Bor**

***Helicteres isora* L.**

***Pavonia zeylanica* (L). Cav**

CONCLUSION

Wild flora are progenitors of every hybrid or verities of crop plants as well as others. Wild flora have the capability from several diseases caused by fungi, bacteria, viruses. Several scientists and breeders always try to solutions to society sensitivity of disease like problems. So ornamental flora also explored from wild in various ways. The major problem with which ornamental flora taken as exotic, it causes severe damage to native flora as like Lantana camara, which does not allow any species to grow nearby her with he help of allelochemicals produced by herself.

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REFERENCES

1. Aasati, B.S and Yadav, D.S., Diversity of horticultural crops in North Eastern region. ENVIS Bulletin: *Himal. Ecol.* **12 (1):** (2010).
2. Binu Thomas, Rajendran. A, Aravindhan. Vand Maharajan, M., Wild ornamental chasmophytic plants for rockery. *J. Mod.Biol. Tech.* **1 (3):** 20-21 (2011).

3. Daniels, R.R.J., "Biodiversity of Western Ghats – An Overview", published on http://oldwww.wii.gov.in/envis/rain_forest /chapter2.htm. (2011).
4. Gamble, J.S. and Fischer, C.E.C., 1915-1936. Flora of the Presidency Madras. Vols.1-3. Adlard & Co. London (Reprinted 1957). Botanical Survey of India, Calcutta.
5. Hooker, J.D., 1872 – 1897. The Flora of British India. Vols. 1 – 7. L. Reeve Company, A. ford, Kent, USA.
6. Khoshoo, T.N., Biodiversity, Bioproductivity and Biotechnology. In: Farmers Rights and Plant Genetic Resources – Recognition and Rewards: A dialogue (eds) M.S. Swaminathan, Mac Millan India Ltd. pp.156-159 (1995).
7. Manickam, V.S, Irudayaraj, V., Pteridophyte Flora of Nilgiris, South India. Bishen Singh Mahendra Pal Singh, Dehra Dun 2003.
8. Mayers, N., Threatened biotas: Hotspots in tropical forests. *Environment* **8:** 187-208 (1988).
9. Muthuchelian K, Kannaiyan S, Gopalam A., Forest Biodiversity Vol-II. Associated Publishing Company, New Delhi, p. 329 (2007).
10. Rajagopal Reddy, S., Madhusudhana Reddy,A. and Yasodamma, N., *Indian J. Fund. and Appl. Life Sci.* **2(1):** pp.192-199 (2012).
11. Swarup, V., *Ornamental horticulture*. MacMillan Indian Limited, New Delhi (1998.)