Ecological vegetation of some Rare, Endangered, Threatened and Endemic medicinal plants of Salher and Mulher Forest, Nashik (Maharashtra).

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Abstract:-

The present paper deals with the study of some Rare, Endangered, Threatened and Endemic medicinal plants of Salher and Mulher Forest, Nashik (Maharashtra). Various plants available in the locality used use by tribal's like Bhil, Mahadeo Koli, Kokani. These peoples are well acquainted with vegetation around them, as they are fully depend on them for their daily needs like food, fuel, fodder, medicine, veterinary medicine, in black magic, religious ceremonies, for sacred purposes. These peoples have to make the best used of plants around them for their survival. This knowledge of plants for their own used is need to study and document.

Key words: - Threatened, Endemic, Veterinary, Religious and Sacred.

Introduction:-

Salher and Mulher forest area is a representative area from the Western Ghats or Sahyadri. The Western Ghats comprises a rich biosphere ranging from thick evergreen forest to heavily eroded barren hills. Various studies have been carried out because of the rich vegetation covered is still high and diverse. Nayar M.P. *et. al* (1987,1988,1990) worked on Red Data Book of Indian Plants, Gaikwad and *et.al.* (2014) Enlisted Endemic Flowering Plants of Northern Western Ghats of India, Kamble *et. al*. (2016) worked on New Record on Endemic and critically Endangered Mycorrhizal plant. Many tribal people and different tribes live in forest of Salher and Mulher. These tribal people use different plants for various purposes like medicine, vegetable, thatching roofs, building huts, agricultural implements and art and craft. They use many plants and different plant parts to cure various diseases. They follow various methods to obtain the medicines from the plant. The main objective of the research was to establish an extent of interdependent plant-man relationship, where the area is small, number f plants available is also more, but still the dependence on plants is also high.

Methodology:-

The present investigations were carried out from Salher and Mulher Forest of Nashik Distict. The threatened and endemic medicinal plants were observed and documented along with data on ethnomedicinal uses as informed by the tribal's and rural peoples. The information was collected from the tribal people. For collecting information the questionnaire was prepared. By using questionnaire to elicit information about ethnomedicinal plants actual interviews of tribal's were taken. Many villages and padas were visited and the information about traditional medicinal plants was collected. At the

same time field visits were arranged. Plants species were located by taking help of interviewee and the plant species were documented. The species were identified by using keys and floras for botanical determination and arranged according to Bentham and Hooker's classification system.

Systematic Enumeration:-

Sr. No.	Botanical Name	Local Name	Family	Habit
1	*Clematis gouriana Roxb.*	Morvel	Ranunculaceae	**Climber**
2	*Cocculus hirsutus (L.) Diels*	Vasanvel	Menispermaceae	Climber
3	*Cissampelos pareira (L.)*	Pahadvel	Menispermaceae	Climber
4	*Cardamine tricocarpa L.*	Don tondi	Brassicacae	Herb
5	*Portuluca oleraceia L.*	Motiluni	Portulacaceae	Herb
6	*Sida acuta Burm.f.*	Chikana	Malvaceae	Herb
7	*Bombax ceiba L.*	Savar	Bombacaceae	Tree
8	*Helicteris isora L.*	Murudsheng	Sterculaceae	Tree
9	*Balanites roxburgii Planch.*	Hinganbet	Balanitaceae	Tree
10	*Boswellia serrata Triana & Planch.*	Salai	Burseraceae	Tree
11	*Celastrus paniculatus Willd.*	Malkanguni	Celastraceae	Climbing Shrub
12	*Ziziphus xylocarpa Willd.*	Ghat bor	Rhamnaceae	Tree
13	*Cyphostemma auriculatum (Roxb.)*	Kali vel	Vitaceae	Climber
14	*Sapindus laurifolius L.*	Ritha	Sapindaceae	Tree
15	*Semecarpus anacardium L.f.*	Bhilava	Anacardiaceae	Tree
16	*Cheirospondias axillaris (Roxb.) B.L.Burtt & A.W.Hill*	Ambada	Anacardiaceae	Tree
17	*Abrus precatorius L.*	Gunj	Fabaceae	Tree
18	*Butia monosperma (Lam.) Taub.*	Palas	Fabaceae	Tree
19	*Mucuna pruriens (L.) DC.*	Khaj kuiri	Fabaceae	Climber
20	*Vigna capensis (L.) A. Rich.*	Halunda	Fabaceae	Climber
21	*Vigna vexillata (L.) A.Rich.*	Halunda	Fabaceae	Climber

22	*Cassia fistula L.*	Bahava	Caesalpinaceae	Tree
23	*Piliostigma foveolatum (Dalzell.) Thoth.in Bull.*	Mothi chambhuli	Caesalpinaceae	Tree
24	*Hardwickia binata Roxb.*	Anjan	Caesalpinaceae	Tree
25	*Anogeisus latifolia (Roxb.ex DC.) Wall.ex Guill.& Perr.*	Dhamoda	Combretaceae	Tree
26	*Calycopteris floribunda(Roxb.) Lam.ex Poir.*	Ukshi	Combretaceae	Shrub
27	*Terminallia bellerica (Gaertn.) Roxb.*	Behada	Combretaceae	Tree
28	*Terminallia chebula Retz.*	Hirda	Combretaceae	Tree
29	*Terminallia arjuna (Roxb.) Wight & Arn.*	Sadada	Combretaceae	Tree
30	*Syzigium heyneanum (Duthie)Wall.ex Gamble*	Lahan jambhul	Myrtaceae	Tree
31	*Careya arborea Roxb.*	Kumbhi	Lecythidiaceae	Tree
32	*Senerilla Scapigerra Dalz.*	Sonerila	Melastomataceae	Herb
33	*Lawsonia inermis L.*	Mehandi	Lythraceae	Tree
34	*Lagerstromia parviflora Roxb.*	Bondara	Lythraceae	Tree
35	*Woodfordia fruticosa (L.) Kurz.*	Dhayati	Lythraceae	Shrub
36	*Tricosanthus tricuspidata Lour.*	kaudal	Cucurbitaceae	Climber
37	*Kedrostris rostrata (Rottl.) Cogn.*	Mirchi kand	Cucurbitaceae	Herb
38	*Cintella asiatica (L.) Urban*	Brahmi	Apiaceae	Herb
39	*Pimpinella heyneana (DC.) Benth*	Dongar jira	Apiaceae	Herb
40	*Heracleum grande (Dalzell & A. Gibson)*	Bafali	Apiaceae	Herb
41	*Meyna laxiflora Robyns*	Aaval	Rubiacaee	Tree
42	*Lagasca mollis Cav.*	Zarvad	Asteraceae	Herb
43	*Senecio auria (L.)A.& D.Love*		Asteraceae	Herb
44	*Bidens biternata (Lour.) Merr. & Sherff*	Kinehi	Asteraceae	Herb

45	*Plumbago zeylanica L.*	Chitrak	Plumbagogenaceae	Herb
46	*Embelia ribes Burm.f.*	Aambati	Myrsinaceae	Climber
47	*Diopyrous Montana Roxb.*	Pali	Ebenaceae	Tree
48	*Wrightia tinctoria*	Kala-kuda	Apocynaceae	Tree
49	*Ceropegia mahabalie Hemadri & Ansari.*		Asclepediaceae	Herb
50	*Paracaryopsis malabarica (C.B.Cl.) R.R.Mill*	Nisurdi	Boranginaceae	Herb
51	*Solanum anguvi Lam.*	Ran-vangi	Solanaceae	Herb
52	*Verbascum Chinese (L.) Sant.*	Kutaki	Scrophulariaceae	Herb
53	*Striga densiflora Benth.*	Agya	Orobancaceae	Herb
54	*Tecoma castanifolia (D.Don) Melch.*	Ghanti phul	Bignonaceae	Tree
55	*Carvia callosa*	Karvi	Acanthaceae	Shrub
56	*Chlerodndrum philipianum Schauer*	Jangli Mogra	Verbenaceae	Shrub
57	*Chlerodendrum serratum (Linn.)*	Bharangi	Verbenaceae	Shrub
58	*Boehmeria macrophylla Hornem.*	Kapashi	Urticaceae	Tree
59	*Ficus exasperata Vahl*	Bhuiumbar	Moraceae	Tree
60	*Aerides maculosum Lour.*	Aamari	Orchidaceae	Epiphyte
61	*Habnaria grandifloriformis Blatt. & McCann*	Chichurkanda	Orchidaceae	Herb
62	*Curcuma pseudomontana J.Graham*	Kali halad	Zingiberaceae	Herb
63	*Curcuma neigiriensis Wight*	Ran halad	Zingiberaceae	Herb
64	*Ensete superbum Roxb.*	Rankeli	Musaceae	Shrub
65	*Crinum pedunculatum R.Br.*	Kumbh	Amaryllidaceae	Herb
66	*Curcilago orchiodes*	Kali musali	Hypoxydaceae	Herb

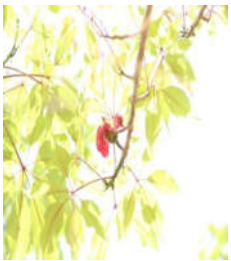
	Gaertn.			
67	*Dioscorea pentaphylla Female L.*	Jaicha mor	Dioscoreaceae	Climber
68	*Dioscorea bulbifera L.*	Jaicha mor	Dioscoreaceae	Climber
69	*Gloriosa superba L.*	Kal-lavi	Liliaceae	Climber
70	*Iphigenia stellata Blatt.*	Bhui chakra	Liliaceae	Herb
71	*Asparagus africanus (Lam.)*	Asvel	Liliaceae	Climber
72	*Drimia indica (Roxb.) Jessop*	Jangli Kanda	Liliaceae	Herb
73	*Chorophytum borvilianum Santapau & R.R.Fern*	Safed musali	Liliaceae	Herb
74	*Amorphophallus commutatus (Schott) Engl.*	Mogari Kand	Araceae	Herb
75	*Arisaema murrayi (J.Graham)*	Sapkanda	Araceae	Herb
76	*Actinopteris dichotoma Link.*	Bhui tad	Pteridaceae	Herb
77	*Cheilanthus farinosa (Forssk.)*	Morjiva	Cheilanthaceae	Herb
78	*Adiantum philipense L.*	Sonkadaki	Adiantaceae	Herb

Photo plates:-

Amorphophallus commutatus

Abrus precatorius

Argyreia nervosa



Bombax ceiba

Ceropegia mahabalie

Curcuma pseudomontana


Cardamine trichocarpa


Chlerodendrum serratum


Cyphostemma auriculatum


Chlerodendrum phillipianum


Cheirospondias axillaris


Celastrus paniculatus


Cassia fistula


Calycopteris floribunda


Carvia callosa


Diopyrous melanoxylon


Ensete superbum


Ficus exasperata


Gloriosa superba


Helicteris isora


Heracleum grande


Habnaria grandifloriformis


Iphiginia stellata


Meyna laxiflora


Paracaryopsis malbarica


Pimpinella heyneana


Striga densiflora


Sonerilla scapigera


Solanum anguivi


Trichosanthus tricuspidata


Terminalia chebula


Vigna vexillata


Wrightia tinctoria

Results and Discussion:-

Ceropegia mahabalie, Cardamine trichocarpa, Vigna vexillata, Curcuma pseudomontana, Iphiginia stellata, Arisaema murrayi, Actinopteris dichotoma are rare and endemic plants species are documented in this present study. This plant species were found to be restricted to this areas and are rare and threatened in occurrence, their populations have been declining rapidly due to habitat destruction and anthropogenic activities. (Deshmukh and Waghmode 2011, Chandore 2015, Pethe 2015). Plant species like *Curcuma neigriensis, Carvia callosa, Ensete superbum, Asparagus africanus* from present study were identified as RET and reported by Jagtap et.al. (2008) and Gaikwad et.al. (2014). they are facing various degrees of threat of extinction. 78 plant species are observed and documented as RET and Endemic to this area.

The present work may be very useful as it provides data on rare, endangered, and endemic plants from Salher and Mulher Forest from Nashik district Maharashtra. It will be helpful for future researchers in conservation of biodiversity of this region.

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