

# A Review on Medicinal Plants of Sariska Tiger Reserve of Alwar district, Rajasthan

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## ABSTRACT

Traditional knowledge about the vegetation of a particular area is very helpful to the local people to meet their day to day requirements. Medicinal plants are of great importance to individuals and communities for treating and preventing specific ailments and diseases. Present status of application of medicinal plants of Sariska Tiger Reserve of Alwar district, Rajasthan by the locals is reported.

Key words: Medicinal plants, Traditional knowledge, Health care, Diseases ailments.

## INTRODUCTION

Medicinal plants of Sariska play an important role in providing health care to humans. They have played a significant role in various ancient traditional systems of medication such as Ayurvedic and Unanic in India. Their demand is increasing in both developing and developed countries. Indigenous traditional medicines are of great importance in the discovery of new drugs from plants. The Indian traditional medicines can be used to prevent, alleviate or cure several human diseases (Bhakat, 1990). Sariska region of Alwar district has very rich vegetation consisting of a large number of plants with their unique medicinal property. Their local uses to cure various ailments have been reported in this communication (Jain, 1968).

### Study Area

Rajasthan is one of the largest state situated in the north-western of India with rich biodiversity. Aravalli range is the striking geological feature of Rajasthan state (Singh, 1998). Alwar district is situated in the north-eastern part of Rajasthan at 27.5<sup>0</sup> North and 76.6<sup>0</sup> East side. It has an average elevation of 271 meters. The sandy soil and bright sunlight are the two important natural factors which are responsible for the development of arid

vegetation having variable medicinal values. Sariska National Park lies in the Aravalli hills of Alwar district of Rajasthan. Sariska Tiger reserve comprises of undulating plateaus, lands and wide valleys of the hill ranges of Aravalli hills. According to Forest Department of Government of Rajasthan the total area of the Sariska Tiger Reserve is 866 square km. According to Parmar (1987), forest of Sariska Tiger Reserve falls under Northern tropical dry deciduous and northern dry deciduous thorn forest (Gadgil, 1996). The vegetation of remains lush green in monsoon and dry in summer.

## MATERIALS & METHODS

The rural people of Alwar district primarily depend upon locally available medicinal plants for curing their ailments. The present study is based on intensive and detailed field excursions of Sariska Tiger Reserve detailed information regarding use of medicinal plants has been documented (Gupta *et al.*, 2002).. The plants were collected and identified by using standard monographs and flora (Vyas, 1967 and Sharma, 1993) Medicinal information about the plants was collected on the basis of local physicians practicing indigenous system of medicine used by villagers.

## RESULTS

The data on medicinal uses of plants have been arranged alphabetically, each by its botanical names followed by name of Family, Habit and medicinal uses (Table 1).

**Table 1-** Medicinal Flora of Sariska Tiger Reserve

S.No	Species	Family	Habit	Medicinal uses of plants
1	<i>Abelmoschus manihot</i>	Malvaceae	S	Fruit is used for pneumonia treatment.
2	<i>Acacia catechu</i>	Mimosaceae	T	Root used in leprosy, skin diseases; bark used in leucoderma
3	<i>Aegle marmelos</i>	Rutaceae	T	Fruit: used in dysentery, peptic ulcer & internal hemorrhage.
4	<i>Anogeissus pendula</i>	Crassulaceae	T	Fruit: used in urticaria, hiccough, and constipation
5	<i>Argemone mexicana</i>	Papaveraceae	S	leaf juice and root-used externally for indolent ulcers and skin diseases
6	<i>Azadirachta indica</i>	Meliaceae	T	Seed: used for hair care & dandruff.
7	<i>Balanites aegyptiaca</i>	Balanitaceae	T	Seed: used in earache, pimples; bark: used in dog bite & piles
8	<i>Barleria prionites</i>	Acanthaceae		Whole plant: mixed with honey to cure bronchial asthma
9	<i>Bauhinia racemosa</i>	Caesalpiniaceae	T	Poultice of leaves is used in swelling & headache
10	<i>Butea monosperma</i>	Fabaceae	T	Fruit: correct menstruation; Root: used in snake poisoning
11	<i>Calotropis gigantea</i>	Asclepiadaceae	S	Leaf-juice: poisonous, used in external swellings.
12	<i>Capparis decidua</i>	Capparidaceae	S	Dried flower buds used in scurvy.
13	<i>Capparis sepiaria</i>	Capparidaceae.	S	Leaf: applied as poultice to piles, swellings & boils
14	<i>Cassia fistula</i>	Caesalpiniaceae	T	Leaf: used in skin diseases like psoriasis, ringworm; Pod: purgative
15	<i>Centella asiatica</i>	Apiaceae	H	Leaves are Blood purifier, tonic, leprosy, syphilis, wounds, improves memory
16	<i>Cleome viscosa</i>	Cleomaceae	H	Rheumatic, arthritis and wounds
17	<i>Dalbergia latifolia</i>	Fabaceae	T	Leaf juice: cure aphthalus ulcer and used as gargles in sore throat; Root: used in gonorrhea
18	<i>Diospyros melanoxylon</i>	Ebenaceae	T	Dried flowers used in urinary, skin & blood diseases.
19	<i>Eclipta alba</i>	Asteraceae	S	Leaf-promotes hair growth. Its extract in oil is applied to scalp before bed time in insomnia.
20	<i>Emblica officinalis</i>	Euphorbiaceae	T	Fruit is blood purifier used in jaundice.
21	<i>Ficus benghalensis</i>	Moraceae	T	Leaves-a moderate sterilizer, given to women after menses.
22	<i>Ficus racemosa</i>	Moraceae	T	Ripe fruits-antiemetic, used in haemoptysis.
23	<i>Ficus religiosa</i>	Moraceae	T	Bark-astringent, antiseptic, alterative, laxative, haemostatic.
24	<i>Holoptelea integrifolia</i>	Ulmaceae	T	Seeds are used inflammation, worm infestations, vomiting, skin
25	<i>Lantana camara</i>	Verbenaceae	S	Leaves are used in piles, sprain and respiratory diseases.
26	<i>Mangifera indica</i>	Anacardiaceae	T	Fruit contains vitamins A, B, C. Leaves are used in blood dysentery & soreness of voice.

27	<i>Mucuna pruriens</i>	Fabaceae	S	Seeds: used as nervine tonic.
28	<i>Nyctanthes arbor-tristis</i>	Nyctanthaceae	T	Leaf bitter tonic, antispasmodic, hypotensive, respiratory stimulant. Used for fevers, rheumatism & obstinate sciatica.
29	<i>Ocimum bacillacum</i>	Lamiaceae	S	Plant is useful in fever, cough, worms, skin diseases and piles.
30	<i>Ocimum sanctum</i>	Lamiaceae	S	The leaf juice used in bronchitis, skin diseases, earache, colds.
31	<i>Opuntia elatior</i>	Cactaceae	S	The leaf juice used in diabetes.
32	<i>Pongamia pinnata</i>	Fabaceae	T	Leaf juice as a nasal drops for migraine.
33	<i>Ricinus communis</i>	Euphorbiaceae	S	Caster- oil is used in making contraceptive jellies and creams.
34	<i>Syzygium cumini</i>	Myrtaceae	T	The bark is astringent & used in sore throats.
35	<i>Terminalia arjuna</i>	Combretaceae	T	Bark is used as a heart tonic
36	<i>Terminalia bellirica</i>	Combretaceae	T	Fruit is used in the preparation of trifala churna.
37	<i>Tribulus terrestris</i>	Zygophyllaceae		The fruits are used in urinary complaints & sexual weakness.
38	<i>Withania somnifera</i>	Solanaceae	S	The root powder is applied locally on ulcers and inflammations.
39	<i>Wrightia tinctoria</i>	Apocynaceae	T	Leaves are used for hair dandruff treatment.
40	<i>Ziziphus mauritiana</i>	Rhamnaceae	S	Fruits used in mental retardation, cold, mouth ulcer.

T-Tree, H-Herb, S-Shrub

## Results and conclusion

The uses of 40 medicinal plants of Sariska Tiger Reserve in Alwar district has been reported based on field enquiries made with local people during the year July 2022- August 2023. Many plants of the study area find mention in the ancient medicine literature and used by different systems (Harshberger, 1996; Gupta *et al.*, 2010). This Review study revealed that medicinal plants cure different health problems. The outcome of this study may find application in initiating detailed studies on prospecting of promising species for the welfare of mankind and biological management of diseases.

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