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Documentation of Some Rare and Endangered Medicinal Plants from Kalsubai - Harishchandragad Wildlife Sanctuary of Ahmednagar District, MS (India).

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Abstract :

Herbal medicine, sometimes referred to as Hebraism or Botanical Medicine, is the use of herbs for their therapeutic or medicinal value. An herb is a plant or plant part valued for its medicinal, aromatic or savoury qualities. Plants produce and contain a variety of chemical substances that are upon the body. The present study deals with the documentation and investigation of wild edible fruits from Northern Western region of Ahmednagar district. The documentation was carried out in different villages of research area in Ahmednagar 2020-22. The villages and the market places of were visited during documentation and data was collected. The present investigation different villages were visited and interactions with villagers was done. The kind of interaction was informal discussion and questionnaires'.

Key words : Hebraism, Herb, Aromatic, Savoury.

Introduction :

Medicinal plants continue to provide health security to millions of rural people all over the world. According to WHO's estimates, over 80% of people in developing countries depend on traditional medicines for their primary health needs. Millions of rural households in India use medicinal plants in a self-help mode (Anonymous, 2019). Thus, for some 4-5 hundred million people, traditional medicine is the only alternative source of healthcare in the absence of the ailing Government run healthcare systems. The traditional system of medicine has a heritage of community acceptance, and the experience and knowledge of local herbalists, Herbal medicine can be broadly classified into various basic systems: Traditional Chinese Herbalism, which is part of traditional oriental medicine, Ayurvedic Herbalism, which is derived from Ayurveda, and Western Herbalism, which originally came from Greece and Rome to Europe and then spread to North and South America. Plants form the main ingredients of medicines in traditional systems of healing and have been the source of inspiration for several major pharmaceutical drugs. Demand for medicinal plants is increasing in both developing and developed countries due to growing recognition of natural products, being non-narcotic, having no side-effects, easily available at affordable prices and sometimes the only source of health care available to the poor. Medicinal plant sector has traditionally occupied an important position in the socio-cultural, spiritual and medicinal arena of rural and tribal lives of India. While the demand for medicinal plants id growing, some of them are increasingly being threatened in their natural habitat. For meeting the future needs civilization of medicinal plants has to be encouraged.

It is evident that the Indian have a tremendous passion for medicinal plants and use them for a wide range of health related applications from a common cold to memory improvement and treatment of poisonous snake bites to a cure for muscular dystrophy and the enhancement of body's general immunity. India is one of the richest plant medicinal cultures in the world.

Study Area :

Kalsubai - Harishchandragad Wildlife Sanctuary is located between 18° 2° & 190 90 North Latitude and 73°9° and 75° 50 East longitude. It is situated to the North West Part of Ahmednagar district of Maharashtra. It comes under Sahyadri ranges forms a part of Western ghat, which form continuous natural boundaries between Ahmednagar, Thane & Nasik districts.

The region extending over Kalsubai hill range and Harishchandragad range covering an area of 36,181 hectares or 361.81 Sq.Km has been declared wildlife sanctuary by the State Government (1986) & is in this region where thick forests are sheltered, the hill forts like Harishchandragad (1425 M), Kulang hill fort (1470 M), Ajoba dongar near Ratangad (1372 M) & Kalsubai hill (1654 M) the highest peak of Sahyadri ranges in Maharashtra are situated.

The Wilson Dam 88M high, one of the highest dams in the country with its famous lake 'Lake Arther" situated in an amphitheatre formed by Kalsubai hill range and Baleshwar hill range facilitates wildlife owing to its huge water reservoir, though Kalsubai hill range appears barren. The fierce picturesque beauty of the nature can be observed here. The precipitous mountains cover the craggy peaks like Ajoba Parvat, Alanggad, Konkankada and famous hill forts like Ratangad and Harishchandragad averaging a height of 1300-1400 M above mean sea level while their deep ravines accentuate their beauty with the lush green moist deciduous forest interspersed with the evergreen plant species forming semi-evergreen patches. During monsoon the herbaceous flora fills up almost all possible gaps carpeting the ground with the evergreen cover. The annual average rainfall in this region is 3, 0004,000 mm

The wildlife or the fauna in this area is poor. However panthers or Biblya: Panthera pardus are occasionally found in the hilly regions with dense forests other carnivorous animals are the Hyena or Taras: Hyena Wild Cat or Ranmanjar: Felis chaus and the Jackal or Kolha: Canis aureus.

The tribal's of this region mostly depend on wild plants as a remedy for any ailment or disease, as they are the inhabitants of remote areas. There are about 12 tribes who live in the interior of Sahydris range where there are good forests. The know the potential medicinal plants found in the jungle and invariably exploited for medicinal purpose. If we allow these plants in this manner, then it seems to be Unprofitable and dangerous.

MATERIALS AND THE METHODS :

Many medicinal plants are seasonal, some not easily not accessible, available only in deep forests or mountain peaks. The data presented here is based on personal observations and interviews of informants. The indigenous knowledge of people regarding plant was gathered by intensive exploration. The informant's interview was of following categories. The local healer, old experienced and knowledgeable of man and woman. Each medicinal and edible use of the plants has been confirmed and verified during different visits in the area. Local authorities were used to identify and locate the locally recognized required respondents in each study area.

Several trips have been taken in order to study the area, plants and their uses. The area was studied and examined carefully. The information's about the medicinal value were collected from knowledgeable persons, Professors, etc. The photographs were taken while conducting the study. The plant was identified by using the Flora of Maharashtra Dicotyledon, Flora of Ahmednagar, Flora of Marathwada (vol I and vol II).

Result and Discussion :

During the study it was observed that the area rich in plant diversity. However, it was also observed that due to over grazing by animals, forest fire and human activities, several plants which may contain rich medicinal value have been wiped out from the area.

The observation made during the study is given in the following enumeration. The plants species are arranged in alphabetical order. 15 medicinal plants has been listed. All these plants has been utilized by the local people in and around in one way or the other purpose for medicinal aspect and even in other fields viz. Fire wood, religious purpose, etc.

Serial No	Botanical Name	Family	Uses
1	Abrus precatorius	Fabaceae	Precatorius are laxative, expectorant and aphrodisiac medicines and are used in urticaria, eczema, stomatitis, conjunctivitis, alopecia areata, migraine, lymphomas/leukemia and dysmenorrhoea. Seeds are said to be purgative, emetic, tonic, antiphlogistic, aphrodisiac and anti-ophthalmic.
2	*Abutilon persicum*	Malvaceae	It is useful in gout, tuberculosis, ulcers, bleed- ing disorders, and worms. It can be used as Digestive, laxative, expec- torant, diuretic, astringent, analgesic, anti-inflammatory, anthelmintic, demulcent and aphrodisiac. Decoction used in toothache and tender gums.
3	*Arisaema tortuosum*	Araceae	The roots have been used as a vermifuge in cattle. The juice of the tubers is applied to the wounds of cattle in order to kill any parasites. The dried powdered tubers are applied to snake bites. The seeds have been mixed with salt and used to treat colic in sheep.
4	*Asperagus racemosus*	Liliaceae	People use asparagus Racemosus for upset stomach (dyspepsia), constipation, stomach spasms, and stomach ulcers. It is also used for fluid retention, pain, anxiety, cancer, diarrhea, bronchitis, tuberculosis, dementia, and diabetes. Some people use it to ease alcohol withdrawal.
5	*Bignonia quadrilocularis*	Bignoniaceae	The stem-bark and leaves are used in a decoction to treat the pain of sore knees
6	*Bixa orellana*	Bixaceae	Thus, despite the different culture and traditions among the countries in South and Central America, several of the popular uses of Bixa orellana are the same, for example, antipyretic, aphrodisiac, antidiarrheal, antidiabetic, and insect repellent
7	*Canscora diffusa*	Gentianaceae	The whole plant is used as a tonic and antigastralgic; it is used as a substitute for tea. Roemer & Schultes from tropical Africa, Madagascar and mainland tropical Asia (not in Malesia) is used in India as a laxative, alterative and nerve tonic
8	*Caralluma adscendens*	Asclepiadaceae	Used to decrease appetite for weight loss. It is also used to quench thirst and to increase endurance. In foods in India, caralluma is cooked as a vegetable and is used in preserves such as chutneys and pickles. It is also eaten raw
9	*Ceropegia oculata*	Asclepiadaceae	The Ceropegia species are being good sources of diverse physiological bioactive compounds such as glycosides, alkaloids, flavonoids, tannins, saponins, triterpenes, phenol, and steroids with wide range of therapeutically active properties viz., anti-inflammatory, anti-oxidant, antimicrobial, anti-cancer and anti-urolithiatic.
10	*Cleome gynandra*	Cleomaceae	The leaves and seeds are used medicinally as rubefacient and vesicant, and to treat rheumatism, externally as well as internally. An infusion of the roots is used as a medicine for chest pain, the leaves to treat diarrhoea.
11	*Crotalaria filipes*	Fabaceae	They cover a wide range of uses such as: food and refreshing drink for humans, cover crop or green manure, improvement of fallows, paper elaboration, medicinal plant and honey production
12	*Curcuma pseuadomontana*	Zingiberaceae	The roots are boiled and eaten and said to be beneficial against leprosy, dysentery, cardiac diseases and general debility. The Savara tribes in the Eastern Ghats of Andhra Pradesh use tuber extracts to treat jaundice.

13	*Dichrostachiys cinerea*	Mimosaceae	In traditional medicine, the bark is used for headache, toothache, dysentery, elephantiasis, root infusions are used for leprosy, syphilis, coughs, as an anthelmintic, purgative and strong diuretic
14	*Drimia indica.*	Liliaceae	Drimia indica (Roxb.) Jessop (Asparagaceae) is a reputed Ayurvedic medicine for a number of therapeutic benefits, including for cardiac diseases, indigestion, asthma, dropsy, rheumatism, leprosy, and skin ailments
15	*Gloriosa superba*	Liliaceae	They also drink the plant juice as an antimalarial. At low doses, the tuber has numerous medicinal applications. It is used traditionally for the treatment of bruises, colic, chronic ulcers, haemorrhoids and cancer, and is also employed as a tonic and purgative.

Conclusion :

In the present study area, it has observed that there are so many medicinal plants in and around the research area.

The observation made during the course of study is given in the following enumeration. The plants species are arranged in alphabetical order. Fifteen (15) medicinal plants has been listed. All these plants has been utilized by the local people in and around in one way or the other purpose for medicinal aspect and even in other fields viz. Fire wood, religious purpose, etc.The people of the area have utilized these plants for many purposes such as food, shades, and religious and mainly for medicinal uses.

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