FOLK MEDICINES OF SATTORDEM VILLAGE OF GOA - A NOTE ON ETHNOBOTANY

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Goa, a southern Indian state, is situated on the western, windward side of the Western Ghats range. It gets its rainfall from the influence of SouthWest monsoon from the first week of June until the first week of September. Average rainfall is between 2,500-3,000mm in the coastal region and 2,800-3,200mm in the central region of the state. Sattordem Village in the central region has been a reservoir of enormous natural resources including floral wealth. The human population here follow distinct traditions, one of which is the tradition to cure human ailments. The flora of this region is comparatively rich and the locals receive their requirements up to a large extent from the surrounding environment. The major occupation of the people is agriculture.

Frequent field trips on ethnobotanical studies were conducted in Sattordem Village during June 1996 to June 1997. Information on medicinal properties and qualities of various plant species were gathered through personal interviews and questionnaire surveys. Information was also gathered from local vaidyas and practitioners.

Enumeration:

1. *Michalia champaca* (Magnoliaceae). Trunk bark is given to women with irregular menstrual cycle. Decoction of flowers given in cases of difficulty in urination. Poultice of flowers given in skin infections.

2. *Annona squamosa* (Annonaceae). Leaf paste applied to kill worms and lice. Paste of seeds is used in killing lice.

3. *Tinospora cordifolia* (Menispermaceae). Used to cure skin infection and fungal infection. Tuberous root is ground and given in case of snake bite.

4. *Cyclea burmanni* (Menispermaceae). Root paste or dry root powder with water is given to children in case of dysentery. Root ground in butter milk is given in diabetes and is also used as antipyretic.

5. *Argemone mexicana* (Papaveraceae). Seed oil is applied to the body in case of leprosy. Seeds ground with lime juce are given in cases of malaria. Sap of the plant is given in cases of jaundice.

6. *Brassica juncea* (Brassicaceae). Stomachic, digestive, stimulant, diaphoretic.

7. *Hydnocarpus wightiana* (Buxaceae). Oil used in case of all skin infections either of bacterial (leprosy) or fungal.

8. *Garcinia indica* (Guttiferae). Fruits are astringent, refrigerant, stomachic. Seed oil is antiseptic.

9. *Ochrocarpus longifolius* (Guttiferae). Antipyretic.

10. *Gossipium arboreum* (Malvaceae). Leaf paste is applied in cases of scorpion sting. Flower petals ground with little milk applied in conjuctivitis.

11. *Sida rhombifolia* (Malvaceae). Poultice of leaves in eye infections. Root juice for dressing wounds.

12. *Hibiscus rosasinensis* (Malvaceae). Poultice of fresh flower for improving hair growth. Root in acute respiratory infections. Decoction of flowers in case of fevers.

13. *Aegle marmelos* (Rutaceae). Astringent, stomachic, laxative, expectorant antiseptic.

14. *Azadiracta indica* (Meliaceae). Bark is refrigerant, antipyretic, astringent, anthelmintic, tonic and vermifuge.

15. *Zizyphus jujuba* (Rhamnaceae). Bark decoction in cases of malaria, fruit decoction in dry coughs.

16. *Mangifera indica* (Anacardiaceae). Seed pulp is vermifuge. Seed pulp given in excess menstrual discharge.

18. *Terminalia arjuna* (Combretaceae). Bark is cardiac haematitic antiseptic, antiphylogesic.

19. *Holarrhena antidysenterica* (Apocyanaceae). Amoebic dysentery, root bark is given as stomachic, astringent, antipenedine, antipyretic and tonic.

20. *Hemidesmus indicus* (Asclepiadiaceae). Diuretic, diphoratic, apetiser, antiparasitic.

21. *Strychnos nux-vomica* (Loganiaceae). Tonic in low doses. Stomache, digestive, antipyretic, stimulant, tonic in high doses analgesic.

22. *Adathoda vasica* (Acanthaceae). Root expectorant

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antipyretic, diuretic, vermifuge. Leaves are expectorant, diuretic, antispasmodic.

23. *Andrographis paniculata* (Acanthaceae). Stomachic and mild antipyretic.

24. *Tectona grandis* (Verbenaceae). Flowers and seeds diuretic leaves stomachic, astringent and vermifuge.

25. *Vitex negundo* (Verbenacae). Stomachic, antiflatulent, analgesic, antiseptic, expectorant, diuretic.

Distinct remedial properties used by the local people are included in the list above. The pattern of utilization varies considerably -- often taken in crude forms, fresh or in dried forms. Dosage varies from place to place and state of health of a person. The main drawback in the folk medicine of the area is non-standardization. However, there is strong faith in this system of medicine as it is one of the most commonly practiced system locally.

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SPIROCERCA INFECTION IN TIGER

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Spirocerca lupi commonly known as oesophageal worm is a nematode parasite of dog and other carnivores. The parasite usually gets localised in the oesophageal wall where it produces granulomas and occasionally neoplasms and in aorta , it causes aneurysm (Solusby, 1968). The present paper reports a case of *Spirocerca* infection in a tiger and its successful treatment.

A male tiger 'Chandu', of Maharajbag Zoo had occasional coughing and vomiting for one month. The tiger showed anorexia and dullness, frequency of vomiting suddenly increased (4 times) on 13.iii.2000. On examination, it revealed some meat, grass blades and mucous. Hence the tiger was suspected to be suffering from gastritis and was treated with Tab Rantac 300 mg. three tabs, Mucain gel 50ml. on beef and Cisapride tab-5 once on beef. The tiger vomited again the next morning. The fecal sample and the vomitus were sent to the laboratory for the necessary examination. The treatment continued for another 3 days without any improvement. Although the animal continued to feed on beef the vomiting did not stop. The report of the fecal sample revealed the ova of *Spirocerca lupi* and larvae of the parasite were seen in the vomitus. It was concluded that the animal was suffering from *Spirocerca lupi* infection and hence pyrental pamoate was given with beef at the rate of 30mg/kg body weight along with the earlier treatment. The same treatment was continued on the next day also. Tab. Rantac and Cisapride were continued for 2 more days. The tiger regained full appetite and vomiting stopped after 55 days of treatment. The fecal sample examination on 7th, 14th and 21st day post treatment did not reveal the ova of the parasite. Similarly, coughing and vomiting was also not noticed during that period.

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The occurrence of *Spirocerca lupi* infection is reported in dogs by several authors (Murali Manohar, 1999) but reports in wild animals are few. Sreenivasgowda *et al.* (1983) recorded infection in a five-month old female lion cub at post mortem examination. The cub was reported to have died after showing symptoms of wobbling gait, weak muscles of hind quarters, vomit and diarrhoea. Post mortem examination showed massive hemorrhage in the thoracic cavity and presence of nodules in the aorta containing reddish coiled worms along with ruptured aneurysm. Agarwal *et al.* (1986) also reported a case of aortic spirocercosis in Jackal. The infection of *Spirocera* is often undiagnosed during life as the ova of the parasites are seen occasionally in faeces only after 5-6 months of infection. Due to occasional coughing and vomiting initially the present case was diagnosed as a case of gastritis. As the tiger had responded to the treatment and faecal sample examination after 7th, 14th and 21st day post-treatment did not reveal any parasitic ova, it can be concluded that Pyrental pamoate is effective against *Spirocerca lupi* infection in tiger also.

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