

Traditional Hepatopathic Treatments in Newasa Tahasil of Ahmednagar District (M.S.) India

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ABSTRACT

The present communication reveals the traditional herbal therapies used in Newasa tahasil areas of the Ahmednagar district against various liver diseases and disorders from Maharashtra, India. In all total 19 plant species belonging to 19 genera from 14 angiosperm families used for treating certain hepatic diseases and disorders have been documented. Of these, uses of some plant species found unknown or less known to India.

Key Words: Folk recipe, Hepatopathic treatments, Newasa, Traditional medicines, Hepatic diseases

INTRODUCTION

In India, traditional healers are using 2500 plants for ethnobotanical purposes out of which 100 alone used on regular basis for medicinal purposes¹.In recent years, it has been realized that traditional herbal drugs are going to play a very significant role in curing certain acute and chronic diseases and disorders. Most of the modern synthetic drugs and medicines have attacked the targets blindly and thus badly affected several related metabolic processes. On other hand the herbal medicines probably have more accuracy in working, more effective, target specific action and without side effects. Further these drugs are affordable, eco-friendly and easily available in local market. During the present course of investigation,19 plant species from the different study sites of Newasa taluka used in treatment of certain liver diseases and disorders have been documented.

ABOUT THE STUDY AREA

The area under the study is an ideal religious place famous for diverse flora of ethno-medicinal significance. It is situated at distance of 55 km on North-western side of Ahmednagar district (M.S.) India. Refer figure-1 for the map of the study area. It covers an area of 1343 km² (i. e 518.70 miles²) and lies at an altitude of 430-437 meters from MSL (Mean Sea Level) and is located in between $20^{\circ}38'38"N-20^{\circ}46'31"N$ latitude and $75^{\circ}93'47"E-75^{\circ}$ 99'78"E longitude. The area under the study is occupied by forest area of 14.75 km² with 32.5% mixed-deciduous vegetation with an average rainfall of about 508 mm and temperature range of 26° C to 43.8° C². So far the study concerned, area under the study is unexplored up to today.

REVIEW OF LITERATURE

Recent interest in ethnomedicinal explorations has increased due to the work of $^{3-13}$.



Fig. 1: Map of the study area

METHODOLOGY

Frequent field visits were arranged in the area under the study during the period from pre-monsoon of 2009 to postmonsoon of 2011 to collect the data on ethno-medicinal uses of the wild ethno-flora among the local inhabitants. The plant specimens were collected with the help of traditional healers and medicine men by knowing their local names as per suggestion^{14,15}. The ethno-medicinal information was confirmed through the traditional healers and medicine men through verbal and informal interviews.

The voucher specimens were prepared, tagged and confirmed by referring the standard floras¹⁶⁻²⁰. They were preserved as per plan suggested by *Singh*, *N.P.P.* (2001) in the Department of Botany, Shri Dnyaneshwar Mahavidyalaya, Newasa for future study²¹.

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RESULTS AND DISCUSSION

In all total 19 plant species belonging to 19 genera from 14 angiosperm families used for treating certain hepatic diseases and disorders in Newasa tahasil from Ahmednagar district (M.S.) India have been documented and summarised below:

1. Aegle marmelos (L.) Corr. (Rutaceae) 'Bael'.

Use:-*Pulp from semi-ripen fruits is fried in cow ghee and little quantity of unripe mango (*Mangifera indica*) pickle and consumed twice a day up to 21-24 days to cure gall stones in liver.

2. Asparagus racemosus wild. (Liliaceae) 'Shatavari' Use: -*An extract from fresh root-tubers is boiled with goat's milk for 2-3 minutes and above preparation is consumed with 1-2 tsp honey to cure alcoholic hepatitis.

3. Boerhavia diffusa L. (Nytaginaceae) 'Ghomati'. Use:-*one to two cups of leaves decoction mixed with a pinch of sugar and above preparation is given orally twice a day up 10-12 days to cure Jaundice.

4. Jatropha curcas (Euphorbiaceae) 'Parshi erand' Use:-Two tsp of stem exudates mixed with equal amount of jaggery and the formulation given with 1-2 tsp of honey to the patient twice a day up to 9-12 days to cure viral hepatitis..

5. *Ficus microcarpa* Linn. f (Moraceae) 'Nandruk' Use:- Hot water decoction of young roots of the plant is administered once a day up to 12-15 days to the patient against certain kind of hepatic disorders.

6. Euphorbia nerifolia L (Euphorbiaceae) 'Sabar' Use:-Two tsp of exudates from the stem are mixed with 1-2 cups cane (*Saccharum officinarum*) juice and the preparation is given internally twice a day up to 12-15 days to control jaundice.

7. *Phyllanthus niruri* Hook f. syn *P. .fraternus* Webster. (Euphorbiaceae) 'Jondhali'

Use:-Aatpav (aprox.100gm) of entire plant parts are boiled in 2-3 glasses of goat's milk for 1-2 minutes and the resultant formulation is given orally to the patient thrice a day up to 18-21 days with 1-2 tsp of honey to cure jaundice.

8. *Hemidesmus indicus* (L.) Schulte (Asclepiadaceae) 'Kavilicha vel'

Use:-Two to three inch long stem pieces immersed in haldi (*Curcuma domestica*) powder are stung in a thread and tied around the neck as garland up to for 12-15 days to cure jaundice in cows and buffaloes.

9. Luffa acutengula (L.) Roxb, (Cucurebitace) 'Dodka'

Use:-2-3 tsp fruit powder is boiled in 1-2 glasses of goat's milk and the formulation is given internally twice a day up to 12-15 days to cure jaundice.

10. Acalypha indica L. (Euphorbiaceae) 'Jamalgota' Use:-Two tsp roots extract of *Acalypa indica* and *Momordica charantia* plants (each) are given up to 12-15 days once daily in the early morning to treat jaundice.

11. Trichosanthes bicuspidata Lour. (Cucurbitaceae) 'Padwal'

Use:- Certain quantity of juice from young and healthy fruits boiled in a glassful of curd for 1-2 minutes in iron pan is administered twice a day up to 8-10 days against hepatitis.

12. Ocimum sanctum L. (Lamiaceae) 'Krishna Tulshi'. Use:- two to three tsp of Juice from fresh and healthy leaves is administered to the patient twice daily up to 10-12 days against chronic liver problems.

13. Punica granatum L. (Puniceceae) 'Dalimb'. Use:-Half cup of fruit juice for twice a day given for two weeks to the patients suffering from jaundice.

14. Ricinus communis L. (Euphorbiaseae) 'Erandi'. Use:-An extract from young seeds boiled in 2-3 cups of cow's milk is given once daily in the early morning up to 15-18 days to improve activity of liver..

15. Saccharum officinarum L. (Poaceae) 'Oos'. Use:-*Consumption of a glassful of stem juice by the patient twice a day up to 18-21 days cures jaundice

16. Tamarindus indica L. (Casealpiniaceae) 'Chinch'. Use:-Rind from ripen pods hurnt, resultant ash is mixed in a cup of cow's milk and above preparation is taken orally for 2-3 times a day to cure jaundice.

17. Terminalia chebula Retz. (Combretaceae) 'Hirda' Use:-*Consumption of pericarp from two-three semi-ripen fruits followed by intake of a cupful luke warm cow's urine once a day in the early morning for three to four weeks maintains liver health and its strength.

18. Gardenia resinifera Roth. (Rubiaceae) 'Dikamali' Use:-*Two to three tsp of stem exudates mixed inequal quantity of honey is mixed in a cupful of coconut milk and the formulation is administered orally a day up to 28-21 days in hepatopathy.

19. Cryptolepis buchanani Roem & Schult. (Periplocaceae) 'Krishna-sariva'

Use:-*One to two inches long fresh stem pieces stitched in a thin leathery thread are tied around the neck for patient up to 18-21 days to cure jaundice

Most of the preparation/formulations are orally administered either in the form of extract, juice, exudates or decoction.

Table-2 represents the plant part used against name and number of plant species studied. It has been found that fruits in six plants (31.58 %) followed with roots, stem and exudates in three plants each (15.79 %), leaves in two plants (10.53%) and seeds and whole (entire) plant parts in one plant each (5.26%) found to have hepatic diseases and disorders curing properties (Fig.2).

 Table-2: Plant part used against name and number of plant species studied

| Sr. No. | Part used | Name of plant species | No. of species |
|------------|----------------|---|----------------|
| 1. | Leaf | Ocimum sanctum, Boerhavia diffusa, | 02 |
| 2. | Stem | Cryptolepis buchanani, Saccharum officinarum, Hemidesmus indicus, | 03 |
| 3. | Exudates | Gardenia resinifera, Euphorbia nerifolia, Jatropha curcas, | 03 |
| 4. | Root | Acalypha indica, Ficus hispida, Asparagus racemosus. | 03 |
| 5. | Fruit | Terminalia chebula, Tamarindus indica, Punica granatum, Trichosanthes bicuspidata ,Luffa acutengula, Aegle marmelos. | 06 |
| 6. | Seed | Ricinus communis. | 01 |
| 7. | Whole plant | Phyllanthus niruri Hook f. syn P.fraternus. | 01 |



Fig.2: Percentage of plant parts used

CONCLUSION

The study area is bestowed by nature with a great ethnofloristic diversity. It denotes the wisdom of the local traditional healers and medicine men along with native knowledgeable informants in regards to traditional ethnomedicinal knowledge. The study enlightens immense scope and wide potential for researches in the area. To document, conserve and evaluate the information, collective efforts are needed from the ethno-botanists and ethno-pharmacologists. As an ethno-botanist, it's our duty to protect and spread the indigenous traditional knowledge through various media before it disappeared. Due to biotic and abiotic interference and deforestation, vast amount of ethno-flora is under the threat of extinction. To conserve it, urgent need of collaborative work regarding urgent protection and preservation by villagers, semi-government and Government authorities is essential.

Rural, tribal and non-tribal populace participation can be initiated by giving incentives to local people and creating general awareness among them about the usefulness of the native ethno-flora. The central and the state government authorities should encourage the ethno- botanists in exploration of the hidden ethnobotanical wealth which in turn will help us in elevating the export of herbal medicine and growing the trade and economy of the country by increasing herbal trade with the major countries around the world. This will also improve the health and quality of life of this entire nation.

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