



SOME LESS KNOWN HERBAL REMEDIES BASED ON REPORTS FROM MAHADEO KOLIS FROM AKOLE TAHASIL OF AHMEDNAGAR DISTRICT (M.S.) INDIA

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ABSTRACT:

The present investigation reveals ethnopharmacological uses of 21 native plant species belonging to 15 families as folklore against certain hepatic diseases and disorders from Akole tahasil of the Ahmadnagar district in Maharashtra state, India. Application of 11 plant species is unknown or less known to India. Botanical names, local name, family (in parenthesis) plant part used for formulation preparation and ethnopharmacological use are given as per information from of the native tribals of the study area.

Keywords: Herbal Remedies, folklore, Mahadeo Kolis, Akole Tahasil

INTRODUCTION:

The field of ethnobotany has playing a vital role in sharing the direct contact between plants and human being. In the present study information on native folk medicine practiced in treatment of certain hepatic diseases and disorders is described. It is the need of time to catalogue the plants used by the indigenous tribal populace throughout the world to collaborate with the chemists to analyze the biochemical compounds inside the medicinal plants, before disappearance of such unwritten valuable ethnopharmacological data.

REVIEW OF LITERATURE:

A recent interest in ethnobotanical explorations has been increased on national and international levels with the work of [3-10] contributed to the ethnobotany. Almeida and Almedia 1981; Ansari 1978 Ambashta (1986); Anonymous (1976); Athawle (1997); Das and Saika (1973); Karnik 1966; Gadgil and Vartak 1974; Jain (1991);

Singh *et.al.*, (2001); Bhosle *et.al.*, (2009); Arshad and Khan (2007) etc. made valuable contribution in ethnobotany in India and Maharashtra.

STUDY AREA:

Akole tahasil is located on the northern part of the Ahmadnagar district in Maharashtra state. It lies between 19°32'32.06"N latitude and 74°01'9'88 E longitude. The Sahyadri hills are extended along the northern parts of the tahasil. The forests in the district are dry deciduous type.

Sandhan valley is located near the Ratangad fort in Samrad village of the tahasil. The valley is the perfect spot for trekking and other adventure activities. It stands at the height of 4255 feet above MSL (Mean Sea Level). **Kalsubai** hill (also called as the Everest of Maharashtra) is the highest peak of Maharashtra state, is located in tahasil. It stands at the height of 5400 feet above MSL (Mean Sea Level). Goddess Kalsubai temple is present at the peak of Kalsubai hill. Tourists &

Mountaineers throughout the Maharashtra state came here for trekking and mountaineering.

METHODOLOGY:

Extensive field visit were arranged in tribal hamlets of Akole tahasil of Ahmednagar district (M.S.) India, to collect folklore on native ethno-flora use through verbal interviews in an informal ways. Each claim was cross verified 4-5 times repeatedly through interactions with the traditional medicine men. Plant twigs in flowering/fruited stage were collected and used for voucher specimens' preparation. These voucher specimens were submitted in the Herbarium of P.V.P. College, Pravaranagar (Loni) of Ahmadnagar district (M.S.) India. Plant names have been identified by using various district, regional floras by Singh *et.al.*, (2001), Singh and Kartikeyan (2002). The plants species have been enumerated alphabetically with reference to their botanical name (in bold and italic form), followed by family (in parenthesis), vernacular name, plant part used for formulation preparation and Ethnopharmacological uses.

RESULT/ENUMERATION

1. ***Aegle marmelos*** (L.) corr. (Rutaceae) 'Bel'.
Plant part used for formulation preparation: fruit
Ethnopharmacological use: * fresh pulp from unripe fruit is mixed with fresh lemon (*Citrus aruntifolia*) juice and above formulation is given orally once a day in the early morning up to 8-10 days to cure bile duct disorders.
2. ***Anogeissus latifolia*** (Roxb. ex. DC) Wall, ex. G. & Perr. (Combretaceae) 'Dhaoda'.
Plant part used for formulation preparation: stem bark

Ethnopharmacological use: *A cupful of infusion made from fresh stem bark in a litre of cow's milk is given to the patient once a day up to 15-18 days to cure jaundice.

3. ***Apium graveolens*** L. (Apiaceae) 'Ajwain/Owa'
Plant part used for formulation preparation: leaf
Ethnopharmacological use: *A cupful leaf juice is mixed in a pinch of sugar powder and same preparation is consumed twice a day up to 15 days to cure hepatic disorders.
4. ***Asparagus racemosus*** wild. (Liliaceae) 'Shatavari'
Plant part used for formulation preparation: root-tuber
Ethnopharmacological use: *Dried root tuber powder is boiled in a half litre cow's milk. One teaspoon of above formulation is given with honey once a day up to 8-9 days to cure hepatic disorders.
5. ***Cardiospermum helicacabum*** L. (Sapindaceae) 'Kapalphodi'.
Plant part used for formulation preparation: leaf
Ethnopharmacological use: An extract from fresh and healthy 4-5 leaves is boiled in a half litre goat's milk. A cupful of same formulation is administered orally twice a day up to 8-10 days to cure viral hepatitis.
6. ***Celastrus paniculatus*** Willd. (Celastraceae) 'Malkangoni'
Plant part used for formulation preparation: fruit
Ethnopharmacological use: *A cupful juice of fresh and young fruits is boiled

- in half litre goat's milk to make 1/6 decoction. Same formulation is drunk once a day in the early morning up to 10-12 days to cure jaundice
7. ***Ceropegia hirsuta*** Wt. & Arn. (Asclepiadaceae). 'Khutti'
Plant part used for formulation preparation: seed
Ethnopharmacological use: *Three gm of powder from shade dried seeds is crushed in some jaggery and same mixture is consumed once a day in the early morning up to 8-12 days to cure viral hepatitis.
 8. ***Cissampelos pareira*** L. var. *hirsuta* (Menispermaceae) 'Pahadvel'.
Plant part used for formulation preparation: root
Ethnopharmacological use: A teaspoon root powder root is boiled in a half litre sheep's milk to obtain 1/8 decoction. Same formulation is mixed with a honey and given to the patients twice a day up to 10-12 days to cure cirrhosis.
 9. ***Citrus medica*** Linn. (Rutaceae) 'Idlimbu'
Plant part used for formulation preparation: fruit
Ethnopharmacological use: Juice from ripen fruit is mixed in one tablespoon honey and one tola (aprox.10gm) *Piper nigrum* seed powder and same preparation is advised once a day in the morning up to 9-12 days to induce bile secretion.
 10. ***Dioscorea bulbifera*** L. (Dioscoreaceae). 'Kadukand'.
Plant part used for formulation preparation: leaf
Ethnopharmacological use: * Aatpav (aprox.100 gm) peeled, dried and powdered tubers are boiled in a half litre sheep's milk to obtain 1/4 decoction. Two tablespoon of same formulation is administered twice a day up to 15 days cure cirrhosis.
 11. ***Ferronia limonia*** L (Rutaceae) 'Kawath'
Plant part used for formulation preparation: fruit
Ethnopharmacological use: *A cupful pulp from ripen fruit is mixed with two tolas (aprox.20gms) jaggery and same formulation is taken once a day in the early morning with empty stomach up to 10-12 days to cure fatty liver.
 12. ***Luffa acutangula*** (L.) Roxb, (Cucurbitaceae) 'Dodka'
Plant part used for formulation preparation: fruit
Ethnopharmacological use: A tablespoon fruit juice is mixed in half litre sheep's milk and above preparation is given twice a day up to 10-12 days to cure the jaundice.
 13. ***Mentha spicata*** L. (Lamiaceae) 'Pudina'
Plant part used for formulation preparation: leaf
Ethnopharmacological use: Leaf juice about half (Cup, is given at morning and evening for. hepatic disorder.
 14. ***Mimosa pudica*** L. (Mimosaceae) 'Lajalu'
Plant part used for formulation preparation: root
Ethnopharmacological use: *A cupful root decoction made in a half litre of sheep urine is mixed in one tola (aprox.10gms) jaggery, and same formulation is given once a day in the early morning with empty stomach up to 10-12 days to cure chronic liver problem.

15. ***Occimum sanctum*** L. (Lamiaceae) 'Kali Tulshi'
 Plant part used for formulation preparation: leaf
 Ethnopharmacological use: Juice of fresh leaves about one spoonful is given twice daily for a 10 days in chronic liver problem.
16. ***Piper longum*** L.(Lythraceae) 'long pepper'
 Plant part used for formulation preparation: leaf
 Ethnopharmacological use: A tablespoon juice from fresh and young leaves is mixed in a cupful sheep milk and same preparation is administered twice a day up to 9-12 days to induce bile secretion.
17. ***Tamarindus indica*** L. (Casealpinaceae) 'Chinch'
 Plant part used for formulation preparation: fruit
 Ethnopharmacological use: The young and fresh fruit pulp is burnt to obtain ash. 1-2 gm of same ash is mixed in a cupful cow's urine and same formulation is taken orally by the patient twice a day up to 10-12 days to cure jaundice.
18. ***Terminalia chebula*** Retz. (Combretaceae) 'Hirda'
 Plant part used for formulation preparation: fruit
 Ethnopharmacological use: *A cupful decoction from ripen fruits in cow's urine is given orally once a day up to 15-18 days to cure jaundice. .
19. ***Tinospora cordifolia*** (Wild.) Miers ex Hook. f.& Thom. (Menispermaceae) 'Gulwel'
 Plant part used for formulation preparation: stem bark
 Ethnopharmacological use: A cupful decoction made from 50 gms of fresh stem bark in 500 ml goat's milk is given orally twice a day up to 12-15 days to cure jaundice.
20. ***Trichosanthes tricuspidata*** Lour. (Cucurbitaceae) 'Kaundal'.
 Plant part used for formulation preparation: seed
 Ethnopharmacological use: An extract made after boiling 50gm dried seed powder in a litre of cow's urine is given twice a day up to 10 – 12 days to cure fatty liver.
21. ***Withania somnifera*** (L.) Dunal. (Solaceae) 'Askand'
 Plant part used for formulation preparation: tubers on root
 Ethnopharmacological use: *One spoonful of tuber powder is mixed in a cupful of sheep's milk and above preparation is drunk twice a day up to 9-10 days to cure hepatitis.

Discussion:

The present paper illustrated a brief account of 21 genera belonging to 15 families used for the treatment of specific liver ailment cure in Akole tahasil from Ahmednagar district (M.S.) India. Most of the preparation/formulations are orally administered either in the form of extract, juice, exudates or in decoction form.

There is enough scope of the amalgamation of these drugs after the tribal drug are subjected to the phytochemical and biological screening together with clinical trials.

From above study (Table:2), it is found that fruits in seven plants (33.33 %) followed leaves (28.57%) in six plants, with roots, (19.5%) in four plants, stem and seed in two plants each

(9.52 %), found to have hepatic diseases and disorders curing properties.

CONCLUSION:

The study area is bestowed by nature with a great ethno-floristic diversity. It denotes the wisdom of the local traditional healers and medicine men along with native knowledgeable informants in regards to traditional ethno-medicinal 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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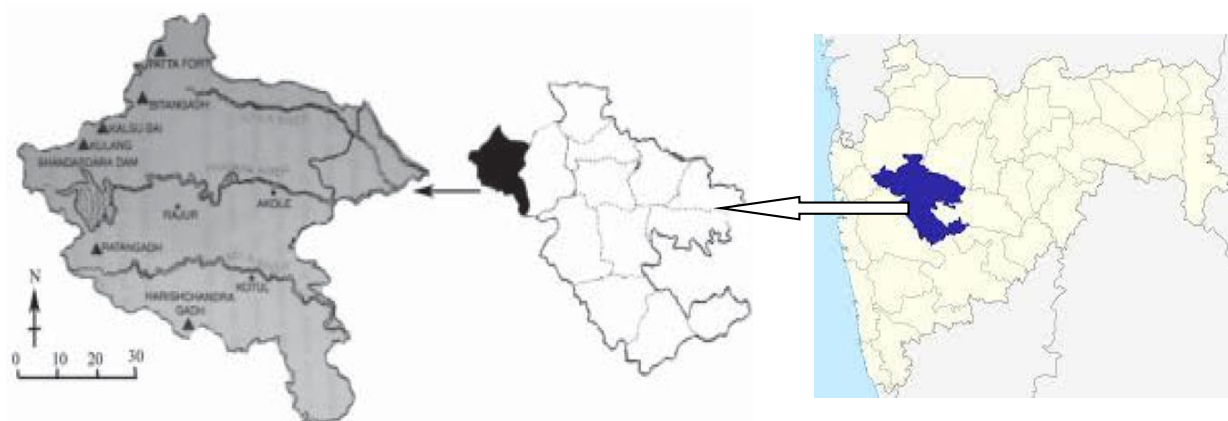
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Study area: Akole tahasil

Ahmadnagar district map

Maharashtra state map

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

S.N.	Part parts used	Name of plant species	No of species	% of plant part used
1.	Leaf	<i>Apium graveolens</i> L, <i>Dioscorea bulbifera</i> L, <i>Occimum sanctum</i> L, <i>Piper longum</i> L, <i>Cardiospermum helicacabum</i> L, <i>Mentha spicata</i> L.	06	28.57
2.	Stem	<i>Anogeissus latifolia</i> (Roxb. ex. DC) Wall, ex. G. & Perr., <i>Tinospora cordifolia</i> (Wild.) Miers ex Hook. f.& Thom.	02	9.52
3.	Root	<i>Asparagus racemosus</i> wild., <i>Cissampelos pareira</i> L. var. <i>hirsuta</i> . <i>Mimosa pudica</i> L. <i>Withania somnifera</i> (L.) Dunal.	04	19.5
4.	Fruit	<i>Aegle marmelos</i> (L.) corr. <i>Celastrus paniculatus</i> Willd, <i>Citrus medica</i> L. <i>Ferronia limonia</i> L. <i>Luffa acutangula</i> (L.) Roxb., <i>Terminalia chebula</i> Retz. <i>Tamarindus indica</i> L. etc	07	33.33
5.	Seed	<i>Trichosanthes tricuspidata</i> Lour. <i>Ceropegia hirsuta</i> Wt.& Arn.	02	9.52

