Studies on Traditional Ethno-Medico-Flora Used By Mahadeo Kolis from Ghatsiras Areas in Pathardi Taluka of Ahmednagar District (M.S.), India

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ABSTRACT
Ghatsiras is the religious hilly place famous for the wild ethnoflora along it's south side. It located along western side of Pathardi Taluka in Ahmednagar district (M.S) India and inhabited mostly by Mahadeo kolis populace that till rely even today on traditional ethnobotanical knowledge for certain needs and also for cure of specific human ailments. Present communication focuses on the ethnobotanically important medicinal plants which are in close vicinity of the bhils community in study area. In all total, 24 plant species belonging to 11 families, have been reported here.

KEYWORDS: Ethnomedicine, Medicinal plants, Maharashtra, Traditional knowledge

BACKGROUND
Extensive ethnobotanical surveys were arranged in the selected study area for collection and identification of traditionally important wild ethnoflora. The study area namely Ghatsiras is located along western side of the Pathardi Taluka of Ahmednagar District, Maharashtra. The information presented here has been gathered from Mahadeo Kolis community having traditional knowledge through verbal and informal group discussions and personal interviews in the period from June 2005 to August 2007.

INTRODUCTION
In recent years, interests have been increased in ethnobotanical explorations mainly due to the renewed interest in traditional herbal knowledge. Ancient literature on ethnobotany suggests that the primitive people of earlier centuries were using several kinds of food and medicinal plants for healthcare needs and general use. Ancient well famous epics like Charak Samhita suggests that the tribal populace including Mahadeo Kolis have been using wild ethnoflora since long ago for various purposes viz.food, medicinal, fodder, healthcare needs etc. It has been found that almost all the wild plants were in use by the traditional healers and ethnic societies of world either as a source of food or as a source of herbal drug. Therefore it is our prime duty to study all these wild plants scientifically. From last three decades considerable progress has been occurred in the field of ethnobotany due to increased interest. In recent years, on global level several ethnobotanically important plants have been documented along with their use. Same traditional knowledge becoming an effective mode for the survival of the tribals and ethnic groups throughout the world. These people are still relying on wild plant for cure and care of a variety of human ailments and the pet animals. A survey of literature indicates that [1-4] have studied the vegetation and described wild ethnoflora certain parts if India as well.

MATERIALS AND METHOD
An intensive field surveys were arranged during the period from June 2005 to August 2007 for local name identification of ethnobotanically important plants. For identification and collection of the above plants, traditional healers from Mahadeo Kolis community were consulted and motivated. They were informally and verbally interviewed for knowing of their ethnobotanical knowledge. The collected plant specimens were identified by using standard floras [5-10].
The Plant specimens were arranged alphabetically according to their Botanical name, local name, family, plant parts used and ethnobotanical uses have been enumerated in sequential manner finally. The herbarium specimens were deposited in the Herbarium of Botany Department, P.V.P.College Pravaranagar (Loni) Dist Ahmednagar and Botanical Survey of Pune for future reference.

Enumeration

**Solanum surattense, Burm.f.**
- **Local Name:** Laxmi-ringni
- **Family:** Solanaceae
- **Plant part used:** leaf
- **Ethnobotanical uses:** Fresh leaves are boiled in water with a pinch of common salt and crushed later on with 2-3 garlic cloves to obtain an extract. Same extract with honey massaged on the body part suffering from muscular pains.

**Solanum nigrum, Linn.**
- **Local Name:** Kamoni
- **Family:** Solanaceae
- **Plant part used:** fruit
- **Ethnobotanical uses:** pulp from fresh and matured fruits is mixed with mustard oil and applied on mouth ulcer.

**Datura inoxia, Mill.**
- **Local Name:** Dhotra
- **Family:** Solanaceae
- **Plant part used:** seed
- **Ethnobotanical uses:** seed powder from the plant is mixed with tobacco leaf powder in equal quantity and same mixture is used for cleaning the teeth in order to cure toothache.

**Heterophragma quadriangulare (Roxb.) K.Schum.**
- **Local Name:** Muras
- **Family:** Bignoniaceae
- **Plant part used:** leaf
- **Ethnobotanical uses:** An extract from fresh leaves mixed with Korphad leaf juice (Aloe vera) and neem (Azadirachta indica) oil in equal quantity. Same preparation is used for curing the skin infection on forehead by fungi or bacteria.

**Trichodesma indicum (Linn.)Br.**
- **Local Name:** Andh-pushpi
- **Family:** Boraginaceae
- **Plant part used:** flower
- **Ethnobotanical uses:** Flower petal's extract made in sheep milk is given with honey to the patient suffering from blood dysentery.

**Cordia dichotoma, Forst.**
- **Local Name:** Bhokar
- **Family:** Boraginaceae
- **Plant part used:** fruit
- **Ethnobotanical uses:** pulp from fresh and mature fruit is mixed with latex from Baniyan (Ficus bengalensis) tree in equal quantity and the mixture obtained is given to the lady patient suffering form bloody exudates through vagina.

**Cordia gharaf (Forsk.)Ehrenb. & Asch.**
- **Local Name:** Gondhan
- **Family:** Boraginaceae
- **Plant part used:** stem bark
- **Ethnobotanical uses:** Inhabitants from the study area consume stem bark from the plant along with Nagin (Piper betle) leaf pasted with lime for curing chronic cough.

**Withania somnifera Dunal**
- **Local Name:** Dhor-Gunj
- **Family:** Solanaceae
- **Part used:** root
- **Ethnobotanical Uses:** - tuber's extract from root with cow ghee is taken internally by the patient once daily for 12-15 days for curing stomachache.

**Terminalia catappa, Linn.**
Local Name:-Badam  
Family:- Combretaceae  
Plant part used:-seed  
Ethnobotanical uses:- Seeds are roasted in cow ghee and consumed in early morning by the youngsters for eaten by the inhabitants along with old jaggery (Gur) early in the morning for increasing muscular strength.  
Cissampelos pareira, Linn.

Local Name:-Pahad vel  
Family:- Menispermaceae  
Plant part used:-whole plant  
Ethnobotanical uses:- Whole plant juice with honey in equal quantity is mixed in sheep milk and the preparation is given to patient for curing Jaundice.  
Cocullus hirsutus, Diels. Syn. C. vilosus. DC.

Local Name:-Vasanwel  
Plant part used:- stem bark  
Ethnobotanical uses:- Stem bark powder is mixed Korphad leaf (Aloe vera) gel and applied externally in cure of skin infections on the forehead.  
Tephrosia purpurea Pers.  
Local Name:- Shurp-nakha  
Family:- Fabaceae  
Part used:- root  
Ethnobotanical Uses:- Fresh root decoction prepared in warm water is consumed twice a day for 4-5 days in order to strengthen teeth.  
Tinospora cordifolia, (Willd.) Miers ex Hook. f. & Thoms

Local Name:-Gulwel  
Family:- Menispermaceae,  
Plant part used:- Stem bark  
Ethnobotanical uses:- Fresh stem bark extract with coconut milk in 1:5 proportion is given to wrestlers for strengthening the muscles.  
Cardiospermum helicacabum, Linn.  
Local Name:-Kapalphodi  
Family:- Celastraceae,  
Plant part used:- seed  
Ethnobotanical uses:- Immature seeds are boiled with a pinch of common salt in water and used for preparation of curry.  
Schleichera oleosa (Lour.)Oken.  
Local Name:-Kusum.  
Family:- Sapindaceae  
Plant part used:- fruit  
Ethnobotanical uses:- Mature fruit pulp along with small quantity of common salt is consumed by the pregnant women for healthy growth of foetus in her uterus.  
Jatropha gossypifolia Linn.  
Local Name:- Mogli Erand  
Family:- Euphorbiaceae,  
Part used:- Seed  
Ethnobotanical Uses:- 1-2 teaspoon of crude seed oil is mixed in goat's milk is consumed by the people early in the morning once daily for 2-3 days in order to cure diarrhoea.  
Sapindus laurifolius, Vahl.  
Local Name:-Ritha  
Family:- Sapindaceae  
Plant part used:- Fruit  
Ethnobotanical uses:- an extract from matured and fresh fruits is mixed with termite affected soil. Same soil mixture is then used as an antidote for scorpion sting.  
Ruta graveolens, Linn.var.anguistifolia Hook.f
Local Name:- Sataab
Family:- Rutaceae
Plant part used:- Leaf
Ethnobotanical uses:- fresh leaf extract in honey obtained from neem tree is given to patient suffering from helminthiasis.
Cleome gynandra, Linn.
Local Name:- Pandhari Tilwan
Family:- Capparidaceae,
Part used: flower
Ethnobotanical uses:- extract from flower petals is given to the lady patient suffering from excessive haemorrhage.
Feronia limonia, (Linn.) Swingle.
Local Name:- Kawath
Family:- Rutaceae
Plant part used: - leaf
Ethnobotanical uses:- Fresh leaves are eaten as raw by the animal grazers for relieving thirst.
Citrus medica, Linn.
Local Name:- idilimbu
Family:- Rutaceae
Plant part used: - fruit
Ethnobotanical uses:- juice from mature fruit with a pinch of sugar and same quantity of common salt is given to patient suffering from blood dysentery.
Abras precatorius Linn.
Local Name: Gunj
Family: Fabaceae,
Part used: Leaf
Ethnobotanical Use:- leaf powder boiled water is given to the patient suffering from hypoglycemia.
Datura stramonium, Linn.
Local Name:- Sadha-dhotra
Family:- Solanaceae
Plant part used: - leaf
Ethnobotanical uses:- Fresh leaves are boiled in water and are tied on painful knee and shoulder in order to get relief.

RESULTS AND DISCUSSION

In all total 23 plant species from 11 families have been reported. These plants are consumed by the inhabitants (Mahadeo Kolis) for curing certain human ailments. Out of these plant species belong to Angiosperms group families. Few plants of this locality possess potential of better economic exploitation. Some of the important plant species among them are Schleicheria oleosa (Lour.) Oken (Kusum), Sapindus laurifolius, Vahl (Ritha), Ruta graveolens, Linn. var. angustifolia Hook.f (Sataab) Feronia limonia, (Linn.) Swingle, (Kawath), Citrus medica, Linn (idilimbu), Cardiospermum helicacabum, Linn. (Kapalphodi), Cleome gynandra, Linn (pandhri Tilwan), Abrus precatorius Linn (gunj), Datura stramonium, Linn. (Sadha Dhotra), Cissampelos pareira, Linn. (Pahadvel) and Withania somnifera (Dhor-gunj) etc.

<table>
<thead>
<tr>
<th>Sr. no</th>
<th>Family</th>
<th>No of plant species</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Solanaceae</td>
<td>5</td>
</tr>
<tr>
<td>2</td>
<td>Rutaceae</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>Fabaceae</td>
<td>2</td>
</tr>
<tr>
<td>4</td>
<td>Menispermaeae</td>
<td>3</td>
</tr>
<tr>
<td>5</td>
<td>Bignoniacae</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>Boruginaeae</td>
<td>3</td>
</tr>
<tr>
<td>7</td>
<td>Combretaceae</td>
<td>1</td>
</tr>
<tr>
<td>8</td>
<td>Sapindaceae</td>
<td>2</td>
</tr>
<tr>
<td>9</td>
<td>Euphorbiaceae</td>
<td>1</td>
</tr>
<tr>
<td>10</td>
<td>Celastraceae</td>
<td>1</td>
</tr>
<tr>
<td>11</td>
<td>Capparidaceae</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>23</td>
</tr>
</tbody>
</table>
In the present work 5 plants from Solanaceae; 3 plant species from Rutaceae; 2 plants from Fabaceae; 3 plants from Menispermaceae; 1 plants from Bignoniaceae; 3 plants from Boraginaceae; 1 plants from Combretaceae; 2 plants from Sapindaceae; 1 plants from Euphorbiaceae; 1 plants from Celastraceae and 1 plants from Capparidaceae family have discussed:

Graphical representation of families used: 1
At the same time present work also enumerates brief summery of plant parts used for the traditional ethnomedicinal purposes.

<table>
<thead>
<tr>
<th>Sr.no</th>
<th>Part used</th>
<th>Number of plants</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Leaf</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>2. Stem</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>3. Root</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>4. Fruit</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>5. Flower</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>6. Seed</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>7. Whole plant</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

Out of the 23 plant species recorded, in 6 plants leaf part; in 3 plants stem part; in 2 plants root part; in 4 plants seed part; in 1 plants whole plant part; in 2 plants flower part and in 5 plants leaf part is used for formulation of medicine.
Since all these plant species were used in more or less proportion throughout the world by the man, for completing his basic need, it is our prime duty protect and conserve and maintain them in a proper way for future use.

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REFERENCES

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