

Plants Used in Treatment of Jaundice by Folklore of Ahmednagar district, Maharashtra, IndiaMulay J R¹ and P P Sharma²¹New Arts, Commerce & Science College, Ahmednagar, India.²P G Department of Botany, Deogiri College, Aurangabad, India.

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ABSTRACT

Since time immemorial plants have traditionally served as man's most vital resource for treating various diseases. India is repository of herbal medicines & there are evidences that have been utilized as medicine for revitalizing body system from ancient civilization. Traditional Systems of Medicine have proved that several chronic diseases can be successfully treated by using herbs. As now today, in most of the rural parts of the country modern medical facilities are not easily accessible and hence, the folk depend on herbal medicine in treating various diseases. Due to lesser side effects and better results, interest in medicinal plants is increasing as an alternative to the modern medicine. Therefore, there is an urgent need for conservation of this valuable treasure. As jaundice is most prevalent disease in the major rural pockets of the district, 44 plant species used in the treatment of jaundice have been reported in the present communication.

Key words: Jaundice, plants used, Ahmednagar, Maharashtra.

INTRODUCTION

The rural people of the district are still dependent upon wild plants for the treatment of various diseases. These people have gathered good knowledge about the useful properties of the plants in the nearby forests. They gather medicinal plants from nearby forests and use these plant materials as raw drugs. However, as a result of modernization and human's uncontrolled activities, life style of these people is changing fastly and ultimately resulting in loss of traditional knowledge among folks. Hence, efforts should be made to document the various uses of plants before some of these are eliminated from the area, or before these inhabitants shift over to modern remedies. However, the vast store of ethno-medicinal information of these study areas has not been fully documented. (Badgujar & Patil, 2008; Vijigiri Dinesh & Sharma, 2010; Chandrashekar & Srivastava, 2005; Mohammad and Suradkar, 2011; Patil & Biradar, 2011; Prachi *et al.*, 2009; Reddy, 2007; Reddy, 2008)

Study Area: The Ahmednagar district is located between 18°02' and 19°09' north latitude and

73°09' and 75°05' east longitude and is situated partly in the upper Godavari river basin and partly in the Bhima river basin. It is largest district of Maharashtra occupying more or less the central position in the state and with an area of 17,413 sq. km. The district is divided into 14 revenue taluka's. 'Kalsubai' the highest peak in Western Ghats of Maharashtra fall under district jurisdiction.

Vegetation: The vegetation of district is quite varied and interesting. Forests are of typical moist deciduous type. The area is also rich in a number of economically important species. The district is studied with number of tribal (adivasi) pockets. (Pradhan and Singh, 1999) reported 12 endemic plants and 11 rare plants in Ahmednagar district.

People: Major tribes found in the district are Thakar, Bhil, Mahadeo koli, Paradhi, etc. besides this several other communities reside in the forests as a forest dweller and invariably depend on forest products for their livelihood (Chhaya Bhalshankar, 2012; Dabgar, 2012; Lal & Singh S, 2012; Rajesham *et al.*, 2013; Sainkhediya & Ray, 2012.).

ETHODOLOGY

The present work included survey and documentation of plants used in the treatment of jaundice. The methodology used for procuring information through interviews of forest dwellers with knowledge of plants for medicinal, purposes. Interviews consisted of open and semi-structured questions and the information collected was verified during different occasions with same informant and in different localities with other informers on different occasions. Plants identified in the laboratory using keys for botanical determination given in different floras such as,

(Singh *et al.*, 2000 &2001), (Singh and Karthikeyan, 2000), (Singh *et al.*, 2001) and (Cooke, 1958) etc. Some earlier studies on ethnobotnay are (Ambasta, 1992; Anonymous, 1948-1976; Asolkar *et al.*, 1992; Chopra *et al.*, 1956 and 1969; Devesh & Mishra 2011; Hari Shankar & Sanjay, 2012; Jain, 1991; Jain, 1996; Jain, 1999; Kapur, 2001; Kirtikar & Basu, 1933; Ladda *et al.*, 2013; Mohammad and Suradkar, 2011; Patil & Biradar, 2011; Prachi *et al.*, 2009; Reddy, 2007; Reddy, 2008; Sharma & Singh, 2001; Varsha, 2011; Vijaybaskar, 2008 and Vijigiri Dinesh *et al.*, 2013).

Plant Name, Family & Local Name	Plant Part	Use/s	Locality & Fiel Voucher No.
<i>Abrus Precatorius</i> L. (Fabaceae) 'Gunj'	Root	Roots of this plants along with seeds of <i>Smilex zeylanica</i> , <i>Asparagus racemosus</i> and <i>Brassica juncea</i> are ground then sterilized with 8 hot earthen specks and taken orally twice for 5 days	Gorakshhanathgad near temple, DCH-1694
<i>Abution indicum</i> (L.) Sweet. (Malvaceae) 'Atibala, Mudra'	Leaves	One spoonful of extract is given with a cup of cow milk early in the morning for a week. In meal rice along withcow milk is taken only.	Very common on wasteland Shendi, DCH-1665
<i>Acalypha indica</i> L. (Euphorbiaceae) 'Kokali'		Two teaspoons of paste given with a curd once for 3 days. 9 leaves 9 black peppers and camphor are mixed and made into paste. This paste is made into pills of peanut size and pills are given every morning and evening with water milk for 15 days.	Very common on wasteland Shendi by pass, DCH-1613
<i>anthospermum hispidum</i> DC. (Asteraceae) 'Germankata'		One teaspoon of fresh root juice is given once a day for 3 days.	Very common on wasteland Shendi by pass, DCH-1696
<i>Aloe vera</i> L. (Lillaceae) 'Korpad'		Fresh leaf juice is given 3 days twice a day till cure. 25mlml of leaf juice is mixed with 3 black peppers given twice a day for 3 days Butter milk is given only during those days.	Very common on wasteland Camp area near fort, DCH-1629
<i>Andrographis paniculata</i> Nees. (Apiaceae) 'Kalmegh'		Aspoonful of powder is giventwice a day till cure. 5 gm of the paste along with the paste of 7 black peppers is taken orally till cure.	Rahuri Dhanvnatari Nursery, DCH-1804
<i>Anethum graveolens</i> L. (Apiaceae) 'Balant shepu'	Leaf	10-15 ml of fresh juice is given orally till cure.	Bajabaiche deul, DCH 1774
<i>Argemone mexicana</i> L. (Papaveraceae) 'Bilayat'	Spines	Spines of the leaves are removed and are made into paste. This paste is	Very common along roadside A.bad road

		applied to eyes in small quantity twice a day for 3 days.	near Sai Lawns, DCH-1612
<i>Asparagus racemosus</i> var. <i>javanica</i> Willd. (Lillaceae) 'Shatavari'	Root	Roots are roasted and eaten 3 thrice a day for 3 days.	Bhandardara rocky hilly slopes, DCH-1871
<i>Boerhavia rapens</i> L. var. <i>diffusa</i> (L.) Hook (Nyctaginaceae) 'Punrnava'	Whole Plant	One spoonful of powder is taken in hot milk for 3 days. A paste is made into pills of 1 gm, 3 pills are given thrice a day for 7 days	Very common along roadside BTR regiment, DCH-1734
<i>Calatropis procera</i> (Ait.) R. Br. (Asclepiadaceae) ,Pandhri Rui, Mandar'	Bark	The stem bark with common salt ginger and black pepper extract given 10-15ml once for 15 days.	Very common along roadside Burhanagar DCH-1729
<i>Cassia fistula</i> L. (Caesalpinaceae) 'Bahava'	Leaves	Leaves are powdered and mixed with fruit powder of <i>Terminalia chebula</i> and one tablespoonfull is given with milk till cure.	Planted Bhandardara DCH-1733
<i>Cassia occidentalis</i> L. (Caesalpinaceae) 'Ran takala'	Leaves	Juice is mixed with butter milk in equal amount and 10 – 20 ml taken thrice a day for 7 days.	Very common weed along roadside Bajabaiche deoul1786
<i>Centella asiatica</i> (L.) Urb, (Apiaceae) 'Brahami'	Whole Plant	10-20 ml of the plant juice is given twice aday till cure.	Comm in moist places Mula chari DCH-1807
<i>Citrullus colocynthis</i> L. (Cucurbitaceae)		6gm of the fruit powder along with jaggery is given daily once till cure, Root powder is also given orally till cure.	on near H-1686
<i>Coccinia grandis</i> (L.) Voigt (Cucurbitaceae) 'Tondli'	Root	Paste is applied on the head for 3 days,	Common weed in fallow field Dahigoan DCH-1685
<i>Curculigo orchiodes</i> Gaertn. (Hypoxidaceae) 'Kali musali'	Tuber	20 gm of the paste given with sugar and a glass of milk daily once till cure.	Ghatghar DCH-1679
<i>Cyperus rotundus</i> L. (Cyperaceae) 'Nagar motha'	Root	Powder is given with buttermilk, garlic, and black pepper till cure.	Frequent in moist places Dahigoan near sina river DCH-1828
<i>Desmostachya bipinnata</i> (L.)DC. (Poaceae) 'Kush'	Root	Juice with decoction of 9 pepper in 3:2 ratio is given once a day till cure,	Bhandardara dam, DCH-1756
<i>Eclipta alba</i> Hassak (Asteraceae) 'Maka'	Whole Plant	Plant is boiled in water and 50ml decoction is taken twice a day for a week. Whole plant is mixed with rhizome powder of <i>Zinger officinale</i> and is given with milk till cure. Leaf juice is given orally with curd till cure.	Frequent in moist places Kapurwadi talavDCH-1761
<i>Euphorbia tirucalli</i> L. (Euphorbiaceae) 'Sher'	Latex	Diluted latex with decoction of black peppers in ratio of 3:2 is given orally till cure.	Burhanagar, DCH-1827
<i>Evolvulus alsinoides</i> L. (Convolvulaceae) 'Vishnukant'	Leaves	2 spoonful of leaf paste is mixed with onion bulb paste and is given twice a day with cow milk for 3 days.	Frequent in moist places Burhanagar, DCH-1724

<i>Gymnema sylvestre</i> (Retz.)R.Br. (Asclepiadaceae) 'Gudhmar'	Leaves	Three leaves are mixed with that of beetle leaves and they are ground. The paste is given orally for 3 days	Bhandardara, DCH-1635
<i>Hemidesmus indicus</i> R. Br. (Periplocaceae) 'Aanatmul'	Root	Root of this plant along with sugarcandy, dried rhizome of <i>Zingiber officinalis</i> , pepper, root of <i>Cassia auriculata</i> in equal proportion, are ground and made into pills these are 3 pills given once a day for 15 days.	Bhandardara1DCH-1666
<i>Ipomoea aquatica</i> Forssk. (Convolvulaceae) 'Nalachi bhaji'	Whole Plant	Fresh juice of plant with cow milk in ratio of 1:2 is given orally till cure.	Pravara sangam, DCH-1646
<i>Jatropha curcas</i> L. (Euphorbiaceae) 'Mogali Erand'	Latex	100ml of latex is mixed with 200-300gm of sugar and is cooked. A spoon of juice is taken orally. Fish,meat chicken are avoided during the treatment period,	Common along road side camp area near fort, DCH-1701
<i>Justica adhatoda</i> L. (Acanthaceae) 'Adulasa'	Leaves	Leaves along with the leaves of <i>Plumbago zeylanica</i> are powdered and is given with milk once a day for 7 days.	Police headquarter A.nagar,DCH-1739
<i>Leucas plukenetii</i> (Roth) Spr. (Lamiaceae)	Shoots	Fresh juice of young shoot is used as nasal drops.	Devgan, DCH-1779
<i>Ocimum tenuiflorum</i> L. (Lamiaceae) 'Ran tulas'	Leaves	Leaf infusion or juice is drunk till cure or Entier plant juice is drunk along with buttermilk till cure.	Shah sharif durga DCH-1687
<i>Oxalis corniculata</i> L. (Oxalidaceae)	Whole Plant	Ateaspoonful of fresh juice of the whole plant is mixed with butter milk is taken once a day till cure.	Common weed along road side and waste land & garden, DCH-1738
<i>Pergularia daemia</i> (Forsk.) Choiv. (Asclepiadaceae)	Bark	Bark of this plant along with that of Moringa oliefera bark with5 pepper seeds are ground and made into 3 equal parts and is given once in a day for 3 days. Only curd rice is taken during this treatment.	Common weed fallow field & waste land Dahigoan, DCH-1778
<i>Phyllanthus amarus</i> Schum, & Thone. (Euphorbiaceae) 'Hajar dani bhui avala'	Whole Plant Root	Whole plant is made into paste and mixed with curd and is given in doses of 3 spoonful twice a day for 7 days. 1teaspoonful of root powder is given on empty stomach daily once for week.	Common weed along road side and waste land& garden BTR regiment, DCH-1670
<i>Plumbago zeylanica</i> L. (Plumbaginaceae) 'Chitrak'	Leaves Roots	Leaf and root decoction is drunk and also used for bath till cure.	Bhandardara, DCH-1785
<i>Portulaca oleracea</i> L. (Portulacaceae) 'Gholachi bhaji'	Whole Plant	Whole plant is sundried and powered, 2-3 spoons of the powder are given on empty stomach for about aweek.	Common weed along road side and waste land& garden Camp garden, DCH-1801
<i>Ricinus communis</i> L. (Euphorbiaceae) 'Erand'	Leaves	8-10 Tender leaves are ground with 8 pepper seeds and made into pills of pea size. 1pill is given once a day with cow milk.	Common weed along road side and waste land Shendi near bypass, DCH-1693

<i>Sida acuta</i> Burm.f. (Malvaceae) 'Bala'	Bark	25gm of bark of this plant and 1 inch rhizome of <i>Cucuma longa</i> are ground and is filtered by using white cloth and is mixed ½ glass of water and is sterilized in hot earthen pot and is taken twice a day for 3 days. Rice with butter milk is only taken during the treatment.	Chandbibi mahal, DCH-1623
<i>Solanum anguivi</i> Lamk. (Solanaceae)	Whole Plant	Decoction of the whole plant is taken with curd till cure.	Chandbibi mahal, DCH-1627
<i>Solanum nigrum</i> L. (Solanaceae) 'Wange'	Whole Plant Leaves	Entire plant infusion is drunk for 4 days. Leaves are shade dried and powdered 1 spoons of this powder is given daily thrice for a week. Decoction of the leaves mixed with honey is given orally till cure.	Common weed along road side and waste land Shendi near bypass, DCH-1735
<i>Sida purpurea</i> (L.) Pers. (Malvaceae) 'Unahali'	Leaves	Leaves are ground and given with buttermilk which contains a piece of garlic and 3 pepper till cure.	Common weed along road side and waste land and bibimahal, DCH-1607
<i>Tinospora cordifolia</i> (Willd) Miers ex Hook. F. (Menispermaceae) 'Gulvel'	Root Stem Leaves	20-30 ml of the root decoction is given till cure. 12 gm of the stem paste is given with honey daily once for 3 days. Leaves and fruits are macerated into powder and taken orally till cure.	Vrudheshwar near temple, DCH-1740
<i>Tribulus terrestris</i> L. (Zygophyllaceae) 'Sarata'	Fruit	Decoction of the fresh fruit and leaf is drunk till cure	Common weed along road side and waste land & fallow field Dahigoan, DCH-1644
<i>Tridax procumbens</i> L. (Asteraceae) 'Ekdandi'	Whole Plant	Plant paste with jiggery is given once in a day for 3-7 days. or 50 ml of the plant juice is given thrice a day for week.	Common weed along road side and waste land near civil hospital, DCH-1626
<i>Tylophora dalzellii</i> Hook. (Asclepiadaceae)		Root paste is applied over the eyelid for 3 days.	Very common on hill slopes Bhandadara, DCH- 1809
<i>Woodfordia fruticosa</i> (L.) Kurz. (Lythraceae), 'Dhyati'	Bark	Bark along with bark of <i>Bauhinia racemosa</i> , <i>Mangifera indica</i> , and <i>Oroxylum indicum</i> are taken in equal proportions and extract is made, 20-30 ml of this extract is given twice a day for 4-6 days.	Chandanapuri ghat, DCH-1736

RESULTS AND DISCUSSION

During the study 44 plant species of 26 families used for treating jaundice have been recorded along with the details like plant part used and mode of administration. Majority of the species used are from families Asclepiadaceae and Solanaceae (4 each), Asteraceae, and Euphorbiaceae, Fabaceae (3 each) and majority of preparations from Leaves (16), Underground parts

(13), Stem bark (01), Stem (5) Fruits (03), Whole plant (07) and Latex (01) etc.

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