# ETHNO-MEDICOBOTANICAL SURVEY IN DHARWAD-PLANTS USED FOR JAUNDICE

S.S. HEBBAR, V.H. HARSHA, G.R. HEGDE AND V. SHRIPATHI

P.G. Department of Botany, Karnatak University, Dharwad

#### ABSTRACT

Dharwad district is situated at an elevation of 678 m. above MSL. This district is adjacent to Western Ghats. There are several herbal practitioners who depend mostly on the locally available plants. There is no published data on the ethno-medico botanical study of this district and hence an extensive survey was undertaken between 1999-2001. More than 200 traditional herbal practitioners were contacted, amongst whom 54 are effectively treating the jaundice. Twenty five species belonging to 18 families used for curing jaundice in Dharwad district of Karnataka have been recorded. Amongst these species, the most commonly used are *Eclipta prostrata* L., *Plumbago zeylanica* L., *Ricinus communis* L., *Balanites aegyptiaca* (L) Delile., *Phyllanthus niruri* L. and *Tinospora cordifolia* Miers. The method of preparation of medicines disclosed by few of the practitioners are discussed.

## INTRODUCTION

Dharwad is one of the 27 districts of Karnataka. It has several herbal practitioners who depend mostly on the locally available plants. There is no published data on the Ethno-medicobotanical survey of this district and hence an extensive survey was undertaken during 1999-2001.

Dharwad district is located between 14° 78' to 15°50' N latitude and 74°48' to 76°00' E longitude and situated at an elevation of 678 m above MSL. The rainfall ranges from 2741 mm in the west to 465 mm towards the east. The vegetation is dry deciduous type in the west to scrub jungles in the eastern dryer parts. Eastern plains of the districts have black cotton soil and Western parts are with lateritic soil.

## **METHODOLOGY**

Local herbal practitioners of different areas of the Dharwad district were met during different seasons of the year. Information about the plants used for jaundice, parts of the plants used, dosage, duration, and restriction on intake of food are gathered through discussion. Plants claimed against Jaundice are collected during flowering seasons and taxonomically identified by referring the floras such as Flora of Karnataka (1984) and The Flora of the Presidency of Bombay (1901-1903). The plant specimens are preserved

in the form of herbarium in the Botany department of Karnataka, University Dharwad.

Screening of the new claims were done by referring the important works of Jain (1991), Anonymous (1994), Yoganarasimhan (1996) and Kirtikar and Basu (2001).

#### **RESULTS**

For each species the family, voucher specimen number, vernacular name in Kannada and Sanskrit name are given in the bracket. An asterisk mark (\*) is given for those species, which form the new claim. Information about the method of preparation and application, dosage and duration, extra ingredients to be added are given wherever available. Majority of the herbal practitioners are of the opinion that during the course of treatment, fried food materials, oily food, green chillies, brinjal and powdered Bengal gram are to be avoided and tender coconut water, sugar cane juice, curd and rice are mostly recommended. Wherever disease is not specified it is implied as the Yellow jaundice (Yellow Atropy).

\*Acacia farnesiana Willd. (Mimosaceae, KUDB 101, Peekjali, Sannajali. San: Arimedaka)
Azadirachta indica A.Juss. (Meliaceae, KUDB 104, Bevina mara. San: Nimba)
\*Cassia auriculata L.. (Caesalpiniaceae, KUDB 109, Honnarike. San: Avartaki)
Part used: Leaves.

Equal quantity of leaves of Peekjali (Acacia farnesiana Willd.), Bevinamara (Azadirachta indica A. Juss.), Kadigaraga (Eclipta prostrata L.) and Honnarike (Cassia auriculata L.) are ground to form a ball of areca nut size, taken orally twice a day for 21 days.

Aegle marmelos Corr. (Rutaceae, KUDB 102, Bilvapatre, San: Bilva)

Part used: Leaves.

A handful of leaves are ground with lemon juice, cardamom and stone sugar, extracted juice is orally taken on empty stomach, every morning for seven days.

\*Andrographis paniculata Nees (Acanthaceae, KUDB 103, Nelabevu. San: Bhunimba)

Part used: Leaves.

Equal quantity of leaves of Nelabevu ( Andrographis paniculata Nees.) Amrataballi ( Tinospora cordifolia Miers.) and rhizome of Katukarohini (Picrorhiza kurrooa Benth.) are ground and orally taken by mixing with honey.

\*Azima tetracantha Lamk.(Salvadoraceae, KUDB105, Uppimullu, Gangimullu. San: Trikantajata)

Part used: Leaves.

A hand full of leaves are ground with five to six fruits of cardamom, paste is orally taken in the morning on empty stomach for three days.

\*Balanites aegyptiaca (L) Delile (Balanitaceae, KUDB 106, Ingala gida. San: Inguda).

Parts used: Leaf and Pulp of the fruit.

Half a glass of leaf juice extracted with coconut water and pulp of the fruit are orally taken in the morning on empty stomach for three weeks.

\*Cadaba indica Lam. (Capparidaceae, KUDB 107, Shegudaki).

Part used: Leaves.

Leaf juice mixed with coconut oil is applied on head, three times a day for one week.

\*Caesalpinia bonducella Fleming (Caesalpiniaceae, KUDB 108, Gajjuga San: Karanja)

Part used: Leaves.

Half a glass of leaf juice mixed with sugar is orally taken in the morning on empty stomach, once in an interval of three days for eleven days.

\*Chrozophora plicata Juss. (Euphorbiaceae, KUDB 110, Aadumuttada gida. San: Suryavarta))

Part used: Leaves.

Leaf juice is orally taken, once a day in the morning on empty stomach for three days.

\*Clerodendrum phlomoidis L. (Verbenaceae, KUDB 111, Husalakki. San: Agnimantha)

Part used: Leaves.

Half a glass of leaf juice is orally taken in the morning on empty stomach for about three weeks for White jaundice (Hepatitis-B). The same juice is applied on the body by mixing with yellow powder (Curcuma longa L.) and curd.

\*Clitoria ternatea L. (Papilionaceae, KUDB 112, Shankapushpi, Gokarni, Shankaralingi balli. San: Supushpi)

Part used: Whole plant

Whole plant with root system thoroughly washed with water and ground and a glass full of juice mixed with goat milk is orally taken in the morning on empty stomach only once or twice. After taking medicine food is avoided for 5-6 hours.

Cryptolepis buchanani Roem. & Schult. (Asclepiadaceae, KUDB 113 Karibantana balli).

Part used: Root, stem and leaves.

Decoction of leaves and roots is orally taken once or twice a day for a week. By removing outer bark stem is tied around the arm like a rope and untied after 4-5 hours.

Eclipta prostrata L. (Asteraceae, KUDB 114, Kadigaraga, Brangaraja. San: Bringaraja)

Part used: Leaves.

Leaf juice is extracted with fennel seeds and rock salt, is orally taken thrice a day for eight days.

\*Feronia elephantum Corr. (Rutaceae, KUDB 115, Belavala mara. San: Dadhiphala)

Part used: Leaves.

Leaf juice is mixed with coconut juice and orally taken in the morning on empty stomach, once a day for seven to eight days.

\*Holoptelea integrifolia Planch. (Ulmaceae, KUDB 116, Tabasi mara. San: Chirabilva)

Part used: Bark.

Rope is made out of inner bark of the tree and tied around the neck or arm, kept it for whole day. Every day morning old one is replaced by fresh bark. Bark can also be tied directly without making rope. Paste of the yellow powder (*Curcuma longa L.*) is applied on head and heated by red hot Iron for White jaundice (Hepatitis-B).

\*Indigofera trita L. (Papilionaceae, KUDB 117, Vajramusti, Vajranili.

Part used: Leaves.

A hand full of leaves are ground with jaggery and orally taken in the morning on empty stomach, once a day for three days.

Phyllanthus niruri L. (Euphorbiaceae, KUDB 118, Nelanelli, Bhunelli, Sidagratappala.

San: Bhumyamalaki)

Part used: Leaves.

A glassfull of leaf juice is extracted by mixing tender coconut water and sugar, orally taken once a day in the morning on empty stomach for 21 days.

Plumbago zeylanica L. (Plumbaginaceae, KUDB 120, Chitramula, Adavimallige.

San: Agnisikha)

Part used: Roots.

Fresh root is tied around the arm for four to five hours. One teaspoonfull of root paste with lemon juice is orally taken, once a day for about three days for White jaundice (Hepatitis-B).

Psidium guajava L. (Myrtaceae, KUDB 121, Perala gida. San: Peruka)

Part used: Leaves.

Equal quantity of leaves of Peralagida (*Psidium guajava* L.), Audalagida (*Ricinus communis* L.) and Nelanelli (*Phyllanthus niruri* L.) are ground, half a glass of juice is orally taken twice a day for a week.

Ricinus communis L. (Euphorbiaceae, KUDB 122, Audala gida, Haralu Gida. San: Chitraka)

Part used: Leaves.

Seven to eight leaves are ground by mixing with four to five fruits of cardamom and tender coconut water. Extracted juice is orally taken in the morning on empty stomach for a week.

\*Ruellia prostrata Poir. (Acanthaceae, KUDB 123, Nanjina gida.)

Part used: Leaves.

A handfull of leaves are ground with clove, cardamom and black pepper, paste is orally taken in the morning on empty stomach for a week.

Tinospora cordifolia Miers. (Menispermaceae, KUDB 124, Amrata balli. San: Amritavalli)

Parts used: Leaves and stem.

Half a glass juice of stem and leaves is orally taken in the morning on empty stomach for two to three weeks.

Trianthema pentandra L. (Aizoaceae, KUDB 125, Bilikanajali.

Part used: Roots.

Paste of the root in water is applied on the inner surface of eyelid in the morning for three days. Decoction of the root is orally taken in the morning on empty stomach for about a week for White jaundice (Hepatitis-B).

\*Tylophora capparidifolia Wight (Asclepiadaceae, KUDB 126, Kamani balli.

Part used: Leaves.

A handfull of leaves are ground with six to eight fruits of cardamom, paste is orally taken in the morning on empty stomach for three days.

## **ACKNOWLEDGEMENTS**

The author is thankful to UGC, SAP-DRS II for the financial assistance and to the authorities of Karnataka University, Dharwad for the facilities.

### REFERENCES

- Annonymus. Indian Medicinal Plants A Compedium of 500 species. Vol. 1-5. Orient Longman Ltd. Madras. 1995.
- COOKE, T. The Flora of the Presidency of Bombay, Vol. I-III Botanical Survey of India, Culcutta. 1901-1903.
- JAIN, S.K. Dictionary of Indian Folk medicne and Ethnobotany. Deep Publications, New Delhi. 1991.
- KIRTIKAR, K.R. AND B.D. BASU. Indian Medicinal Plants with Illustrations. Oriental Enterprises, Dehra Dun. 2001.
- SALDANHA, C.J. Flora of Karnataka. Oxford and IBH Publishing Co. Pvt. Ltd., New Delhi. 1984.
- YOGANARASIMHAN, S.N. Medicinal plants of India. Vol. I-Karnataka. Interline Publishing Private Limited, Bangalore. 1996.