

## (VI)

### USE OF SOME MEDICINAL PLANTS TO CURE MIGRAINE

#### Introduction

Plants as cure for human ailments are a tradition as old as human civilization. Ancient traditions of Indian medicine viz. Ayurveda, Unani and Sidha and now, even, allopathy derives many of their curative tools from plants.

The Indian system of medicines has played an important role in our country in providing medical care since antiquity. This system of medicine is as old as our history and has formed an integral part of the Indian tradition since time immemorial.

Many workers have studied the folk medicinal uses of plants in this region. Among these are Singh *et al.* (1984) who studied the folk medicinal claims of Chakrata forests. Singh (1986) worked on selected Indian folk claims for the cure of bronchial asthma. Gaur (1999) studied the flora of District Garhwal (North-West Himalayas) with ethnobotanical notes. Tomar and Singh (2005) have worked on folk medicinal uses of some indigenous plants among the village people of Barnawa in Baghpat District (UP) as also a study of folk medicinal uses of some indigenous plants of Baghpat District (Tomar and Singh, 2005a).

#### Study Area and Methods

Meerut District in Western Uttar Pradesh is roughly rectangular and is

bounded in the North by Muzaffarnagar, in the East by Bijnor, in the South by Ghaziabad and in the West by Baghpat districts, respectively. In Meerut District, soil mostly loamy and in some areas sandy loam, silty loam and clay loam are occasionally met. The rainfall varies considerably from year to year. The skies are usually heavily overcast during the monsoon in the months of July-September

Meerut District comprises of twelve blocks in three Tehsils. The survey of folk medicinal plants was conducted for two consecutive years in villages of twelve blocks in the district. The present study involved field work and interviews, folk medicinal information collected from the native informants, who are Vaidyas or Hakims and elderly village people, who have knowledge about Ayurvedic medicine. Oral interviews were held in villages and information recorded at the spot.

Medicinal plants was collected and preserved for the future use. The plants were pressed in old newspapers and blotting sheets for dehydration in strong ply board. The species were changed to fresh sheets after an interval of 24 hours to 2-3 days depending on the weather conditions until the specimens were completely dry. The plant species were identified with the help of available floras. Doubtful medicinal plants are confirmed at the herbaria of Forest Research Institute (F.R.I.) and Botanical Survey of India (B.S.I.) Dehra Dun.

## Results and Discussion

Migraine is a complex disorder. Each individual patient has his own personal experience and is usually identified with severe headache.

In present study seven medicinal plant species were found most useful to cure migraine. These belong to 7 genera and 5 families. Medicinal plants enumerated here are arranged alphabetically by their botanical names followed by family name, local names, and description of plants, chemical constituent, folk medicinal uses, flowers and fruits, herbarium number and place of collection.

### Enumeration

*Daucas carota* Linn.

Family : Umbelliferae

Local Name : Gajar

Description : A much-branched herb. Leaves pinnately decompose. Flowers white. Fruits bristly along the secondary ridges.

Chemical constituents : It has high carotene and it is a source of vitamin A and carbohydrates. It also contains ducene, alkanes, acids and daucine.

Folk medicinal uses : The leaves of Gajar are crushed to obtain the juice. It is mixed with Ghee in 2:1 ratio and dropped in the nostril of patient to relieve migraine instantly.

Flowers and Fruits : January-March

Amit Tomar, 373 Meerut

*Leucas cephalotes* Spreng.

Family : Labiatae

Local Name : Gubbha

Description : An erect, pubescent annual. Stems branches obtusely angular. Leaves ovate or ovate-lanceolate.

Flowers white, in large, globose, terminal whorls. Nutlets dark brown, smooth.

Chemical constituents : The seeds and flowers contain an essential oil, sitosterol and a glycoside.

Folk medicinal uses : Leaves are dried and powdered and mixed with 1-2 Kali Mirch (Black pepper). It is given to patient and claims to provide instant relief in cure migraine.

Flowers and Fruits : August-October

Amit Tomar, 387 Meerut, 166 Machhara

*Nicotiana tabacum* Linn.

Family : Solanaceae

Local Name : Tambaku

Description : An erect, large annual. Lower leaves large, oblong or ovate-lanceolate. Flowers rosy or reddish. Capsules ovate.

Chemical constituents : The leaves contain pyridine-piperidine type of alkaloids, among which most prominent is nicotine. It also contains nornicotine and anabasine.

Folk medicinal uses : Dry flowers of Tambaku and Ank (*Calotropis procera*) are mixed in equal quantity and dried. These are burnt and inhaled 2-3 times a day for 2-3 days to cure migraine.

Flowers and Fruits : November- March

Amit Tomar, 181 Meerut

*Ocimum canum* Sims.

Family : Labiatae

Local Name : Jangli Tulsi

Description : A bushy, much-branched, pubescent herb. Leaves elliptic, sub crenate. Flowers pale violet or purplish-white, in whorls. Nutlets ellipsoid, black.

Chemical constituents : The herb contains linalool and camphor.

*Folk medicinal uses* : Fresh paste of whole plant is applied externally on forehead twice daily to cure migraine.

*Flowers and Fruits* : July-November

Amit Tomar, 312 Hastinapur

*Sesamum orientale* Linn.

*Family* : Pedaliaceae

*Local Name* : Till

*Description* : A biennial or perennial herb up to about 1.2 m. heights. Leaves long-stalked, hairy, and ovate. Flowers 5-8 cm. long, white or purple.

*Chemical constituents* : The seeds contain fixed oil. This is a semi-drying, polyunsaturated having fatty acids like, linoleic, oleic, palmitic and stearic acids.

*Folk medicinal uses* : The oil of seeds is rubbed on the head for relief of migraine.

*Flowers and Fruits* : August-November

Amit Tomar, 313 Meerut, 461 Machhara

*Trachyspermum ammi* Linn.

*Family* : Umbelliferae

*Local Name* : Ajwain

*Description* : An erect annual, up to 1 m tall. Leaves 2 to 3 pinnate. Flowers white in compound umbels. Cremocarps ovoid, compressed.

*Chemical constituents* : The fruits of Ajwain contain volatile oil. Proteins, fat, carbohydrates. Traces of tannin, glycoside and steroidal substances have been also reported.

*Folk medicinal uses* : A hot dry fomentation with seeds is given to patient for 2-3

days to cure migraine. It claims by the local people.

*Flowers and Fruits* : November-March

Amit Tomar, 60 Meerut

*Zingiber officinale* Rosco.

*Family* : Zingiberaceae

*Local Name* : Adrak

*Description* : A herb with a thick tuberous, aromatic rootstock. Stems leafy, about 1 m height. Leaves linear-lanceolate.

*Chemical constituents* : Rhizome contains volatile oil, starch, fat, fibre, resinous matter, inorganic material and vitamins A, B and C. Rhizome also contain zingiberene and curcumene.

*Folk medicinal uses* : The equal quantities rhizome of Adrak and Aswagandha (*Withania somnifera*) are ground and given in the dose of 6 gm. twice daily for 15-20 days to cure migraine.

*Flowers and Fruits* : October-November

Amit Tomar, 52 Meerut, 193 Kharkhoda

## Conclusion

It has been realized that medicinal plants are going to play an important role for future in medical system. These medicinal plants contain various chemical aspects which provide strength to the body organs and immune system. Now people are moving to Ayurvedic medicine system, which does not have not side effects and is easily provided at minimum rates by Vaidyas or Hakims (Ayurvedic medical practitioners).

## Acknowledgements

The author is thankful to Prof. V. Singh, Department of Botany, CCS University, Meerut and Dr. H. Singh, Reader, Department of Botany, Meerut College, Meerut for their sincere guidance of this work.

### References

- Gaur, R.D. (1999). *Flora of district Garhwal North-West Himalaya with ethnobotanical notes*. Srinagar, Garhwal, India: Trans Media.
- Singh, V.K., A. Mohd. and Abrar M. Khan (1984). Folk medicinal claims of Chakrata forests, Uttar Pradesh. *India J.P.I. Nature*, 1(2):16-21
- Singh, V.K. (1986). Selected Indian folk claims for the cure of bronchial asthma. *J. Res. Ed. Ind. Med.*, 384: 37-43.
- Tomar, A and H. Singh (2005). Folk medicinal uses of some Indigenous Plants among the village people of Barnawa in Baghpat District (U.P.). *Plant Archives*, 5(1): 81-86.
- Tomar, A and H. Singh (2005a). Folk Medicinal Uses of Some Indigenous Plants of Baghpat District of Uttar Pradesh, India. *J. NTFP*, 12(3): 167-170.

Department of Botany,  
Meerut College,  
Meerut (Uttar Pradesh).

Amit Tomar

---

**INDIAN FORESTER SPECIAL ISSUE**  
***Medicinal & Aromatic Plants - Part-III***  
***“Technologies, Trade & Commerce”***  
**(Containing 236 pages with 25 colour photos)**

*This publication continues the Indian Forester tradition of focussing on issues of current importance, covering relevant aspects of research and development for effective management and utilisation of Non-Wood Forest Species of Medicinal and Aromatic Plants. This issue highlights the Technologies, Trade & Commerce, Economics and Marketing aspects, which is urgently required at this juncture by growers and users.*

**Price Rs. 300/-**

**Set price for Medicinal & Aromatic Plants Special Issues I-III Rs. 700/-**  
(Payable through DD/MO at Dehra Dun in favour of Business Manager, Indian Forester)

***Please mail your valued orders to :***

**“BUSINESS MANAGER”**

**INDIAN FORESTER**

**P.O. New Forest,**

**Dehra Dun - 248006 (Uttarakhand)**

**Email : [indfor@icfre.org](mailto:indfor@icfre.org)**