

Native phytotherapy for eye and ear complaints in Nasik District (Maharashtra)

Patil M.V.* and D.A.Patil**

*GET's Arts, Commerce & Science College, Nagaon, District Dhule - 424004, Maharashtra.

**P.G.Department of Botany, S.S.V.P.S's L.K. P.R.Ghogrey Science College,
Dhule-424005, Maharashtra

Received : 03.10.2007

Accepted : 12.02.2008

Abstract :

The tribals such as Kokana, Mahadeo-Koli, Bhil, Warali, Thakur, Katkari etc. and rural people of Nasik district use different parts of plants in crude form as cures against eye and ear afflictions. This paper deals with 13 plant species of which five species are employed by preparing formulations like juice, pulp and contact of drug in case of eye diseases. These are prepared from leaves, stem-bark and roots and administered for conjunctivitis, cataract and burning sensation of eyes. Likewise, eight species are used to cure ear-diseases by using drugs in the form of juice obtained from leaves, young stem-bark and fruits. Out of 13 species, five species each against eye and ear complaints are being reported for the first time. Modern laboratory methods and techniques are, however, required to reveal new lead molecules.

Keywords : Native phytotherapy, Eye and ear complaints.

Introduction :

Nasik district occupies the north-western part of Maharashtra lying between 19°3' and 20°52' north latitude, and 73°16' and 74°56' east longitude. As per 2001 census, the total population of the district is 49,87,923, of which 9.31 lakhs are tribal people. Different tribes like Kokana, Mahadeo-koli, Bhil, Warali, Thakur, Katkari etc. inhabit the rugged forest terrains of Western Ghats. Their indigenous knowledge as a result of long association with the local flora is being studied. The results of our ethnobotanical survey in the district are being published (Patil and Patil, 2000 a,b; 2001 a,b, 2002; 2005). The present paper forms a segment of the said work.

During the course of studies in 1997 to 2004, field surveys were conducted in many tribal

hamlets and rural parts of the district. The tribal heads, medicine-men and senior ladies were contacted and interrogated, apart from some actual personal observations. The data collected were verified in different localities and has been compared with the classical literature by Watt (1972), Anonymous (1948-1976), Ambasta (1986), Jain (1991) and Bhattacharjee (1998), apart from recent publications. This comparison helped to earmark the new reports findings. They are highlighted with asteriks in the enumeration. Traditional methods of herbarium preparation have been followed. They are housed in the Department of Botany at Nagaon (District Dhule).

Ethnobotanical Enumeration

- *1. *Aloe vera* (L.) Burm. f. (Liliaceae) Korpad :Leaf pulp is kept on eyes to get relief from burning sensation.
- *2. *Blumea malcolmi* Hook. f. (Asteraceae) Tantani :Few drops of leaf juice are dropped into eyes at morning against conjunctivitis till cured.
- *3. *Streblus asper* Lour. (Moraceae) Kharbat :Roots are fastened nearer as a treatment of cataract.
- *4. *Tectona grandis* L.f. (Verbenaceae) Sag :Roots of one year seedling are tied on ears to treat cataract.
- *5. *Vitex negundo* L. (Verbenaceae) Nirgudi :Leaf juice, 2-3 drops, are poured into eyes against conjunctivitis till cure.
6. *Cardiospermum halicacabum* L. (Sapindaceae) Kapal-phodi, Baura :Few drops of leaf juice are poured into eyes to treat ear-ache.
7. *Euphorbia neriifolia* Linn. (Euphorbiaceae) Sabar :Bark of young stem is scraped and roasted. Juice is then obtained and dropped into ears to treat ear-ache.
8. *Ocimum basilicum* Linn. (Lamiaceae) Sabja :Few drops of leaf juice are dropped into ears as a remedy against ear-ache.
- *9. *Pancratium sanctae-marieae* Blatt. & Hallb.(Amaryllidaceae) Pachan-kand :Two to three drops of juice obtained from bulb are poured into ears to relieve pains from ear-ache.
- *10. *Schrebera swietenoides* Roxb. (Oleaceae) Mokha :Few drops of juice of leaves are dropped into ears to treat ear-ache.
- *11. *Solanum anguivi* Lam. (Solanaceae) Ranvange :Fruit juice is poured into ears to treat ear-ache.
- *12. *Tagetes erecta* Linn. (Asteraceae) Genda, Zendu :Two to three drops of juice obtained from leaves are poured into ears to relieve pains from ear-ache.
- *13. *Bridelia airy-shawii* P.T.Li. (Euphorbiaceae) Asand :Juice is obtained from stem-bark after heating it. Few drops of it are dropped into ears to treat ear-ache.

Discussion :

The present paper documented 13 plant species belonging to 13 genera and 13 families of angiosperms employed to treat eye and ear complaints in Nasik district. The plants are found in their vicinity and immediately available for therapeutic purpose. The herbal remedies in case of eyes are effective against conjunctivitis, cataract and burning sensation. All five

species used for this purposes form the first reports for India. This is indicated by their comparison with the classical and recent literature. Likewise, in case of ear complaints, five species are being reported for the first time. Species like *Cleome viscosa*, *Cassia fistula*, *Portulaca oleracea* and *Alternanthera tenella* are reported earlier (Patil and Patil, 2005; Patil, Patil & Pawar,

2007, in press) for other forms of ear afflictions. They are, however, used in crude forms of application of the drugs. Further investigations on modern lines like pharmaceutical and therapeutic as well as safety aspects are obviously needed for their better utilisation.

Junior author (Patil M.V.) is thankful to Principal Dr.P.N.Patil of GET's Arts, Commerce and Science College, Nagaon and Shri.B.M.Patil, Ex-Principal, S.S.V.P.S's L.K.Dr.P.R.Ghogrey Science College, Dhule.

References :

1. Patil M.V. and D.A.Patil. Ancient Science of Life XIX (3-4):102, 2000a
2. Patil M.V. and D.A.Patil. J.Swamy Bot. Cl. 17(3-4):83, 2000b.
3. Patil M.V. and D.A.Patil. Ancient Science of Life XXI:26, 2001a.
4. Patil M.V. and D.A.Patil. Journal Non-Timber Forest Products 8(1-2):19, 2001b.
5. Patil M.V. and D.A.Patil. Some herbal remedies on stomach complaints in Nasik District (Maharashtra), Proc.of National Seminar held at Department of Botany, Dr.B.A.Marathwada University, Aurangabad (Eds. A. M. Mungikar & A.S.Bhutkar) pp 123-127, 2002.
6. Patil, M.V. and D.A.Patil. Indian J. Traditional Knowledge 4(3):287, 2005.
7. Watt, G. Dictionary of Economic Products of India. Bishen Singh Mahendra Pal Sing, Dehra Dun, India, 1972.
8. Anonymous. The Wealth of India: A Dictionary of Indian Raw Materials and Industrial Products. Vol.I-XI (Publication and Information Directorate, CSIR), New Delhi, India, 1948-1976
9. Ambasta, S.P. The Useful Plants of India (Publication and Information Directorate, CSIR), New Delhi, India, 1986.
10. Jain, S.K. Dictionary of Indian Folk Medicine and Ethnobotany. Deep Publications, New Delhi, India, 1991.
11. Bhattacharjee, S.K. Handbook of Medicinal Plants. Pointer Publishers, Jaipur, India, 1998.
12. Patil, D.A., Patil, M.V. and Shubhangi Pawar. Ethnobotanical aspects of crop weeds of North Maharashtra. In : Indigenous Knowledge (Ed. Prof.T.R.Sahu) Dr.H.S.Gour University, Sagar, M.P. (India) (In Press), 2007.