

## Endemic ethnomedicinal plant species *Dyerophytum indicum* O. Ktze

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### SUMMARY

Sangamner taluka of Ahmednagar district (Maharashtra state, India), part of Westernghats called, as Sahyadris include the Baleshwar range in the middle and is rich in ethno-medicinal wealth. Peaks such as Katra dongar, Mura, Wakari, Shirpunj, Ghanchakar (1532m), Bahiroba and Sindola form a series in this range. Sangamner taluka constitutes total area of 1687.90 sq. km out of which 87.65 per cent of villages have forest area and 93.83 per cent of villages have irrigated area. The sense of biological conservation is present in these ethnic societies. *Ficus benghalensis* L. of Pemgiri village is one of the best examples. Tribal from these areas make a proper use of plants and their products in curing various diseases. The present paper deals with ethno-medicinal study of *Dyerophytum indicum* O. Ktze., rare and endemic to Chandanapuri Valley, a notable place near the Baleshwar range. *Dyerophytum indicum* O. Ktze., is a under-shrub with perfoliate, very thick and coriaceous leaves. Bark of this plant has abortifacient property.

**Key Words :** Endemic, Sahyadris, Chandanapuri, Abortifacient

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Sangamner taluka of Ahmednagar district (Maharashtra state, India), part of Westernghats called, as Sahyadris include the Baleshwar range in the middle and is rich in ethno-medicinal wealth. Baleshwar is the second great spur of Sahyadris, which completely transverse the Akole and Sangamner talukas forming the water shed between Pravara in the north and the Mula in the south. The peaks such as Katra dongar, Mura, Wakari, Shirpunj, Ghanchakar (1532m), Bahiroba and Sindola form a series on the Baleshwar range

on the east of Ratangad. On the Baleshwar peak there is a Hemadpanthi Temple of Lord Shiva.

Sangamner taluka constitutes total area of 1687.90 sq. km out of which 87.65 per cent of villages have forest area and 93.83 per cent of villages have irrigated area (Banthia, 1991). The sense of biological conservation is present in these ethnic societies (Jain, 1986). *Ficus benghalensis* L. of Pemgiri village is one of the best examples. Tribal from these areas make a proper use of plants and their products in curing various diseases.

The present paper deals with ethno-medicinal study of *Dyerophytum indicum* O. Ktze., endemic to Chandanapuri Valley, a notable place near the Baleshwar range.

Ethno-medicinal knowledge of tribal about the plants was documented by arranging frequent field visits to the study area. Area like Baleshwar and Chandanapuri ghat were visited annually for 2-3 times during the year 2001-2005. Flowering twigs and photographs were collected in presence of tribal Vaidyas. Minor details like vernacular names of the plant species, locality and habitat were noted in the field notebook. A questionnaire was prepared containing the information about the tribal Vaidyas, their living style and

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source of income, educational background and medicinal uses of plant species. Interviewing the tribal Vaidyas, information on ethno-medicinal importance of the plant species was gathered. Each medicinal use of the plant had been confirmed during several visits to different localities in the area and also from the same informants on different occasions.

Scientific techniques were used to prepare herbarium specimens of plant species, as suggested by Jain and Rao (1977). Herbarium specimens are maintained in the departmental herbarium. Collected plants were identified with the help of keys to families, genera and species provided in standard Floras like *Flora of Bombay Presidency* (Cooke, 1908), *Flora of Ahmednagar District* (Pradhan and Singh, 1999), *Flora of Maharashtra State Vol.I* (Singh and Karthikeyan, 2000), *Flora Maharashtra State Vol. II* (Singh et al., 2000) and *Flora of Maharashtra State Vol-III* (Sharma et al., 2000). Identified plant species were then verified from Dr. V. N. Naik, Marathwada University, Aurangabad (a senior taxonomist of Maharashtra state).

Books referred for comparison of uses recorded during the field studies and for listing chemical constituents of the plant species studied are A dictionary of Indian medicinal plants (Akhtar et al., 1992) published by Central Institute for Medicinal and Aromatic Plants, Lucknow, Pharmacognosy 2<sup>nd</sup> Ed. (Trease and Evans, 1978), Indian materia medica (Nadkarni, 1954), Compendium of Indian medicinal plants Vol. 1-3 (Rastogi and Mehrotra, 1991-1993), Glimpses of Indian ethnobotany (Jain, 1981), A manual of ethnobotany (Jain, 1987), Contribution to Indian ethnobotany (Jain, 1991) and Dictionary of Indian folk medicine and ethnobotany (Jain, 1991).

*Dyerophytum indicum* O. Ktze. belongs to family Plumbaginaceae and locally is called as Lal-chitrak. It is an under-shrub with perfoliate, very thick and coriaceous leaves. The leaves are covered with scurfy scales. Flowers are in dense, paniculate spikes and are reddish. Capsules are circumscissile at the base and splitting into five valves. The seeds are smooth and pear shaped. The plant flowers in the month of October- February.

It is a rare plant found only in the Chandanapurighat (Pradhan and Singh, 1999). Tribal from this area use bark in abortion. Bark paste is applied on scorpion stings. Roots, when come in contact with skin, cause itching.

The medicinal uses of the plant are not found in any kind of literature. Chemical constituents of the plant parts are not known.

### Conclusion :

*Dyerophytum indicum* O. Ktze. belonging to family Plumbaginaceae is a rare and endemic to Chandanapurighat area of Sangamner taluka. Tribal use this plant in abortion.

Authenticity of the medicinal use is not revealed from any kind of literature. Therefore, there is a need to study the chemical constituents and examine the abortifacient properties of the plant.

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