Seed fume of *Solanum surattense*: A traditional panacea for teeth and gums

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Received 29 July 2003

This communication provides a brief account of a time-tested remedy from seed fume of *Solanum surattense* Burm. f. against tooth and gum disorders. The practice is quite popular among the aborigines of Gonda, Bahraich and Balrampur districts of Uttar Pradesh, India. The text deals with method of treatment and results of clinical trial conducted by author himself.

**Keywords:** Ethno-botany, seed fume, *Solanum surattense*, teeth and gums, traditional panacea.

**IPC Int. Cl.** A61K 35/78; A61P 11/04.

*Solanum surattense* Burm. f. (Family - Solanaceae), is a very prickly, perennial, diffuse, patch forming herb, flowering and fruiting throughout the year, commonly found on wastelands. Leaves ovate-elliptic to oblong, pinnatifid, sinuate, stellate, hairy when young, segments ovate, irregularly dentate; flowers violet, in 2-6 flowered cymes; calyx lobes ovate-lanceolate, acuminate, glandular within; corolla lobes acute, stellate-hairy, glandular at top; style glabrous; fruits globose, green white mottled, 1.2-2cm in diam; seeds glabrous. The plant is locally called 'Bhatkatayaya' (English – Yellow-berried Nightshade) (Plate 1: photo A & B). Pandey has reported the plant fume as useful in the treatment of fever, pneumonia, rheumatism and respiratory troubles.

**Materials and Methods**

The seeds are obtained from mature dried berries by crushing and winnowing. Fresh seeds are dried under shade and stored in clean and dry containers for future use. During application, about one teaspoonful seed is divided into four equal fractions. About 2 ml mustard oil is dropped over a hot iron plate and a fraction of seeds is also added to it. As soon as the oil and seeds come in contact with hot iron plate the fume starts to appear. This fume is applied in the mouth of the patient for a few seconds. A country made earthen pipe with one end wide and the other narrow, similar to clay pipe, is also used to divert the fumes into the mouth from the hot plate. All the four fractions of the seeds are thus used for fumigation at intervals of few minutes.
During the treatment patient keeps his/her mouth open over a dish filled with water. It has been observed that along with the saliva some maggot like particles come out which may be some precipitate, etc. and the patient gets relief from pain and swelling within hours.

**Clinical trial**

The author himself has given the aforesaid treatment to many patients suffering from various teeth and gum problems like dental carries, pain, pus formation, associated swellings, loose gum abscesses, sensitivity, etc. About 75% of them were completely cured after 3-4 treatments. However, out of the remaining 25%, most of the cases underwent surgery. The most effective results were obtained in cases of dental carries where swelling and pain were very severe.

**Conclusion**

The crude traditional method of treatment was tried in its original form and found to be most effective against teeth and gum disorders. This remedial property of the seed fume is attributed to the active principles present in them. The curative ingredients of plants appear into the fume as such either in the form of vapour or volatile oils or in denatured forms. The contributions like this are very much result oriented and will provide important clues regarding the use of medicinal plants in a novel way. But their efficiency, credibility and applicability need to be established through the phytochemical, pharmacological and clinical screenings. However, in developing country like India such methods of treatment must be popularized to provide easy and cheap healthcare facilities.

**Acknowledgement**

The author is grateful to Prof. B K Verma (Ex HOD), Dr D K Chauhan and Dr S K Chauhan, Department of Botany, University of Allahabad, Allahabad and Dr R C Srivastava Jt. Director, Botanical Survey of India, Allahabad for encouragement and support.

**Reference**