

skills, it would certainly enhance science teaching while eradicating classroom boredom. All science teachers should be happy to take professional courses on interactive teaching, public speaking and performing acts in order to enrich their classroom teaching³. It is equally essential for the leaders of educational institutions to conduct systematic student interviews to review the performance of teachers on a yearly basis to upgrade science teaching.

India is known for great teachers and the country continues the tradition of respecting teachers. In fact, it is the teachers who objectively affect the young minds of students who will determine the future of science and technology. I hope India's next generation of teachers will incorporate science and performing art to make the teaching profession unique. I conclude by quoting what Gail Godwin once said, 'Good teaching is one-fourth preparation and three-fourth pure theatre'.

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A unique way of using washcloth dyed with bixin by the Meiteis of Manipur

Bixa orellana Linn. (family Bixaceae) native to tropical America is a profusely fruiting shrub or small tree and grows 3–10 m in height bearing pink or white flowers. It has prickly, reddish, heart-shaped pods with many small seeds at the ends of the branches. The seeds are covered with reddish aril, which is the source of an orange-yellow dye called bixin. The dye is widely used in the food industry to colour dairy products, sugar confectionary, soft drinks, fish, meat, etc.^{1,2}, in textile industry for dyeing clothes and yard threads^{1,3} and sometimes in paint, varnish, lacquer industry⁴ and most recently in cosmetic and soap industry¹.

Besides being used as a colouring agent, the extract of seeds (dye and oil) is used for healing minor wounds and burns. It is also used to prevent scarring, blisters and against certain skin diseases¹ and to protect from sunburn⁵. The extract of the seeds shows antimicrobial⁶, antifungal⁷ and antibacterial activities⁸.

The Meiteis, the valley inhabitants of Manipur, have rich ethnobotanical knowledge⁹. They have been using vari-

ous dyes obtained from plants for dyeing cloths or yarn threads from time immemorial³. *B. orellana* is one such plant which yields a dye called bixin (locally the plant and the dye obtained is called Urierom) and the plants are usually cultivated in homestead garden. Bixin is also used extensively for dyeing locally made cotton washcloth (locally called Urierom lakpa/sangba phadi), which used by every family during bathing. It is believed that it keeps skin diseases at bay.

Direct application or drinking the extract of various plant parts of *B. orellana* for treating various ailments including skin diseases has been reported. However, use of washcloth dyed with bixin to keep skin-related diseases at bay is unique. It has been reported that the natural dyes show antimicrobial activity. However, textiles impregnated with natural dyes usually show less antimicrobial activity as the uptake of these dyes in the textile is below the minimum inhibitory concentration¹⁰. So, it needs to be tested whether the washcloth dyed with bixin has any beneficial effect on the skin.



Bixa orellana Linn. plant bearing pods

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