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Ethnopharmacological Note

A note on some medicinal uses of *Curcuma zedoaria*, a Zingiberaceae family plant of Bangladesh

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Curcuma zedoaria (Christm.) Roscoe is a Zingiberaceae family plant that can be found in the wild areas of Bangladesh. It is an herbaceous plant, known in English as zedoary or white turmeric and locally as 'shoti'. The plant has aerial stems as well as underground stems, the latter being known as rhizomes and which have both traditional medicine and culinary uses. In Kasipur village of Narayanganj district of Bangladesh, macerated rhizomes are applied to forehead to cure headache and to improve eyesight (Karim et al., 2011). The Garo tribal community living in Netrakona district, Bangladesh, use rhizome paste against sprain and dermatitis (Rahmatullah et al., 2009). The people of Golaghat district, Assam, India, use rhizomes of the plant as stimulant and carminative (Barukial and Sarmah, 2011). The Jhankri, Bijuwa, and Phedangma people of Darjeeling Himalaya, India, use rhizomes of the plant against food poisoning, acute stomach pain, and loss of appetite (Bantawa and Rai, 2009). The tribal people of Koraput district, Odisha, India, use rhizomes against abdominal cramps, amenorrhea-abdominal pain, rheumatic pain, dyspepsia, colic, vomiting, cough, and menstrual disorders (Dhal et al., 2011). Traditional healers in East Godavari district of Andhra Pradesh, India, administer 10-15g of dry fruit extract along with black pepper and sugar to treat asthma; dry fruits are taken orally in cough, headache, and anaemia (Rudrapal et al., 2012). The Temuan tribe of Ayer Hitam Forest, Selangor, Peninsular Malaysia, use rhizomes orally for women to gain strength and after childbirth and topically apply pounded rhizomes to wounds (Hanum and Hamzah, 1999). During a plant collection trip in Dhaka district, it was observed that a traditional medicinal practitioner used the rhizomes of *C. zedoaria* to treat helminthic infections in humans, while another traditional medicinal practitioner used the rhizomes to treat erectile dysfunction in humans. Both uses are novel and previously unreported to our knowledge (treatment of worms in children with tuber juice has previously been mentioned by Nadkarni (1999) but the author did not cite any information source). The names of the practitioners were Ishar Howladar and Abdul Majid, respectively. The plant was authenticated at the Bangladesh National Herbarium, where a voucher specimen was deposited (Accession Number 43832). In both instances of treatment, rhizomes were crushed and powdered and left to soak in water for 24 hours. The mixture was then filtered and the filtrate discarded. The residue was dried under sunlight, water added and the mixture boiled for sufficient time to turn the mixture into a semi-solid mass. This mass was taken orally, the dose depending on the severity of the problem. Curcumin is present in rhizomes of *C. zedoaria* (Lobo et al., 2009). The anthelmintic activity of curcumin has been reported (El-Bahy and Bazh, 2015). Thus the plant can be a potential source for treating helminthic infections, which is highly prevalent in the rural and urban slum areas of many countries of the world (Haque, 2007).



Declaration of Conflict of Interest

No conflict of interest associated with this work.

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Figure 1. *Curcuma zedoaria* (Christm.) Roscoe