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Ethnopharmacological Note

A novel anti-cancer use of *Vallisneria spiralis* (L.) Kuntze (Vallisneriaceae)

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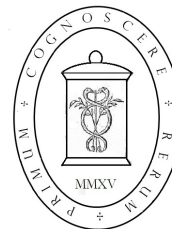
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Vallisneria spiralis (L.) Kuntze (Vallisneriaceae family) is considered a medicinal plant in Bangladesh. In English, it is known as Bread flower and in Bengali as Ramsor or Hapormali. Paste of leaves of the plant along with leaves of *Clerodendrum viscosum* is taken orally for frequent salivation with mucus and menstrual disorders in Manikganj district, Bangladesh (Shahnaj et al., 2015). *Vallisneria spiralis* has been reported to be the only species belonging to the *Vallisneria* genera in Bangladesh; it has further been reported that the plant is used to treat sores and wounds (Sarwar, 2015). Plant paste is applied on eczema and latex is applied on wounds by the Gujjar tribe of Sub-Himalayan Tract, Uttarakhand, India (Sharma et al., 2013). Plant latex is applied to sores and wounds by the local tribes in Hamirpur valley, Himachal Pradesh, India (Sharma et al., 2012). Recently a folk medicinal practitioner (FMP) was discovered in Ronbijoypur village of Bagerhat district, Bangladesh. It may be mentioned in this context that for the last few years our study group has been documenting the folk and tribal medicinal plants of Bangladesh (Azad et al., 2014; Kamal et al., 2014; Malek et al., 2014; Kundu et al., 2016; Roy et al., 2017). According to the FMP, one day he was travelling near the village when he saw a poor man using the leaf juice of a plant on his infected leg. The plant was mentioned to the FMP as hapormali. Since then, the FMP started experimenting with juice obtained from various combinations of hapormali plant parts (like leaf and stem, root and stem, leaf, root and stem) on patients with infections on their external body parts (like paronychia), which infections were causing burning sensations or pain. The FMP found that topical application of juice from any part of the plant or combination of parts would heal the infection usually within 2-3 days. For eczema, he prepared a decoction by boiling root, bark, stem and leaves of the plant with 16 volumes of water and washed the affected area for 3-4 days. The FMP then used this plant decoction on a patient suffering from tooth cancer, the cancer being diagnosed at a cancer treatment centre at Kolkata, India. The patient's root of the tooth was rotten and emitted pus and a foul odour. After washing the tooth for a week with the plant decoction, pus coming out of the tooth stopped and the tooth was healed. Another patient, who was diagnosed with liver cancer in Kolkata, India, was given orally the plant decoction by the FMP for a few weeks and the FMP claimed that the liver cancer also got cured. The name of the FMP was Komollesh Chandra Paul. The plant specimen was collected from the FMP and identified at the Bangladesh National Herbarium (Accession number 45027). Photograph was also taken of the plant (Figure 1).

Keywords: medicinal plants; *Vallisneria spiralis*; cancer



Declaration of Conflict of Interest

No conflict of interest associated with this work.

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Figure 1. *Vallaris solanacea*