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Ethnopharmacological Note

Novel use of *Asparagus racemosus* (Willd.) Oberm. (Asparagaceae) root juice to treat eye disorders

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Abstract

Asparagus racemosus (Willd.) Oberm. belongs to the Asparagaceae family of plants. The plant can be found in Nepal, India, Sri Lanka, and Bangladesh. Medicinal uses of the plant have been recorded from ancient times. In English, the plant is known as 'Indian asparagus' and in Bengali as 'shatamuli'. The three major traditional medicinal systems of India, namely Ayurveda, Siddha and Unani describe therapeutic uses of the plant (Joshi, 2016). In Ayurveda, the major uses of the plant are to rejuvenate the female reproductive system and to support the digestive system. In Siddha medicine, a major use of the plant is for treatment of leucorrhoea. In Unani, major uses include strengthening libido in men and for treatment of menstrual disorders. Folk medicinal healers in Rangpur district, Bangladesh use the plant to treat jaundice (Azad et al., 2014). Roots are used by the Santal tribe residing in Rajshahi district, Bangladesh, to treat tuberculosis (Shahidullah et al., 2009). The Garo people living in Tangail district, Bangladesh, use the roots for decreased sperm count, passing of semen with urine, loss of libido, and low semen density (Rahmatullah et al., 2011). Leaves are used with other plant parts to treat rheumatic fever and indigestion by folk medicinal practitioners in Manikganj district, Bangladesh (Shahnaj et al., 2015). nRoots of the plant are used for prophylaxis and postpartum complications among the Marwari

community of Jodhpur district, Rajasthan, India (Goyal, 2017). The Santhal tribal people of West Bengal, India, use the roots for urination problem in children (Mandal and Rahaman, 2012). Root powder is used to increase vigor and strength by tribals of Kannad region of Aurangabad district, India (Kshirsagar and Sanghai, 2015). An ethnomedicinal survey conducted in Boter Hat village, Birol, Dinajpur district, Bangladesh, revealed that a local folk medicinal practitioner (Kaviraj) named Sri Goyeswar Chandra was using the juice obtained from crushed roots of the plant to treat eye disorders like conjunctivitis, cataract, and night blindness. Juice was applied directly to eyes. While the nature of the eye disorders treated varied widely, the Kaviraj claimed success in his treatment, which was echoed by his patients. The plant was identified as *Asparagus racemosus* (Fig 1). Since this was a novel use of the plant, the plant was photographed and plant specimen identification confirmed at the Bangladesh National Herbarium, where it was given an Accession Number of 45333.

Keywords: medicinal plants, *Asparagus racemosus*, eye disorders

Declaration of conflict of interest

No conflict of interest associated with this work.

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Figure 1. *Asparagus racemosus*