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Ethnopharmacological Note

## Achyranthes aspera L. (Amaranthaceae): a plant for treatment of multiple disorders

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Achyranthes aspera L. (Amaranthaceae) is known in English as prickly chaff flower and in Bengali as chirchiry. It is a herbaceous plant and commonly found in Bangladesh. In Ayurveda, the plant is known as apamarga, and used to treat hemorrhoids, coughs, asthma, anemia, jaundice, earache, skin diseases, and snake bite (Hasan, 2014). An Ayurvedic medicine prepared from the plant, named Kshara, is used to treat fistula, obesity, and tumors. Other Ayurvedic medicines utilizing this plant include Gorochanadi gulika, used for thetreatment of pneumonia, coughs, cold, bronchitis, asthma, and diseases of throat, and Jyotishmati oil, which is used for the treatment of leucoderma. The people of Bajua danga village, Jessore district, Bangladesh, use the roots of the plant to treat leucorrhea and menstrual problems; the Chak tribe of Bangladesh uses the roots to treat menstrual and lower abdominal pain (Hossan et al., 2010). In Kishoregani district, Bangladesh, the roots are used for the treatment of pain (Sultana et al., 2015). Roots of the plant are also used in Bangladesh with leaves of Cynodon dactylon to treat menstrual disorders (Afrooz et al., 2017). Further uses of the leaves and roots of the plant were documented from a folk medicinal practitioner practicing at Nowali village, Monirampur, Jessore district, Bangladesh. The practitioner was named Haidar Ali, male, 60 years of age and practicing for 37 years. The practitioner prescribes oral intake of leaf or root juice for sexual disorders, gonorrhea, any kind of pain, eye problems, dysentery, constipation, and weak heart. Interestingly, the methanol extract of the plant inhibited the growth of Staphylococcus aureus, Bacillus subtilis and Salmonella typhi; chloroform extract inhibited the growth of Staphylococcus aureus and Salmonella typhi; n-hexane extract showed growth inhibition against Staphylococcus aureus, Escherichia coli, and Bacillus subtilis (Naidu et al., 2006). The use of the plant against weak heart as well as eye problems merits attention from researchers. The plant contains an alkaloid, achyranthine, which can cause dilation of blood vessels, lower blood pressure, and increase the rate and amplitude of respiration (Srivastav et al., 2011).

Key words: Tylphora indica, asthma, prutitus

## **Declaration of conflict of interest**

We have no conflict of interest to declare.

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Figure 1. Achyranthes aspera