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Ethnopharmacological Note

### ***Tectaria variolosa* (Wall. ex Hook) C. Chr. (Dryopteridaceae) – previously unreported use of the fern species against diabetes and swelling of legs**

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*Tectaria variolosa* (Wall. ex Hook) C. Chr. is a fern species belonging to the Dryopteridaceae family and also known by its synonym, *Tectaria impressa* (Fée) Holttum. The fern can be found in the Rema Kalenga Wildlife Sanctuary, in Chunarughat of Habiganj district, Sylhet Division, Bangladesh. A survey of medicinal plants present within the Sanctuary area revealed the fern, whose medicinal uses were obtained from a local folk medicinal practitioner, Md. Atiyar Gazi. The plant was photographed and identified at the Bangladesh National Herbarium (Accession Number 43729). The folk medicinal practitioner mentioned that he uses the leaves of the fern to treat diabetes and swelling of legs (peripheral edema). Diabetes is not diagnosed by him; he is dependent on allopathic doctors for diagnosis. However, leg swelling is diagnosed by him directly though he is not aware of underlying causes like circulatory system problem, lymphatic system problem or kidney failure. It may be pointed out that diabetes itself can cause kidney complications resulting in edema of legs. Treatment consisted of orally partaking leaf juice for at least 3 months to control blood sugar and to cure any leg swellings. A perusal of the literature revealed that there are no reported ethnomedicinal uses of this fern species, either in Bangladesh or in any other country of the world. However, antibacterial activity has been observed with rhizome extract of this fern (Nath et al., 2016). It appears that *Tectaria* species have not been well-studied as to their phytochemical contents or pharmacological properties. *Tectaria cicutaria* rhizome extract reportedly demonstrated anti-inflammatory effects both *in vitro* and *in vivo* (Choudhari et al., 2013). The use of other Dryopteridaceae family ferns in folk medicine is not uncommon in Bangladesh. Whole plants of *Diplazium esculentum* (Retz.) Sw. has been reported to be used against diabetes, skin disorders, and dysentery (Rahmatullah et al., 2011). Thus this family may prove to be a useful source of antidiabetic species.

**Keywords:** medicinal plants *Tectaria variolosa*; diabetes

#### **Declaration of conflict of interest**

No conflict of interest associated with this work.

## References

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Figure 1. *Tectaria variolosa* (Wall. ex Hook) C. Chr.