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Ethnopharmacological Note

***Pronephrium articulatum* (Houlston & T. Moore) Holttum (Thelypteridaceae) – a plant with hitherto unreported antidiabetic uses**

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Rema Kalenga Wildlife Sanctuary in Sylhet Division, Bangladesh is a relatively unfrequented spot of forest area in the northeast portion of the country. This is a dry and evergreen forest and is located in Chunarughat of Habiganj district, which falls within Sylhet Division. The floral species of the forest have begun to be identified by various groups including Bangladesh National Herbarium in recent years. However, a number of plant species present in the Sanctuary are used by local traditional medicinal practitioners and most of these medicinal uses remain to be documented. In recent months, we had been focusing on Rema Kalenga Sanctuary for possible findings of novel uses of medicinal plants, which plants themselves may have remained undocumented ethnomedicinally. In the process, we came across a local folk medicinal practitioner named Md. Atiyar Gazi, male, and more than 70 years in age. Mr. Gazi had been using a number of floral species found within the Rema Kalenga Sanctuary in his practice spanning more than four decades. After thoroughly informing Mr. Gazi about the nature of our visit, Mr. Gazi (also known by the local name for a folk medicinal practitioner as Kaviraj) consented to give information on the medicinal uses of a few plants and further agreed that we can disseminate this information both nationally and internationally. Since Mr. Gazi was not fluent in English, all interviews were conducted in the Bengali language, which was spoken by both the Kaviraj as well as the interviewers. All plants mentioned by the Kaviraj were shown to us by him. Plants were photographed and specimens collected for later identification at the Bangladesh National Herbarium at Dhaka. One of the medicinal plants shown by the Kaviraj was identified as *Pronephrium articulatum* (Houlston & T. Moore) Holttum (Figure 1) belonging to the family Thelypteridaceae Herbarium Accession Number 43732). The Kaviraj uses leaves of the plant to treat diabetes. Leaves are crushed between two pieces of stone to obtain juice, which is filtered with a piece of clean cloth. 120 ml of juice is taken orally with 50 ml honey and 1g 'kalijira' (seeds of black cumin or *Nigella sativa* L., family: Ranunculaceae) in the evening. This is done every day for 3 months. The Kaviraj mentioned that diabetes is not diagnosed by him; he relies on diagnosis at a modern clinic for diabetes confirmation. The Kaviraj is also not aware of different types of diabetes. It may be mentioned that there are no previous ethnomedicinal reports on *P. articulatum*. *N. sativa* is considered scientifically as one of the best herbs to control diabetes in addition to hypolipidemic and hypotensive properties and as such to treat not only diabetes but also metabolic syndrome (Ghorbani, 2013). It would be interesting to see whether the combination of the

two plants, namely *P. articulatum* and *N. sativa* can prove to be an effective remedy for metabolic syndrome. According to the Kaviraj, *P. articulatum* can also be used to control hunger and so may prove to be a useful plant to control obesity.

Keywords: medicinal plants *Pronephrium articulatum*, diabetes

Declaration of Conflict of Interest

No conflict of interest associated with this work.

Reference

Ghorbani A (2013) Best herbs for managing diabetes: A review of clinical studies. *Brazilian J. Pharmaceut. Sci.* 49(3): 413-422.

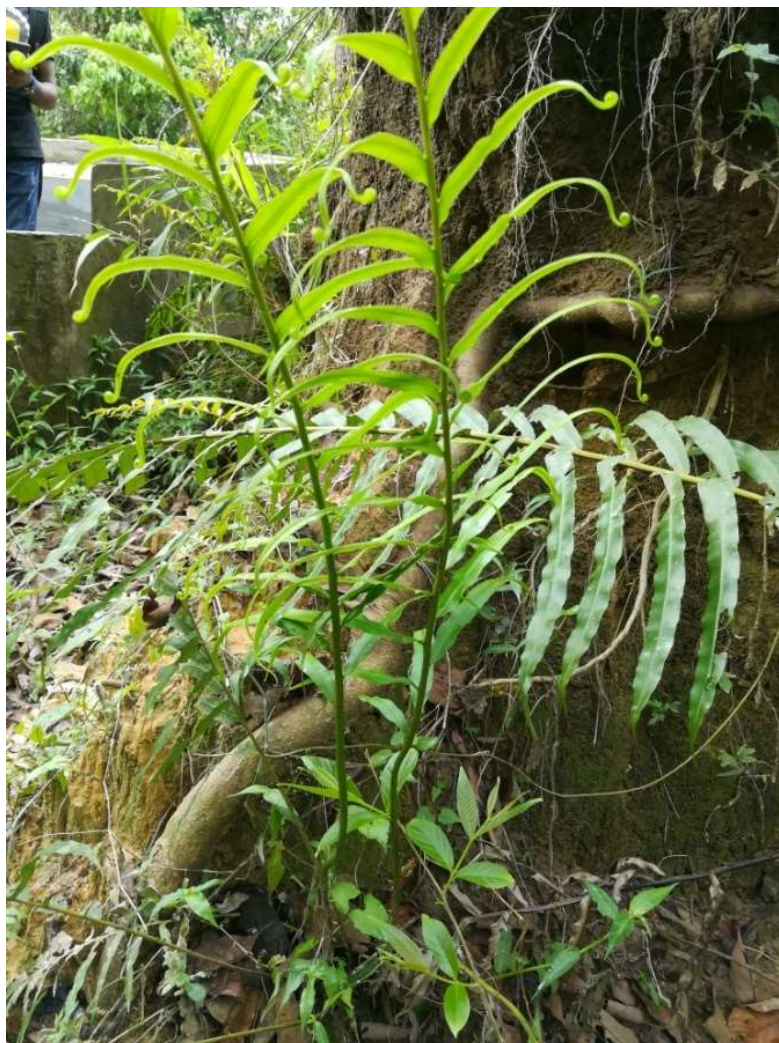


Figure 1. *Pronephrium articulatum* (Houlston & T. Moore) Holttum