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Ethnopharmacological Note

## Note on the Use of *Caesalpinia nuga* (L.) Aiton against malaria by Chak tribal healers of Bangladesh

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Bandarban district is in the Chittagong Hill Tracts region – an area of low hills and dense forests in the southeast part of Bangladesh. The region is the home of several major and minor tribes of Bangladesh, including the Chak tribe, which is sometimes confused with the Chakma tribe – a much larger tribe of the region. In an ethnomedicinal survey conducted among the Chak tribe and its tribal medicinal practitioners, an unusual use of the seeds of *Caesalpinia nuga* (L.) W.T. Aiton (Fabaceae family) was noted, which is reported here. The tribal practitioners took three seeds of the plant (local name *Krung khai*), powdered then and administered the powder with water orally only once, which they claimed to cure malaria and fever completely. The Chak tribal healer from which the formulation was received did not want to name himself. The plant was identified by Mr. Monjur-Ul-Kadir Mia, ex-Principal Scientific Officer and Curator of the Bangladesh National Herbarium. Plant specimen was deposited at the Medicinal Plant Collection Wing of the University of Development Alternative (Accession Number 917/2016). *Caesalpinia* is a genus of flowering plants within the Fabaceae family. The synonym of the plant is *Caesalpinia crista* L. and apart from Chittagong Hill Tracts region, the plant (which is actually a moderately sized deciduous tree) apparently has not been reported from anywhere else in Bangladesh. In Indian traditional medicinal system like Ayurveda, roasted seed powder of the plant along with pippali (1:1) and honey (pippali is fruit of *Piper longum* L., Piperaceae family, combination of seeds of *C. nuga* and fruits of *P. longum* is known as Latakaranja) is considered an effective medication for malarial fever (Suryawanshi & Patel, 2011). The seeds of the plant reportedly contain cassane and norcassane type diterpenes, which may be responsible for anti-malarial activity (Kalauni et al., 2006; Kumar et al., 2014; Liu et al., 2015). As such, the seeds of the plant merit further research for isolation and identification of components effective against malarial fever and anti-plasmodial activity.

### References

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Figure 1. *Caesalpinia nuga* (L.) Aiton and its fruit pods.