



Dorstenia christenhuszii (Moraceae), a new species from the Taita Hills, Kenya

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Abstract

At the Mbololo locality of the endemic African violet (*Streptocarpus teitensis*, Gesneriaceae) in the Taita Hills, Kenya, a new species of *Dorstenia* (Moraceae) was discovered. It is described here and illustrated with photographs.

Introduction

The Taita Hills in southeastern Kenya belong to the chain of Eastern Arc Mountains that rise from the surrounding plains (of ca. 600–700 m elevation) to a series of peaks and ridges, with the highest point being Vuria (2208 m). The soils are deep and low in nutrients; they have a low pH and poor water-holding capacity. The Taita Hills are under the influence of the intertropical convergence zone that brings heavy rains twice yearly (April and November), but more important to the peaks are year-round rain-bearing clouds blown in from the Indian Ocean. At elevations above 1500 m, the natural vegetation is characterised as secondary moist to intermediate forest, but the majority of the land is now used for agriculture or forestry; native forest patches are small and remain only on a few hilltops (Aerts *et al.* 2011, Beentje 1988).

The Eastern Arc Mountains, classified as one of the world's 25 most important biodiversity hotspots (Myers *et al.* 2000), extend from Kenya into Tanzania. There are many species shared by Taita with the Usambara Mountains, which lie just across the border in Tanzania. The once continuous forests were interrupted due to development of a drier climate in the lowlands, and this isolation has resulted in recent radiations of endemic taxa. Most notable are the narrow endemics like *Meineckia ovata* (E.A.Bruce) Jean F. Brunel (syn.: *Zimmermannia ovata* E.A.Bruce; Phyllanthaceae), which is restricted to a small patch in northern Ngangao, and an endemic African violet, *Streptocarpus teitensis* (B.L.Burtt) Christenhusz (2012: 8; syn.: *Saintpaulia teitensis* B.L.Burtt; Gesneriaceae), which is restricted to wet rocks in eastern Mbololo. In addition, *Memecylon teitense* Wickens (Melastomataceae) and the native coffee, *Coffea fadenii* Bridson (Rubiaceae), occur in both Ngangao and Mbololo (and also in the Pare Mountains, Tanzania), but are only frequent in Mbololo. The forest tree community of Mbololo differs significantly in composition from other Taita Hills forest fragments. Typical indicator tree species for this fragment are *Chrysophyllum gorungosanum* Engl., *Coffea fadenii*, *Cynometra* sp., *Heinsenia diervilleoides* K.Schum., *Sorindeia madagascariensis* DC. and *Strychnos mitis* S.Moore.

Unfortunately, these forests have suffered heavy loss caused by ever increasing human population, resulting in a 98% decrease of the indigenous forest cover. The remaining forest patches are small, often less than 5 ha, and on hilltops. Therefore, saving these areas from further human interference should receive priority.

In February 2012, an expedition to the Taita Hills, Kenya, was carried out to study the fern diversity and extent and current status of the natural forests and to collect seeds and cuttings of endangered native plant species. Mbololo, Ngangao, Vuria and Yale were visited. On the eastern slopes of Mbololo around 1600 m