

**An investigation on the potential interactions between *Colophospermum mopane*  
and its neighbouring understory vegetation.**

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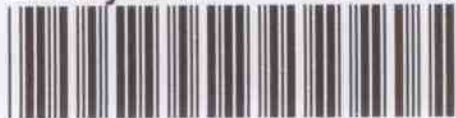
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## Abstract

*Colophospermum mopane* is a common tree or shrub locally dominant in savanna of sub-tropical region. A study of this tree species was carried out focussing on the two semi-arid areas where it is dominant and prevalent; the main areas considered for this current study are Mopani Bushveld and Tshiungani both located in the Limpopo Province of South Africa. The study focussed mainly on the interaction of *C. mopane* and its understory and nearest neighbour vegetation; the study also considered the response of *C. mopane* to disturbance and also on the plant-animal interactions; the reproductive strategies of *C. mopane* also formed part of this current work. The competitive interactions were established by this study wherein a complete permanent removal of *C. mopane* resulted in the growth, establishment and flourishing of grasses and herbs in the stands that were formerly dominated by *C. mopane* trees. Cutting of *C. mopane* trees revealed that they indeed do resprout vigorously thereafter following rainfall; it was also proved that root suckering is another strategy which *C. mopane* trees use for survival especially after fire. Our current work also revealed that *C. mopane* trees produce abundant amount of seeds and seedlings and this was more obvious immediately after rainfall.

Moisture and light, amongst other environmental factors, are indeed therefore indispensable for the continuous existence and survival of *C. mopane* trees; these factors are also necessary for the continuous coexistence of *C. mopane* and its understory and nearest neighbour vegetation.

Our study established the need for rainfall to keep our mopane woodlands germinating, growing, establishing, producing and reproducing perpetually; rainfall in *C. mopane* dominated stands areas ensures sustained coexistence of *C. mopane* and vegetation of other species.