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Calotropis procera: A New Investment for African Drylands

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Abstract

Calotropis procera, commonly known as milkweed, is an evergreen dry land shrub native to tropical Africa. In some of the dry parts of the Sahel, it is sometimes the only green plant in sight. The local communities have limited use for the species except for some traditional medicine applications and cheese making. However, the potential of using the fibre from mature fruits has aroused interest on the species. Preliminary analysis have shown that the fibre has good quality for the textile industry comparable to silk. For a sustainable C. procera based fibre industry, there is need to "domesticate" the species to ensure optimal quality and quantities. As a cultivated plant, the species will offer hope of growing a cash crop in regions with minimal where no other cash crop survives. In addition, its leaves have shown good potential for use as high quality livestock fodder. Communities in the semi-arid and arid areas of sub-Saharan Africa are adversely being affected by the impact of climate change; with reduced annual rainfall, few crops that used to grow in the region can no longer grow to maturity due to the prolonged. Interestingly, C. procera still thrives in these drylands showing its resilience to this extreme conditions. It will therefore offer hope to improve livelihood for the resource poor farmers as well as reduce environmental degradation as a ground cover. ICRAF is leading the species domestication project in Kenya with partners in China assessing the fibre quality for textile industry. Preliminary findings towards the domestication of C. procera are presented here.

Keywords: Calotropis procera, domestication, fiber, fodder, sub-Saharan Africa, textile industry