

JATROPHA CURCAS IN SUB-SAHARAN AFRICA: THE BIG ILLUSION?

Guy Mergeai^{1,2}, M. Terren^{1,3}, P. Jacquet de Haveskercke³, S. Saverys³

¹*University of Liège, Gembloux Agro-Bio Tech, Gembloux, Department of Tropical Crop Husbandry and Horticulture, Belgium.*

²*Aide au Développement Gembloux, Gembloux, Belgium.*

³*Durabilis Foundation, Ghent, Belgium.*

gmergeai@ulg.ac.be

Jatropha curcas L. is claimed to be a hardy drought-tolerant and pest-resistant shrub that reclaims the land, prevents erosion, and responds better to organic manure than chemical fertilizers. These properties make this plant suitable to be cultivated by small farmers on marginal land. In a global context of increase of fossil energy prices, the putative qualities of *J. curcas* have motivated the set up of large plantation schemes in sub-Saharan Africa and in most tropical areas of the world. These plantations should contribute to provide the energy indispensable to local development, and increase employment and income opportunities for local populations through contract farming. The performances of *J. curcas* plantations were monitored in three African countries (Senegal, Benin, Congo Democratic Republic) in the framework of research-development projects aiming at determining the real potentialities of the crop to contribute to poverty alleviation in sub-Saharan Africa. The results obtained put in evidence a very high variability for the yields obtained with local plant material after three years of cultivation, in rainfed and in irrigated conditions. In all locations the yields obtained are much lower than expected according to the figures available in literature three years ago. The crop is attacked by pests and sometimes diseases in all the locations where it is cultivated. Some of these biotic constraints threaten the survival of the plants to a scale that prevent any hope of profitable dissemination of *Jatropha* cultivation in the short term (notably in the Senegal river valley). These preliminary results question the whole profitability of the cultivation of *J. curcas*. The conditions to be met to allow the profitable cultivation of the crop by small scale farmers in sub-Saharan Africa in order to become an effective pro-poor development tool are discussed.