

## **A PROMISING ENERGY CROP FOR RURAL DEVELOPMENT: IMPROVEMENT OF *JATROPHA CURCAS* AGRO-PRACTICES**

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*Jatropha curcas* L. is a valuable multipurpose crop and has recently gained lot of importance for the biodiesel production and secondary products such as soap, fertilisers, bio-pesticides, cosmetics, and medicine. The integration of *J. curcas* into rural economies in developing countries, through extensive plantations in marginal lands or intercropped agro-silvo-pastoral systems, could be an effective strategy to reduce local community dependence on imported energy resources, generate employment opportunities, and enhance their livelihoods.

*J. curcas* is a perennial drought-resistant plant well adapted to marginal lands in arid and semiarid and tropical regions. Furthermore, this energy crop offers the ecological advantage to mitigate soil degradation and desertification and to reclaim wasteland. Although the increasing global interest on this energy crop *J. curcas* physiological characteristics and its agronomic management practices are not thoroughly unravelled.

This contribution will highlight some *J. curcas* research challenges within the framework of an EU-AID international cooperation project implemented in Ghana. In order to improve the knowledge of *J. curcas* agronomical management practices, which could be transferred to the local Ghanaian rural communities, several agronomic experimental works are being carried out at Kwame Nkrumah University of Science and Technology's Agricultural Research Farm at Awomanso, (Kumasi, Ghana). Two-year-experiment outcomes on the evaluation of *J. curcas* local germplasms, of the most suitable generative propagation systems (direct seed vs pre-cultivated seedlings), and of *J. curcas* effects on intercropping system with *Arachis villosulicarpa* and *Zea mays* are discussed.