

Propagation, cultural practices, genetic and biochemical diversity of two medicinal plant species, Croton membranaceus and Cryptolepis sanguinolenta (Junior Fellowship: Dr. Naalamle Amissah)

Initiative: Wissen für morgen – Kooperative Forschungsvorhaben im subsaharischen Afrika (beendet)

Ausschreibung: Postdoctoral Fellowships "Resources, their Dynamics and Sustainability - Capacity-Development in Comparative and Integrated Approaches"

Bewilligung: 08.02.2011

Laufzeit: 3 Jahre

Croton membranaceus and Cryptolepis sanguinolenta are two medicinal plant species with restricted distribution in the West Africa region that are on the verge of extinction. Root extracts of Croton membranaceus are used to treat measles and urine retention problems, while Cryptolepis sanguinolenta have been found to have anti-malarial, anti-microbial and anti-hyperglycemic properties. The goal of this project is to identify populations with high bioactive compounds, assess genetic diversity and develop propagation and cultivation protocols for their domestication. The concentration of bioactive compounds and percentage composition of the active ingredients in the plants will also be determined. Anti-malaria activities of C. sanguinolenta bioactive compounds would be assessed. The effectiveness of C. membranaceus decoctions will be determined using the MTT assay protocol. It is expected at the end of this research that natural habitats of C. membranaceus and C. sanguinolenta with high concentration of the bioactive compounds would be identified. Propagation, cultural and management practices for the above mentioned species would be developed.

Projektbeteiligte

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