

## **Potential of endophytic fungi for controlling pests and diseases in traditional cacao agroforests of Cameroon (Junior Fellowship: Dr. Hervé Bisseleua)**

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Cacao plantations form an integral part of the rural landscape in southern Cameroon and provide an important source of income for smallholder farmers, specifically at the pristine forest/agricultural area interface. In this project we address the question how removal of shade trees and intensification of cacao production interact with endophytic fungi, known to induce resistance against pests or diseases on cacao trees. We will use cacao plots along a rainfall gradient and manipulative experiments using shaded and non-shaded cacao trees to address the question how these endophytic fungi may be manipulated for biological control services, to be implemented in certification standards for "rainforest friendly" cocoa production. Specifically we will test the antagonistic potential of strains of these endophytes against the most prevailing problems, the cacao mirids and the black pod disease (BPD). Furthermore, we will manipulate ants to act as spore disseminators on the cacao trees. The new management technologies will be successfully disseminated by way of pilot demonstrations, farmer group meetings, radio programmes, leaflets and posters, national and international meetings, websites and manuals, as well as through local and international publications.

### **Projektbeteiligte**

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