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## BOOK OF ABSTRACTS


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# Studies of the *Baracoffea*: Malagasy coffee trees growing on the West Coast of Madagascar

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## RATIONALE

In Madagascar, the deforestation and other anthropogenic activities have caused a strong fragmentation of the forest and have considerably modified the natural forest ecosystems. One of the direct consequences is that nearly 75% of Malagasy coffee species are classified as vulnerable, threatened or highly endangered according to the list of the International Union for Conservation of Nature (IUCN), among these coffee species is the *Baracoffea* group (*Coffea* subgenus). Baracoffea species are known to present remarkable adaptation to drought and spectacular large seed sizes.

## METHODS

An ecological study was carried out: floristic inventory; analysis of vegetation cover; numerical abundance; natural regeneration rates, associated species and study of the distribution of these species.

## RESULTS

The objective of this work is to characterize the species diversity of the *Baracoffea* group in the western region of Madagascar in view of its IUCN status, particularly in the city of Mahajanga and to characterize their ecological requirement in order to be able to give recommendations for its conservation. It was revealed from this study that 3 *Baracoffea* species are present near the town of Mahajanga, such as: *Coffea ambongensis*, (in the forest of Antsanitia), *C. boinensis* (in the forest of the National Park Ankarafantsika) and *C. bissetiae* (in the forest of Antsanitia and in the National Park Ankarafantsika). The most favorable habitat for these species appears to be the dense deciduous semi-deciduous forest with a semi-open cover, resting on a ground of sandy nature with orange sand. The associated families are Annonaceae (25.95%), Fabaceae (16.79%) and Rubiaceae (16.03%).

## CONCLUSIONS & PERSPECTIVES

The population of this group of *Baracoffea* is very restricted in its natural environment which implies a real threat of extinction. In order to preserve these coffee trees, an ex-situ conservation must be implemented urgently in Mahajanga. Finally, phylogenetic analyses will have to be carried out in order to compare the evolutionary relations of the coffee bushes with the other coffee trees.