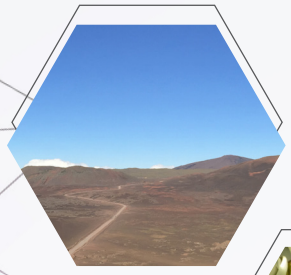
BOOK OF ABSTRACTS
POSTERS

Island BIOLOGY



La Réunion
8-13 JULY

2019

Université de la Réunion
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Third International Conference on Island Ecology, Evolution and Conservation

8-13 July 2019
University of La Réunion
Saint Denis, France

Editors: Olivier Flores, Claudine Ah-Peng, Nicholas Wilding

Rapid assessment of plant invasions in natural and semi-natural forest habitats in Grande Comore island

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Comoros archipelago is a biodiversity *hot spot* characterized by a relatively dynamic land use change. Natural forests in these islands are exposed to serious anthropogenic-induced threats with severe impacts on the structure of biodiversity. Among these, biological invasions by exotic plants remain a serious problem that hinders the conservation of native vegetation in Comoros. It is therefore necessary to establish management priorities for these forest remnants, but reference data barely exists on the invasion level of forest habitats by plants in the archipelago. In this study, we focus on the island of Grande Comore and specifically address the two following questions: (*i*) which plant species are the most invasive and (*ii*) what are the invasion level of different forest habitats? This study has been conducted on exotic woody plants. Surveys were targeted at lowland and sub-mountain forests on 44 transects of 150 X 10 m from 23 to 1047 asl. Transects were divided in sections of 30 m to facilitate the recording of species invasion levels, habitat types and land use. Sampling was carried out on individuals whose size was superior to 1 m. Major invasive plants in natural and semi-natural forests include *Psidium cattleianum*, *Clidemia hirta*, *Furcraea foetida, Rubus rosifolius* and *Syzygium jambos*. In term of habitats, lowland forests have been cleared and replaced by plantations (coconut and / or fruit trees). The sub-montain forests dominated by native species of *Nuxia*, *Ocotea* and *Tambourissa* are typically uninvaded in their canopy whereas sub-mountain forests dominated by *Weinmannia* is invaded in the understory and the canopy. The results obtained represent the first assessment of plant invasion in forests on Grande Comore. In order to define management priorities, it is necessary to expand these surveys. Results of this study will contribute to improve decision-making for the National Park program in Comoros.

Keywords: exotic woody plants, Madagascar and Indian Ocean biodiversity hot spot, forest habitat, anthropogenic disturbances, island conservation

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