

Abstract for the BioAsie Program Meeting
'Extraction, characterization and optimization of bio-molecules from by-products of the Asian timber'
25th to 27th April, 2017
Université de Lorraine, Nancy, France

ENDEMIC TREE SPECIES EXTRACTS ASSESSMENT FROM MARQUESAN PHARMACOPOEIA AND PHARMACOPOEIA

26 avril 2017, 10h00
Faculté des Sciences et Technologie,
Salle de réunion du LERMAB,
entrée 4A, 3^{ème} étage

Phila RAHARIVELOMANANA

University of French Polynesia,
EIO UMR 241, Faa'a, French Polynesia
e-mail: phila.raharivelomanana@upf.pf

An ethnobotanical survey was performed in Marquesas archipelago (French Polynesia) to record medicinal and cosmetic traditional uses of plants. Few endemic plants are used for medicinal and cosmetic preparations.

Taken as examples, phytochemical properties of extracts from endemic trees from Marquesan cosmetopoeia (*Santalum insulare* and *Rauvolfia nukuhiensis*) assessed from a multidisciplinary approach will be presented and so showing their potential. These two endemic plants are endangered species and the properties of their constituents provided strong arguments to promote preservation programs of these patrimonial plants.

Santalum insulare (Santalaceae), an endemic Marquesan species is locally called "puahi". Its heartwood had been used as a perfume ingredient for centuries and contains a highly prized essential oil. Volatile constituent composition of this sandalwood showed the occurrence of two chemotypes. Kernels of this sandalwood species contains interesting polyunsaturated fatty acid (PUFA) content having valuable potential for cosmetic ingredient.

Rauvolfia nukuhiensis (Apocynaceae), locally called "tu'eiao", is currently used as traditional medicinal plant for women intimate care. The phytochemical study of alkaloid content of *R. nukuhiensis*, led to the identification of thirteen indole alkaloids unusually belonging to different skeletons (ajmalan, sarpagan, macrolin and β -carboline).

The cytotoxicity of the isolated components as well their inhibiting effects on hERG channel activity were evaluated, so showing their inhibiting effects.

