

# Studies on unused medicinal resources in africa, occurrence of sulfur compounds in cassipourea genus in kenya

Kato, Atsushi; Ichimaru, Momoyo; Matsukawa, Motomi; Moriyasu, Masataka; Fukuoka, Nobuyuki; Kishida, Kesa; Ogeto, J.O; Juma, Francis D.

## Abstract:

In the current research, the inland genus *Cassipourea* of Rhizophoraceae in Kenya was pinpointed as a target for developing new medicinal resources. The field work on four species of *Cassipourea*, i.e. *Cassipourea malosana*, *C. gummiflua*, *C. euryoides*, and *C. celastroides* was carried out during three months in 1987, which all are grown in different habitats each other. It was proved with detective indicator (PdCl) at field work that the barks of these trees contain some sulfur compounds as we had expected. The plant materials transferred from field to laboratory provided some sulfur compounds as result of chemical studies such as isolation of compounds and determination of their structures. These compounds were such various alkaloid a pyrrolidine and pyrrolizidine possessing 1,2-dithiolane ring and bisdi-sulphide bridge system respectively. Among the alkaloid two new pyrrolidine alkaloids named guinesine-D and euryoidine have been isolated from *Cassipourea euryoides*. Guinesine-D has also been found in *C. celastroides*. Another new pyrrolizidine alkaloid named isocassipourine have been isolated from *C. malosana* and *C. gummiflua*, For these three compounds, structure 1. 8 and were Proposed respectively on the basis of spectroscopic evidence