

**SYNERGY OF CHEMOTAXONOMY AND PHYLOGENY  
IN SYSTEMATICS OF MARINE RED ALGAE GENUS  
LAURENCIA IN THE SULU SULAWESI CORAL  
TRIANGLE REGION OF MALAYSIA**

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## ABSTRACT

### **SYNERGY OF CHEMOTAXONOMY AND PHYLOGENY IN SYSTEMATICS OF MARINE RED ALGAE GENUS LAURENCIA IN THE SULU SULAWESI CORAL TRIANGLE REGION OF MALAYSIA**

Chemistry of halogenated compounds from *Laurencia* is a very interesting area of research and it never fails to offer the possibility of discovering new compounds with novel structure and properties. Malaysian waters are rich with many species of *Laurencia*, but very few are documented and even fewer findings are published pertaining to their chemistry. During our chemical investigation of *Laurencia* species from the coastal water of Borneo, we have reported here the chemical composition of *L. similis*, *L. snackeyi*, *L. majuscula* and *L. nangii*. This is the first report on the composition of secondary metabolites and their activities in 4 major *Laurencia* species from the coastal waters of North Borneo Island of Sabah, Malaysia. Our initiative pertaining to the isolation and identification of secondary metabolites from Bornean *Laurencia* continues to excite us, with the isolation of wide diversity of structurally interesting metabolites. Our finding here suggests that chemical races may be present in *L. snackeyi*, *L. majuscula* and *L. nangii*. This is an important new source report that would lead to further investigation involving cross breeding of the three chemical types to confirm the presence of new chemical race in Bornean *Laurencia*. Since taxonomic identification of *Laurencia* has been regarded as difficult and complex, presence and role of chemical markers in solving taxonomical complexity would decrease misidentification of morphologically similar populations.

