Halogenated metabolites with antibacterial activity from the Okinawan Laurencia species. Phytochemistry

Abstrak

The chemical compositions of five species of the red algal genus Laurencia from coastal waters of Okinawa Prefecture, Japan, have been investigated. A halogenated C(15) acetogenin, (12E)-lembyne-A, was isolated from L. mariannensis, and a halogenated sesquiterpene, (6R,9R,10S)-10-bromo-9-hydroxy-chamigra-2,7(14)-diene, was first found from L. majuscula as a naturally occurring compound. Laurencia nidifica yielded previously known laurinterol and isolaurinterol. Samples of L. cartilaginea and L. concreta afforded no halogenated metabolites. The structures of these halogenated metabolites as well as their antibacterial activity against some marine bacteria are reported.