

New molecular compounds found near Fiji

October 13 2005

Scientists have discovered 10 new molecular structures with pharmaceutical potential in a species of red seaweed near Fiji in the South Pacific.

The research team, led by Georgia Institute of Technology Professor of Biology Mark Hay, says some of the natural compounds indicate the potential to kill cancer cells, bacteria and the HIV virus. And scientists say two of the compounds exhibit anti-bacterial activity towards antibiotic-resistant Staphylococcus aureus.

The compound isolated in the greatest abundance -- named bromophycolide A -- killed human tumor cells by inducing apoptosis, or programmed cell death -- a mechanism that is promising for development of new anti-cancer drugs.

The findings on three of these compounds -- called diterpene-benzoate natural products -- are reported in the Oct. 12 online issue of the American Chemical Society journal Organic Letters. Information on the other compounds will be published at a later date.

The research was primarily funded by the Fogarty International Center at the National Institutes of Health.

Copyright 2005 by United Press International



Citation: New molecular compounds found near Fiji (2005, October 13) retrieved 10 April 2024 from https://phys.org/news/2005-10-molecular-compounds-fiji.html

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.