

## **Antibiotics from mangroves**

April 25 2014, by Darmarajah Nadarajah



Researchers at the Universiti Teknologi MARA in Malaysia have conducted a study on the mangrove ecosystem to search for actinomycetes bacteria. The mangrove ecosystem is known as a highly productive habitat for isolating actinomycetes, which has the potential of producing biologically active secondary metabolites.



The study focused on eight different mangrove sites in Malaysia, which were chosen at random to isolate and screen actinomycetes from <u>soil</u> <u>samples</u>. A total of 53 possible marine actinomycetes were isolated and it was found that a three percent concentration of <u>sodium chloride</u> was sufficient to support the growth of marine actinomycetes.

Among the isolated filamentous bacteria, five isolates showed antimicrobial activity from direct culture broth against at least one of the test organisms. Meanwhile, four extracts of <u>ethyl acetate</u> showed activity against Gram-positive test organisms. The results revealed that marine actinomycetes is a potential source for producing antibiotics.

Provided by Universiti Teknologi MARA (UiTM)

Citation: Antibiotics from mangroves (2014, April 25) retrieved 6 May 2024 from <u>https://phys.org/news/2014-04-antibiotics-mangroves.html</u>

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