



ChemTech

International Journal of ChemTech Research

CODEN(USA): IJCRGG, ISSN: 0974-4290, ISSN(Online):2455-9555
Vol.10 No.6, pp 281-288,2017

Antimicrobial activity of a mangrove *Streptomyces sp.M16*

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Abstract: An actinomycete isolate M16 was isolated by dry heat (70°C) pre-treatment method on starch casein agar media, from the soil sample that was collected nearer to the root region of the mangrove *Avicennia marina* from the back water area, Ariyankuppam, Puducherry (UT). Antimicrobial activity of isolate M16 was tested against twelve bacteria, eight multicellular fungi and a unicellular *Candida albicans*. Broad spectrum antimicrobial activity was confirmed by cross streak method. The isolate M16 was identified at genus level through the scanning electron microscopy and it was named tentatively as *Streptomyces sp.M16*. *Streptomyces sp.M16* was found to be active in having antibacterial, antifungal and anticandida properties.

Key words: Dry heat treatment, Antimicrobial activity, Agar plug, Cross Streak, Well Diffusion method, *Avicennia marina*, Mangrove Back water area.

T. Janaki/International Journal of ChemTech Research, 2017,10(6): 281-288.
