Antibacterial principles from Myristica fragrans seeds.

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Abstract

Nutmeg (Myristica fragrans) is used in food preparations for its aromatic flavor. The present investigation was undertaken to evaluate the antibacterial activity of constituents of M. fragrans seeds. Seeds of M. fragrans were powdered and extracted with chloroform to obtain trimyristin, which on saponification yielded myristic acid. The mother liquor remaining after separation of trimyristin was concentrated and column-chromatographed with petroleum ether to separate myristicin. Antibacterial activity of these isolated constituents was evaluated by determination of minimum inhibitory concentration against selected Gram-positive and Gram-negative organisms. All the constituents isolated from nutmeg exhibited good antibacterial activity. This study shows the potential of natural compounds in replacement of synthetic preservatives.

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