

Efomycins K and L from a termite-associated *Streptomyces* sp. M56 and their putative biosynthetic origin.

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*equal contribution



Abstract

Two new elaiophylin derivatives, efomycins K (1) and L (2), and five known elaiophylin derivatives (3-7) were isolated from the termite-associated *Streptomyces* sp. M56. The structures were determined by 1D and 2D NMR and HR-ESIMS analyses and comparative CD spectroscopy. The putative gene cluster responsible for the production of elaiophylin derivatives was identified based on significant homology to related clusters. Phylogenetic analysis of gene cluster domains was used to provide a biosynthetic rational for these new derivatives and to demonstrate how a single

biosynthetic pathway can produce diverse structures.

Beteiligte Forschungseinheiten

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Leibniz-HKI-Autor*innen



Christine Beemelmans

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Themenfelder

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