

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

Klassen JL, Lee SR, Poulsen M, Beemelmans C\*, Kim KH\* (2019) Efomycins K and L from a termite-associated *Streptomyces* sp. M56 and their putative biosynthetic origin. *Front Microbiol* 10, 1739.

[Details](#)

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## 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.

## Involved units

[Chemical Biology of Microbe-Host Interactions Christine Beemelmans](#) [Read more](#)

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## Topics

[Secondary metabolites from insect-associated microbes](#)

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