Abstract:

Secondary metabolism of Gram-positive soil bacteria from the genus *Streptomyces* is a inestimable source of natural products including manumycins, which belong to a polyketide group. These products possess weak antimicrobial, but important antiinflammatory, and antitumor activities. *Streptomyces* sp. offers broad amounts of yet undiscovered antibiotics, potentially utilizable in clinical medicine. This fact makes out of these organisms a promising solution to our present problem with rising antibiotic resistance among microorganisms. Two main ways are applied in this research: There are efforts of prepairing new derivates based on known products and creating various modifications in their structure. Next, new producers are discovered by “genome mining” methods, activation of silent gene clusters, followed by improvements of antibiotic production. One of those silent clusters was found in the *Saccharothrix espanaensis* DSM44229 strain. The genetic information has been transferred to a heterologous host in order to characterize its product. Cluster activation and production of novel manumycin-type metabolites occurred in the host after the transfer.