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## Diversity, anti-quorum sensing and antimicrobial activities of endophytic actinobacteria isolated from Mongolian plants

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With the aim to find endophytic actinomycetes that synthesize anti-quorum sensing (QS) compounds and antimicrobials over 1000 strains were isolated from plants of the desert and mountain areas of Mongolia. As a result, 11.9% of our actinomycetes strains were found to possess the anti-QS activity and 23.8% of the strains were active against gram positive and negative bacteria. These strains also showed anti-QS activity and antibacterial activity by bioautography assay. The 16 strains exhibiting the highest activity were analyzed by HPLC, which showed that all of them produced flavonoids and phenolic

compounds. These results suggest that those actinomycetes could be potential candidates for the production of unique biologically active compounds. Based on morphology and 16S rRNA gene sequences analysis, 84 actinomycete strains were assigned to the genera Streptomyces, Promicromonospora, Pseudonocardia, Nocardia, Saccharothrix, Friedmanniella, Micromonospora, Actinocatenispora and Geodermatophilus, thelattertwogenerawereregisteredinMongoliaforthefirsttime.

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