Biotransformation of Glabratephrin, a Rare Type of Isoprenylated Flavonoids, by Aspergillus niger


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Microbial transformation of glabratephrin, the major isolated compound from Tephrosia purpurea, afforded pseudosemiglabrin. The formation of the transformed compound seems to be performed via ring opening-closure of a five-membered ring causing transformation from a spiro into a fused system. The structure of the transformed compound was determined by comprehensive NMR studies, including DEPT, COSY, HMQC, NOE and MS.

Key words: Tephrosia purpurea, Microbial Transformation, Pseudosemiglabrin