

Taichunamides: Prenylated Indole Alkaloids from *Aspergillus taichungensis* (IBT 19404) - DTU Orbit (08/11/2017)

Taichunamides: Prenylated Indole Alkaloids from *Aspergillus taichungensis* (IBT 19404)

Seven new prenylated indole alkaloids, taichunamides A–G, were isolated from the fungus *Aspergillus taichungensis* (IBT 19404). Taichunamides A and B contained an azetidine and 4-pyridone units, respectively, and are likely biosynthesized from notoamide S via (+)-6-epi-stephacidin A. Taichunamides C and D contain endoperoxide and methylsulfonyl units, respectively. This fungus produced indole alkaloids containing an *anti*-bicyclo[2.2.2]diazaoctane core, whereas *A. protuberus* and *A. amoenus* produced congeners with a syn-bicyclo[2.2.2]diazaoctane core. Plausible biosynthetic pathways to access these cores within the three species likely arise from an intramolecular hetero Diels–Alder reaction.

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