Isolation of Notoamide S and Enantiomeric 6-epi-Stephacidin A from the Fungus Aspergillus amoenus: Biogenetic Implications

Notoamide S has been hypothesized to be a key biosynthetic intermediate for characteristic metabolites stephacidin A, notoamide B, and versicolamide B in Aspergillus sp. but has not yet been isolated. The isolation of notoamide S and an enantiomeric mixture of 6-epi-stephacidin A enriched with the (-)-isomer from Aspergillus amoenus is reported. The presence of (+)-versicolamide B suggests that the fungus possesses only the oxidase, which converts (+)-6-epi-stephacidin A into (+)-Versicolamide B, but not for (-)-6-epi-Stephacidin A.