



Naphtho- γ -pyrone derivatives from the soil-derived fungus

Aspergillus tubingensis PP2.2

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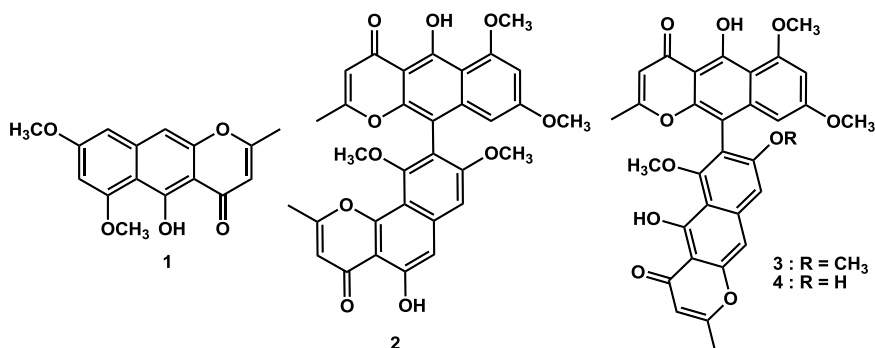
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Abstract: Soil-derived fungi in the genus *Aspergillus* produce various types of secondary metabolites which show wide range of biological activities. In our ongoing search for bioactive metabolites from soil-derived fungi, the mycelial extract of *A. tubingensis* PP2.2 displayed antimalarial activity against *Plasmodium falciparum* with an IC₅₀ value of 2.26 μ g/mL. It also possessed cytotoxic activity against KB (oral cavity cancer), MCF-7 (breast cancer) and Vero cell lines with IC₅₀ values of 5.81, 5.81 and 6.58 μ g/mL, respectively. Chemical investigation of the mycelial extract led to the isolation of four known compounds, rubrofusarin B (**1**), fonsecinone A (**2**), aurasperone A (**3**) and dianhydroaurasperone C (**4**). Their structures were elucidated by analysis of spectroscopic data, including IR, UV and NMR.



Keywords: Naphtho- γ -pyrone; Soil-derived fungus; *Aspergillus tubingensis*