

O-17: POLYKETIDES FROM THE MARINE-DERIVED FUNGUS *ASCOCHYTA SALICORNIAE* AND THEIR POTENTIAL TO INHIBIT PROTEIN PHOSPHATASES

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The marine-derived fungus *A. salicorniae* yielded two new compounds with a spiro-ketal substructure (**1**, **2**). Compounds **1** and **2** are structurally unique concerning their unusually substituted gamma-butyrolactone and tetrahydro furane moieties, respectively. Two further new metabolites, ascoclotones A and B (**3**, **4**), together with the structurally related polyketides ascochitine and ascochital were obtained. The absolute configurations of the epimers **3** and **4** were assigned through simulation of the chiroptical properties using quantum-chemical CD calculations and chiral GC-MS subsequent to oxidative cleavage of the side chain. In silico screening (PASS software) identified compounds **1** and **2**, as well as ascochitine and ascochital, as potential phosphatase inhibitors. To date, ascochitine and ascochital were tested against a range of protein phosphatases. Ascochitine was found to inhibit the enzymatic activity of MPTpB (*Mycobacterium tuberculosis* protein tyrosine phosphatase B) with an IC₅₀ value of 11.5 μM. Acknowledgements: Financial support came from the DFG, Graduate College GRK 677.

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