

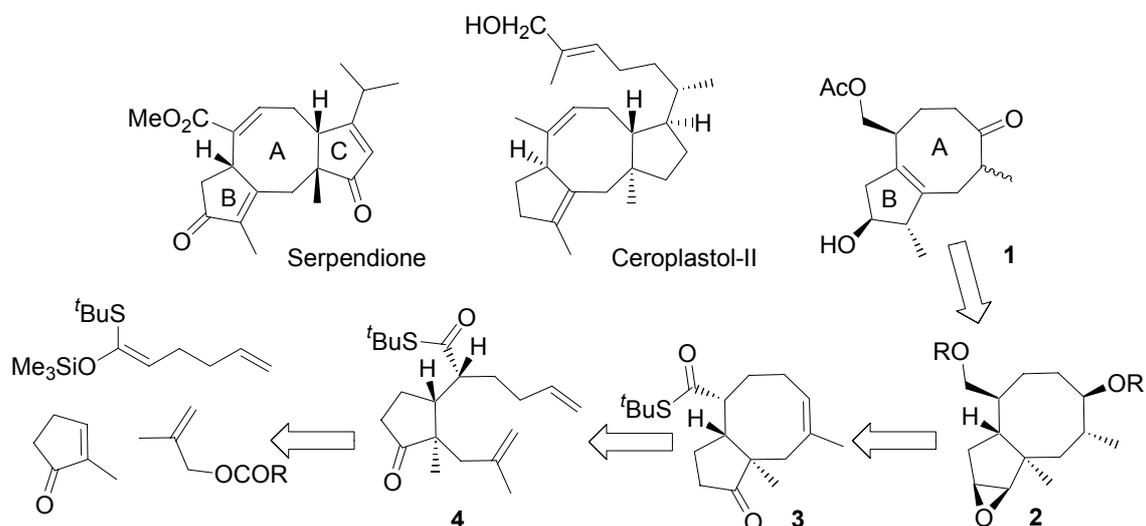
Studies Towards the Total Synthesis of Di- and Sesterterpenes with Dicyclopenta[*a,d*]cyclooctane Skeleton. A Three-component Approach to the Rings A/B Building Block

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Terpenoids of fusicoccane or ophiobolan - ceroplastol families, represented by serpendione¹ and ceroplastol-II,² were isolated from insect secretions, terrestrial plants, fungi and marine sources. Intriguing structural features and biological activity of certain fusicoccanes and ophiobolanes have stimulated interest in their total synthesis.³

The present work is focused on the synthesis of cyclopentaoctane derivative **1** which has been chosen as the key building block in the construction of terpenoid dicyclopenta[*a,d*]cyclooctane systems. The main transformations are illustrated in the scheme. Compound **3** was expediently obtained from common precursors using conjugate addition reaction in tandem with alkylation and ring closing metathesis reaction.



References:

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