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Total Syntheses of Sarcandrolide J and Shizukaol D: Lindenane Sesquiterpenoid [4+2] Dimers *Angew. Chem. Int. Ed.* **2017**, *56*, 637–640.

Syntheses of Sarcandrolide J and Shizukaol D

Significance: Liu and co-workers report the first syntheses of members of the family of lindenane sesquiterpenoid [4+2] dimer family of natural products. Despite their structural similarity, sarcandrolide J and shizukaol D were isolated from different plant species. The bioinspired synthetic strategy relies on a key Diels-Alder cycloaddition. **SYNFACTS Contributors:** Erick M. Carreira, Nicole Hauser Synfacts 2017, 13(03), 0227 Published online: 15.02.2017 **DOI:** 10.1055/s-0036-1589995; **Reg-No.:** C00117SF

Comment: Diels-Alder reaction of dienophile C and the diene generated in situ from D yielded the desired diastereomer F in 83% yield. Intermediate G was subjected to singlet oxygen to afford H after Kornblum-DeLaMare rearrangement. Lactone methylation and acetylation completed the syntheses of sarcandrolide J and shizukaol D, respectively.

Category

Synthesis of Natural Products and Potential Drugs

Key words

sarcandrolide J

shizukaol D

sesquiterpenoid [4+2] dimers

Diels-Alder reaction

Kornblum-DeLaMare rearrangement

singlet oxygen Diels-Alder reaction



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