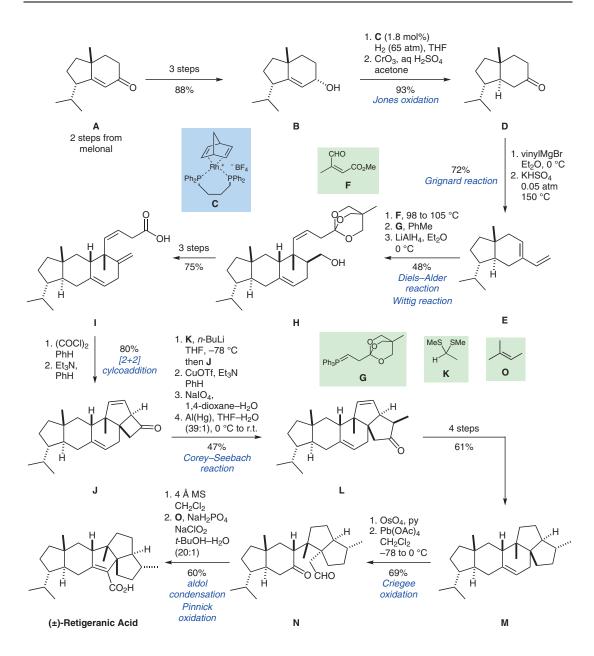
J. Am. Chem. Soc. 1985, 107, 4339-4341, DOI: 10.1021/ja00300a049.

## First Synthesis of (±)-Retigeranic Acid

E. J. COREY\*, M. C. DESAI, T. A. ENGLER (HARVARD UNIVERSITY, BOSTON, USA)



Significance: In 1985, Corey and co-workers reported the first racemic total synthesis of (±)-retiqeranic acid. The pentacyclic sesterterpene has eight stereocenters. The key to their synthetic strategy was the construction of the central fivemembered ring through a ring contraction sequence.

**Comment:** Carboxylic acid I was converted into the acyl chloride and after treatment with base, a [2+2] cycloaddition gave the ketone J. Cyclopentanone L was accessed by a ring expansion thereby assembling the carbon skeleton of (±)-retigeranic acid.

SYNFACTS Contributors: Erick M. Carreira, Sebastian Kölbl Synfacts 2024, 20(09), 0901 Published online: 16.08.2024 **Synthesis of Natural** 

(±)-retigeranic acid

sesterterpene Jones oxidation Grignard reaction Diels-Alder reaction Wittig reaction [2+2] cycloaddition Corey-Seebach reaction Criegee oxidation aldol condensation



Pinnick oxidation