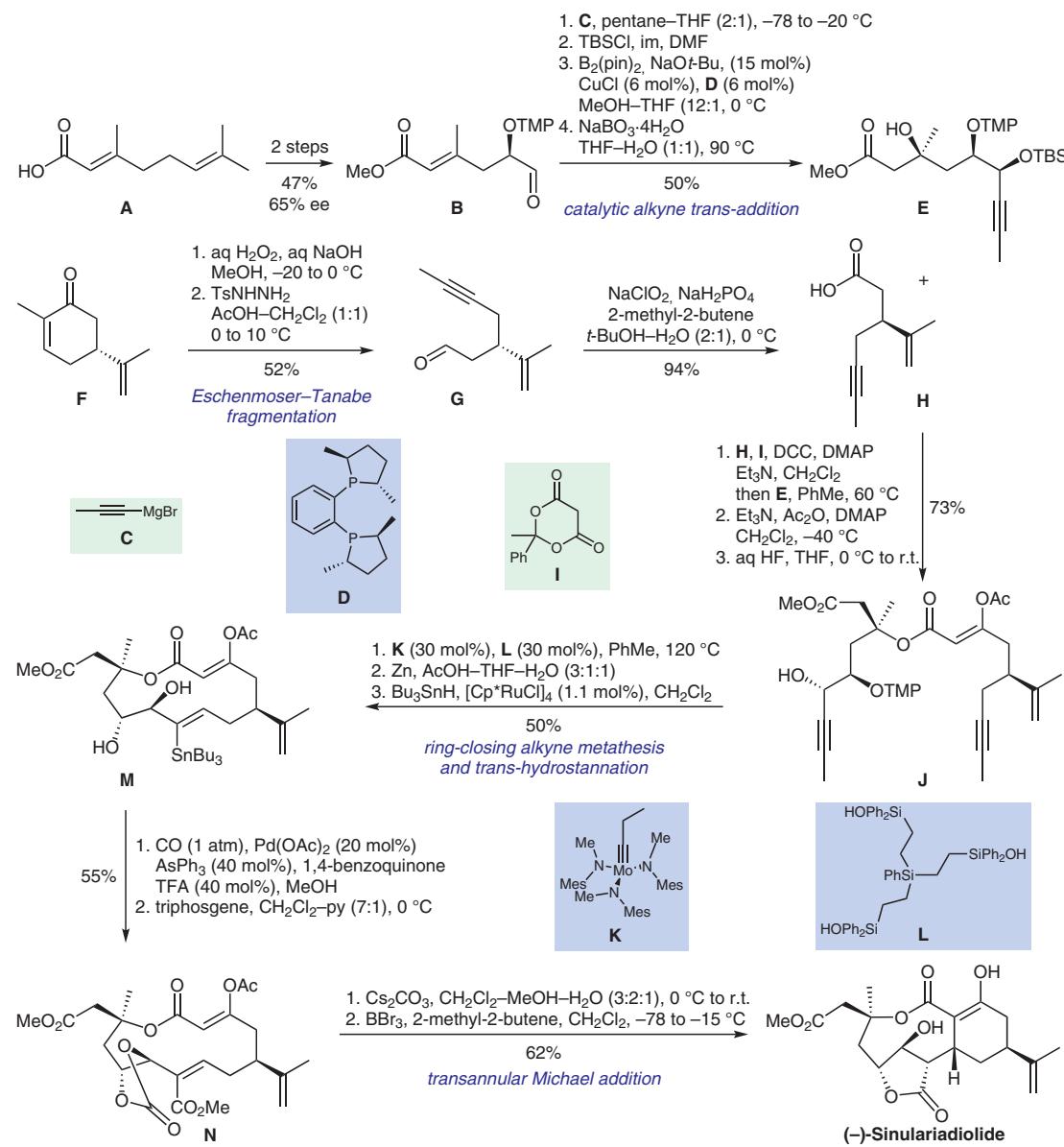


Total Synthesis of (-)-Sinulariadiolide



Significance: The tricyclic nor-cembranoid sinulariadiolide was first isolated in 1996 from soft corals found in Okinawa. Fürstner and Meng report the total synthesis of (-)-sinulariadiolide via ring-closing alkyne metathesis followed by an intriguing intramolecular reaction cascade.

Comment: Fragments **E** and **H** were accessed from geranic acid (**A**) and carvone (**F**). Ring-closing alkyne metathesis and hydrostannation–carbonylation of **J** gave **N**. The title compound was accessed by a sequence involving transannular Michael addition.

Category
Synthesis of Natural Products and Potential Drugs

Key words

- (-)-sinulariadiolide
- Eschenmoser-Tanabe fragmentation
- ring-closing alkyne metathesis
- trans-hydrostannation
- Michael addition

