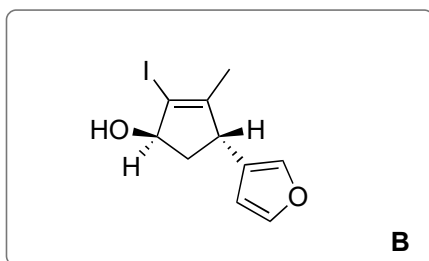
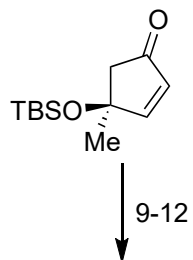
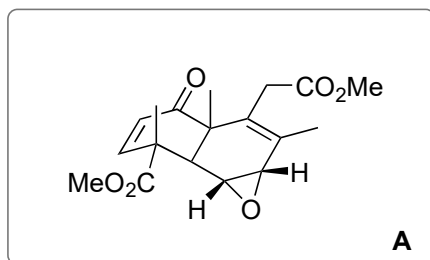
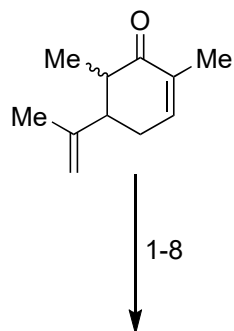
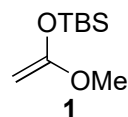


Stereoselective Total Synthesis of Nimbolide

David B. Ryffel, Peter C. Ryffel, Matteo Martinelli, Vineet R. Pillai and David Sarlah *J. Am. Chem. Soc.* **2025**, 147, 17, 14083–14087.



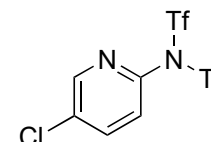
- 1) LDA, (Z)-iodoacrolein, *then* TBSOTf, Et₃N
- 2) Pd₂dba₃, B₂Pin₂, KOAc, *then* TMAO
- 3) HF
- 4) ABNO, PIDA, NaClO₂
- 5) TMSCHN₂
- 6) NaHMDS, Comins' reagent
- 7) **1**, Pd(PPh₃)₄, CsOAc
- 8) DMDO



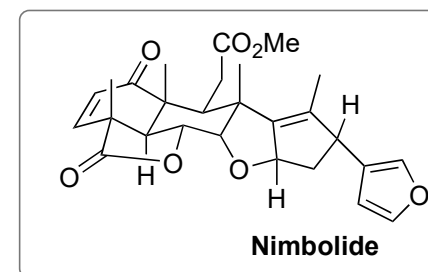
- 9) *t*-BuLi, CuI·DMS, 3-bromofuran, BF₃·OEt₂
- 10) DBU
- 11) TMSN₃, I₂
- 12) (S)-CBS, BH₃·DMS

- 2) Name of the reaction:
Borylative Heck reaction

- 6) Structure of Comins' reagent:

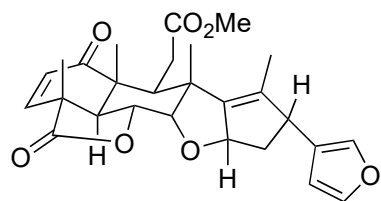


- 9) Name of the starting material:
Maimone's enone



A + B

13-15



Nimbolide

- 13) 100 °C
14) AIBN, Bu₃SnH
15) Al(OMe)₃