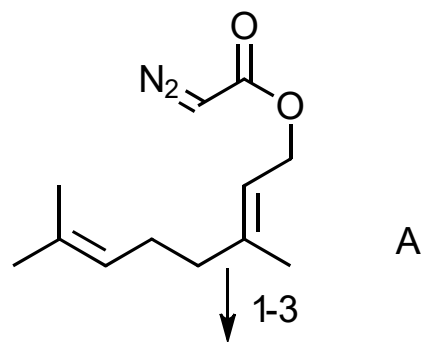
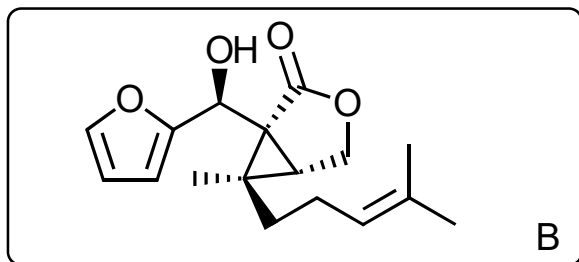


# Synthesis Challenge # 63

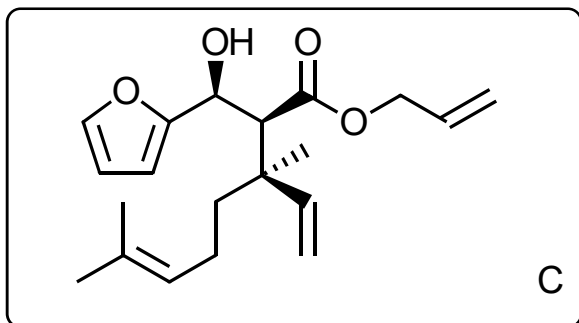
AG Wegner Diastereoselective Total Synthesis of (±)-Basiliolide B and (±)-epi-8-Basiliolide B, X. Liang, L. Zhou, L. Min, W. Ye, W. Bao, W. Ma, Q. Yang, F. Qiao, X. Zhang, C.-S. Lee, *J. Org. Chem.* **2017**, ASAP, DOI: 10.1021/acs.joc.6b02921  
30.03.2017



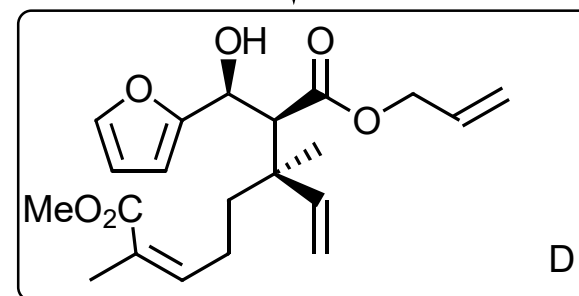
1-3



4-6



7-9



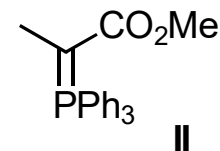
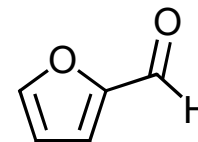
- 1) I, DBU (10 mol%), IBX, DMSO
- 2) Cu(TBS)<sub>2</sub> (10 mol%), toluene, 80°C
- 3) NaBH<sub>4</sub>, MeOH

- 4) 4 N KOH, EtOH, then allylBr, DMF
- 5) PPh<sub>3</sub>, I<sub>2</sub>, imidazole
- 6) *n*BuLi (2.5 eq.), THF

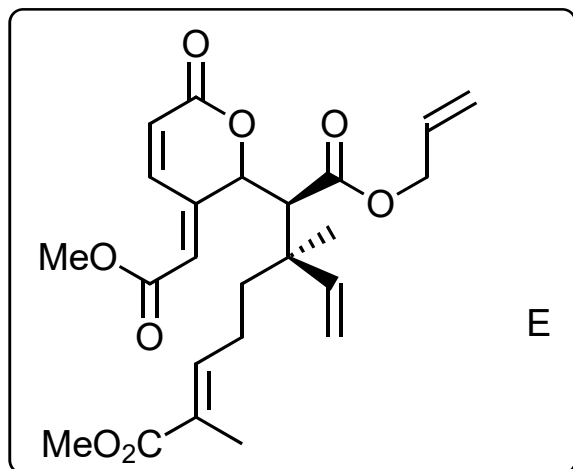
- 7) *m*CPBA
- 8) NaIO<sub>4</sub>
- 9) II

Please provide a synthesis for A.

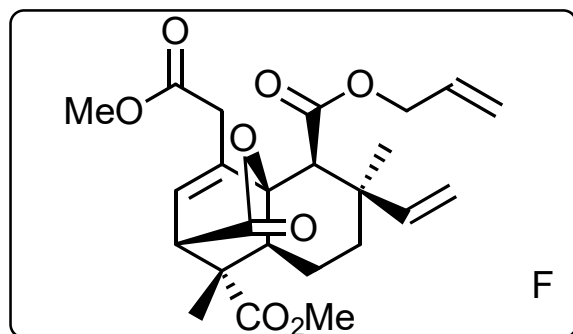
→ starting from geraniol



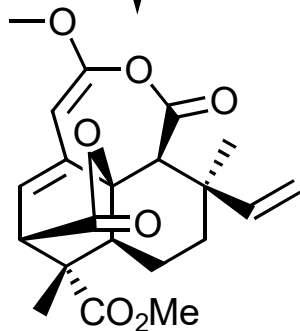
10-13



14



15-16



- 10) VO(acac)<sub>2</sub>, TBHP
- 11) Ag<sub>2</sub>O, MeI, acetone
- 12) **III**
- 13) Jones oxidation

14) DABCO, toluene, 120°C, 3d

- 15) Pd(PPh<sub>3</sub>)<sub>4</sub>, PPh<sub>3</sub>
- 16) Tf<sub>2</sub>O, Et<sub>3</sub>N, -78°C - 0°C

