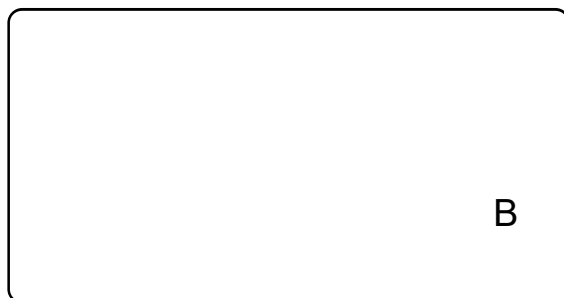


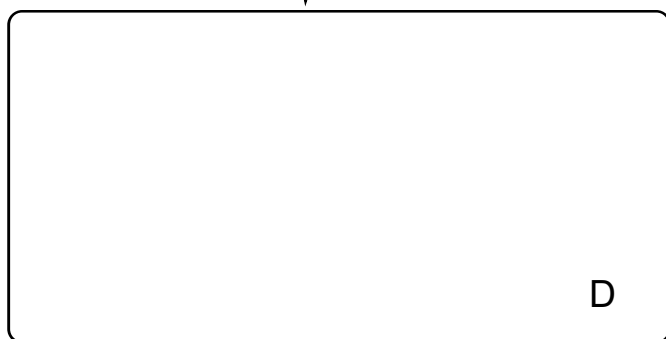
↓ 1-3



↓ 4-6



↓ 7-8

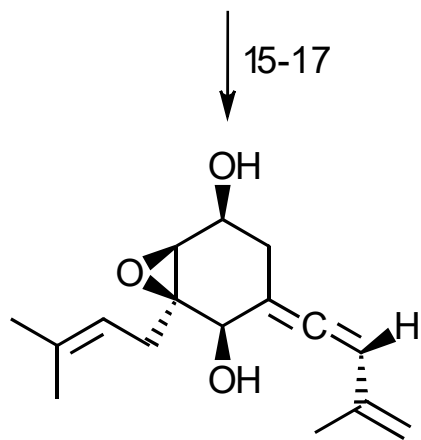
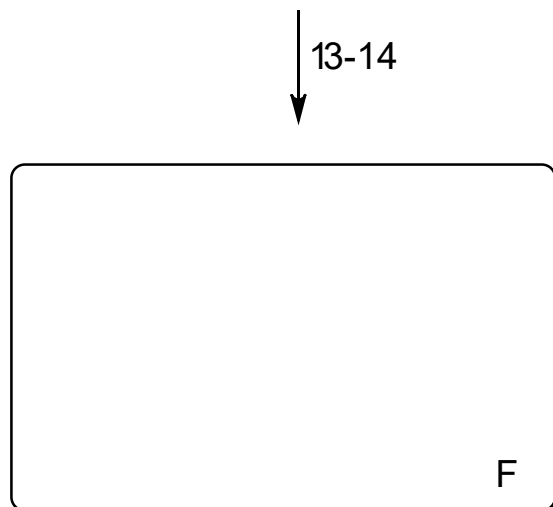
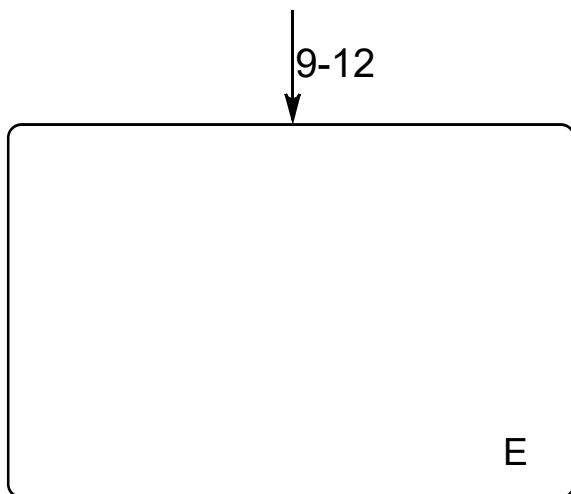


- 1)  $\text{LiBH}_4$
- 2) TESCl, imidazole
- 3) DIBAL, THF,  $0^\circ\text{C}$

- 4)  $\text{Pb}(\text{OAc})_4$ ,  $\text{NaHCO}_3$
- 5) TBSOTf, 2,6-lutidine
- 6)  $\text{HF}\cdot\text{Py}$ , then,  $\text{NaBH}(\text{OAc})_3$

- 7) TESCl, imidazole
- 8)  $\text{allylSn}(n\text{-Bu})_3$ ,  $\text{Pd}(\text{PPh}_3)_4$ , NMP

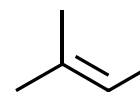
Please provide a synthesis of A.



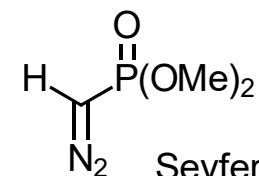
- 9) I, Grubbs 2<sup>nd</sup> cat.  
 10) TBAF, AcOH  
 11) DMP  
 12) Seyferth-Gilbert reagent

- 13) TBAF  
 14) VO(OEt)<sub>3</sub>, TBHP

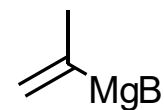
- 15) TESOTf, 2,6-lutidine  
 16) II, CuCN, CH<sub>2</sub>Cl<sub>2</sub>, -40°C  
 17) TBAF



I



Seyferth-Gilbert reagent



II