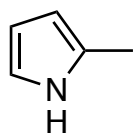
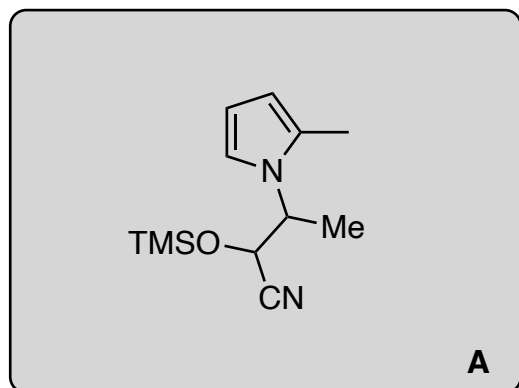


## Total Synthesis of (-)-Curvulamine

Haelsig, K. T.; Xuan, J.; Maimone, T. J.  
*J. Am. Chem. Soc.* **2020**, *142* (3), 1206-1210.

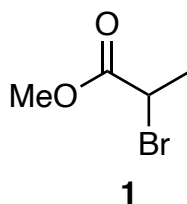


1-3

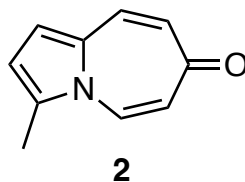


4-7

- 1) NaH, **1**, DMF, 0 to 23 °C
- 2) DIBAL, PhMe, -78 °C
- 3) TMSCN, LiClO<sub>4</sub>, CH<sub>2</sub>Cl<sub>2</sub>, 23 °C



- 4) NaHMDS, LiCl, THF, -78 °C, then **2**, then NIS
- 5) hv (390 nm), NaHCO<sub>3</sub>, 5:1 MeCN/*t*-BuOH, 23 °C
- 6) ethyl vinyl ether, *t*-BuLi, THF, -78 °C
- 7) NaOMe, MeOH, 90 °C

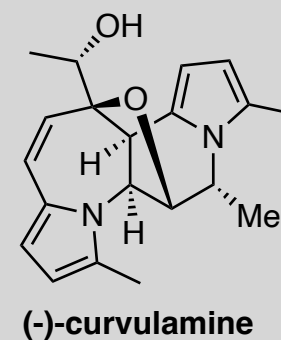


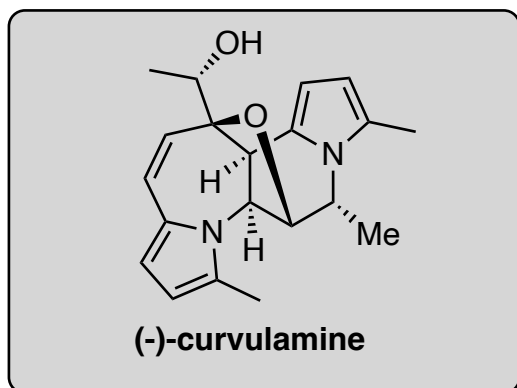
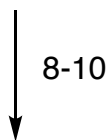
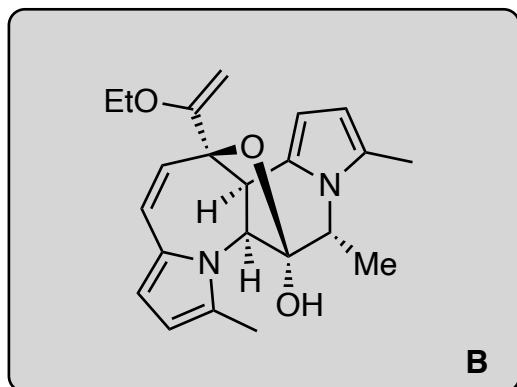
2) *Hint*: 1.1 eq of DIBAL

4) How would you make **2**?  
[See page 3](#)

6) *Hint*: Two transformations

7) *Hint*: Look for most acidic proton





- 8) KHMDS, CICSOPh, DMAP, THF, -78 °C  
 9) HSnBu<sub>3</sub>, BEt<sub>3</sub>, O<sub>2</sub>, THF, 45 °C, *then* HCl  
 10) (*R*)-CBS, BH<sub>3</sub>•DMS, CH<sub>2</sub>Cl<sub>2</sub>, 23 °C

- 9) Name of reaction?  
**Barton-McCombie**

- 10) Draw structure of CBS

