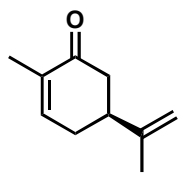


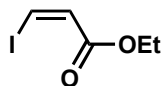
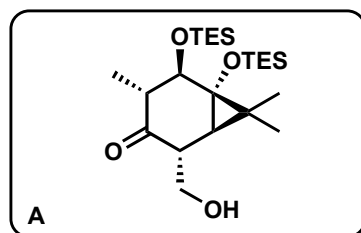
Asymmetric Total Synthesis of Euphordraculoate A and Pedrolide

Canhui Tu, Yunlong Yang, Yuzhi Jiang, Yan Hao, Zhen Wang, Shaomin Fu, Song Qin, Bo Liu

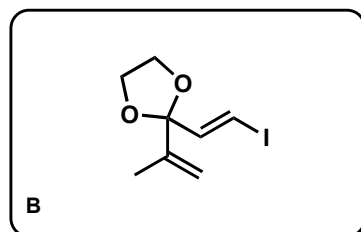
Angew. Chem. Int. Ed. **2024**, 63 (40), e202409997.



1 - 8

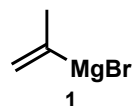


9 - 11

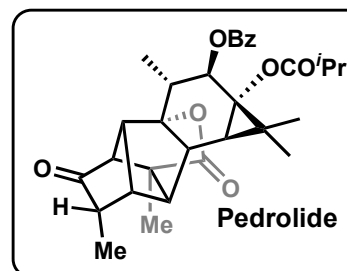
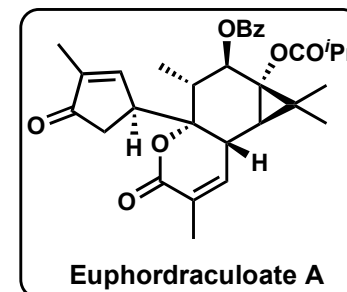


- 1) HBr, AcOH
- 2) NaOH, H₂O₂
- 3) LDA, HBpin, NaOH, H₂O₂
- 4) TESCl, TEA
- 5) LiTMP, Et₂AlCl
- 6) RhCl(PPh₃)₃, H₂ then DMP
- 7) DBU
- 8) LiHMDS, TMSCl then Yb(OTf)₃, HCHO (aq.)

- 9) DIBAL-H, then **1**
- 10) DMP, NaHCO₃
- 11) TsOH·H₂O, (CH₂OH)₂

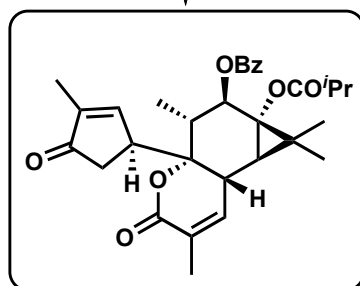


8) Name of the reaction: *Mukaiyama Aldol Addition*

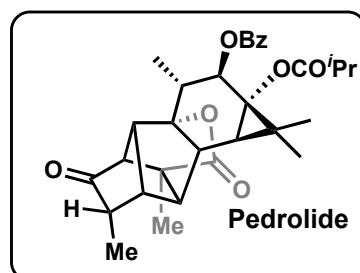


A + B

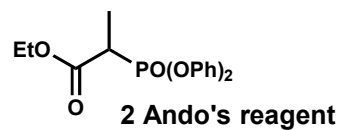
12 - 21



22



- 12) $i\text{PrMgCl}$, LiCl
- 13) DMP
- 14) DBU, **2**, NaI (75 % **Z**, 13 % **E**)
- 15) HF , TEA
- 16) $i\text{PrCOCl}$, DIPEA
- 17) BzCl , TEA
- 18) TMSOTf , 4 Å MS
- 19) NaBH_4 , $\text{CeCl}_3 \cdot 7\text{H}_2\text{O}$, MeOH/DCM
- 20) NaH
- 21) TPAP , NMO , 4 Å MS



22) Eu(fod)_3

18) Name of the reaction: *Nazarov cyclization*

19) Name of the reaction: *Lüche reduction*

22) Hint: 3 transformations in one step.
Dienyl enolization, intramolecular DA reaction, enol-ketone tautomerization.

