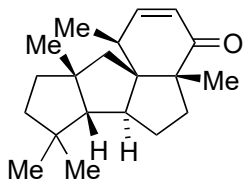
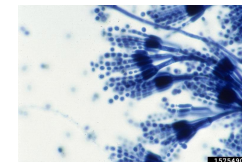


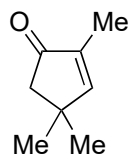
(-)-Conidiogenone B



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1

1) (*R*)-CBS catecholborane,
toluene/THF
2) *n*-butyl vinyl ether
Hg(OAc)₂, Et₃N, 170 °C

Draw CBS reagent and TS
Name reaction in 2)

2

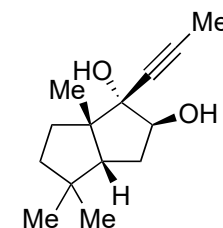
Ts-CH₂-NC
3) TosMIC, *t*-BuOK, THF
4) PhSiH₃, Fe(acac)₃, HFIP/EtOH

Name and mechanism 3)
Mechanism 4)

3

5) Pb(OAc)₄, CH₂Cl₂; then
CeCl₃, NaBH₄, MeOH
6) *n*-Bu₃P, *o*-NO₂C₆H₄SeCN;
then H₂O₂

Name reduction condition 5)
Name and mechanism 6)



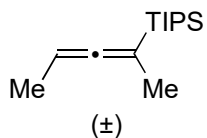
4

7) Co₂(CO)₈, CH₂Cl₂, TFA,
BH₃·SMe₂; then NMO

Key Step:
Names and mechanisms

6

5



8) TiCl_4 , CH_2Cl_2 ;
then $\text{BF}_3 \cdot (\text{HOAc})_2$

Key Step:
Name and mechanism

6

9) NaBH_4 , MeOH
10) NaH, CS_2 , MeI, THF
11) $n\text{-Bu}_3\text{SnH}$, AIBN, toluene

Name 10+11

7

8

12) O_3 , CH_2Cl_2 ; then
 Me_2S ; then 3 M HCl,
THF, reflux

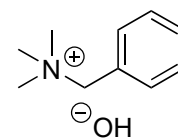
15) L-Selectride, THF

Structure?

11

(-)-Conidiogenol

13) Triton B, TBHP, THF
14) SmI_2 , THF/MeOH

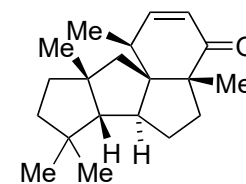


Triton B

Mechanisms

10

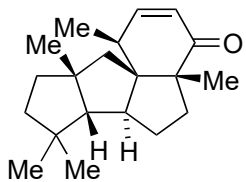
(-)-Conidiogenone



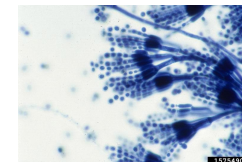
9

(-)-Conidiogenone B

(-)-Conidiogenone B



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