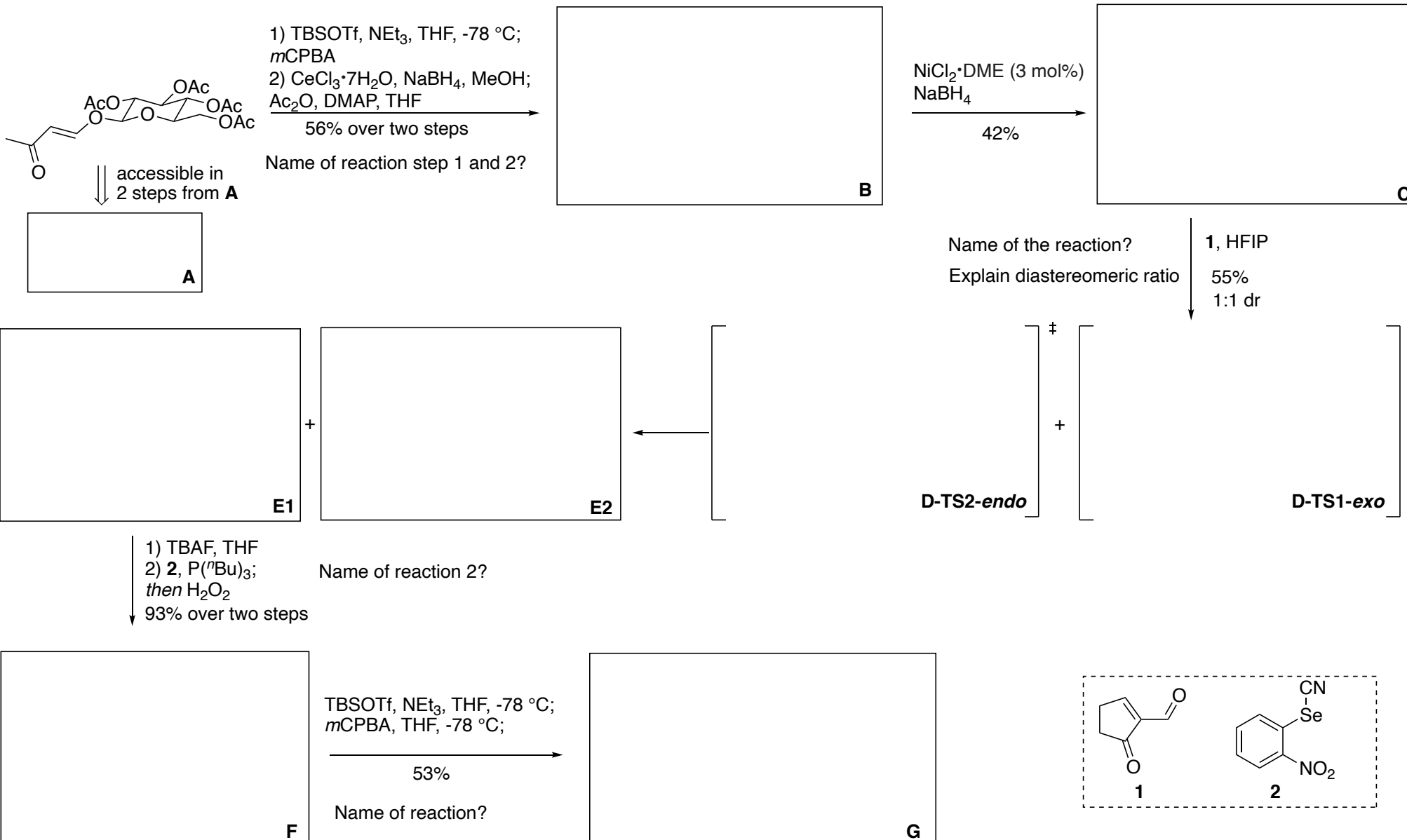




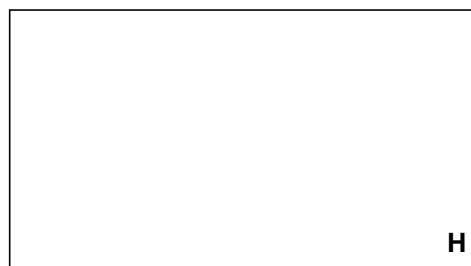
Total Synthesis of (-)-Strictosidine and Interception of Aryne Natural Product Derivatives "Strictosidyne" and "Strictosamidyne"

Anthony, S. M.; Tona, V.; Zou, Y.; Morrill, L. A.; Billingsley, J. M.; Lim, M.; Tang, Y.; Houk, K. N.; Garg, N. K.
J. Am. Chem. Soc. **2021**, *143*, 7471–7479



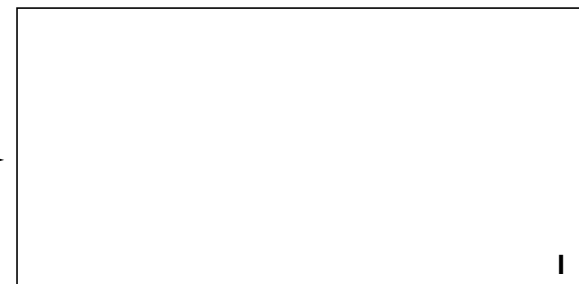


G $\xrightarrow[65\% \text{ over two steps}]{\begin{array}{l} 1) \text{ Pb(OAc)}_4, -20 \text{ }^\circ\text{C}, \text{ MeOH} \\ 2) \text{ LiOMe}, -20 \text{ }^\circ\text{C}, \text{ MeOH} \end{array}}$



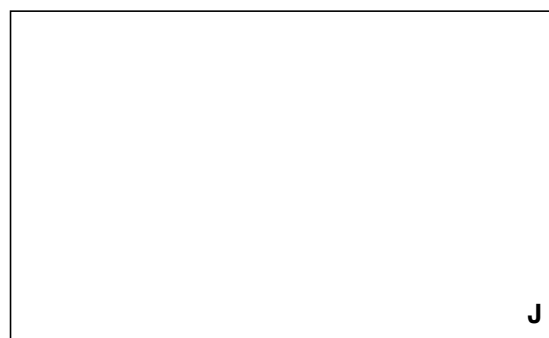
(-)-Secologanin


3, strictosidine synthase,
 NaH_2PO_4
 H_2O , $30 \text{ }^\circ\text{C}$
 $\xrightarrow[82\% \text{ Enzyme-mediated Pictet-spengler reaction}]{} \text{I}$



(-)-Strictosidine

\downarrow **4**, TFA,
DCM, $0 \rightarrow 23 \text{ }^\circ\text{C}$
52%

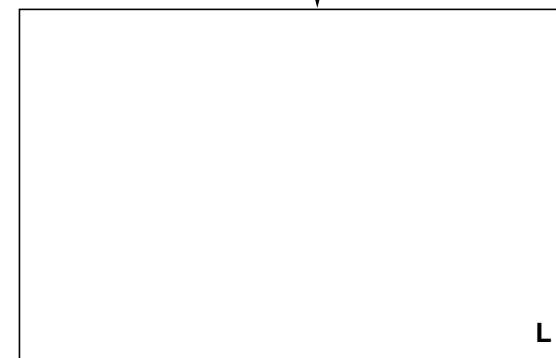



 $\xrightarrow[\text{CsF, MeCN, } 50 \text{ }^\circ\text{C}]{} \text{K}$



„Strictosidyne“

\downarrow 66%
dr 1:1



Strictosidine analog

