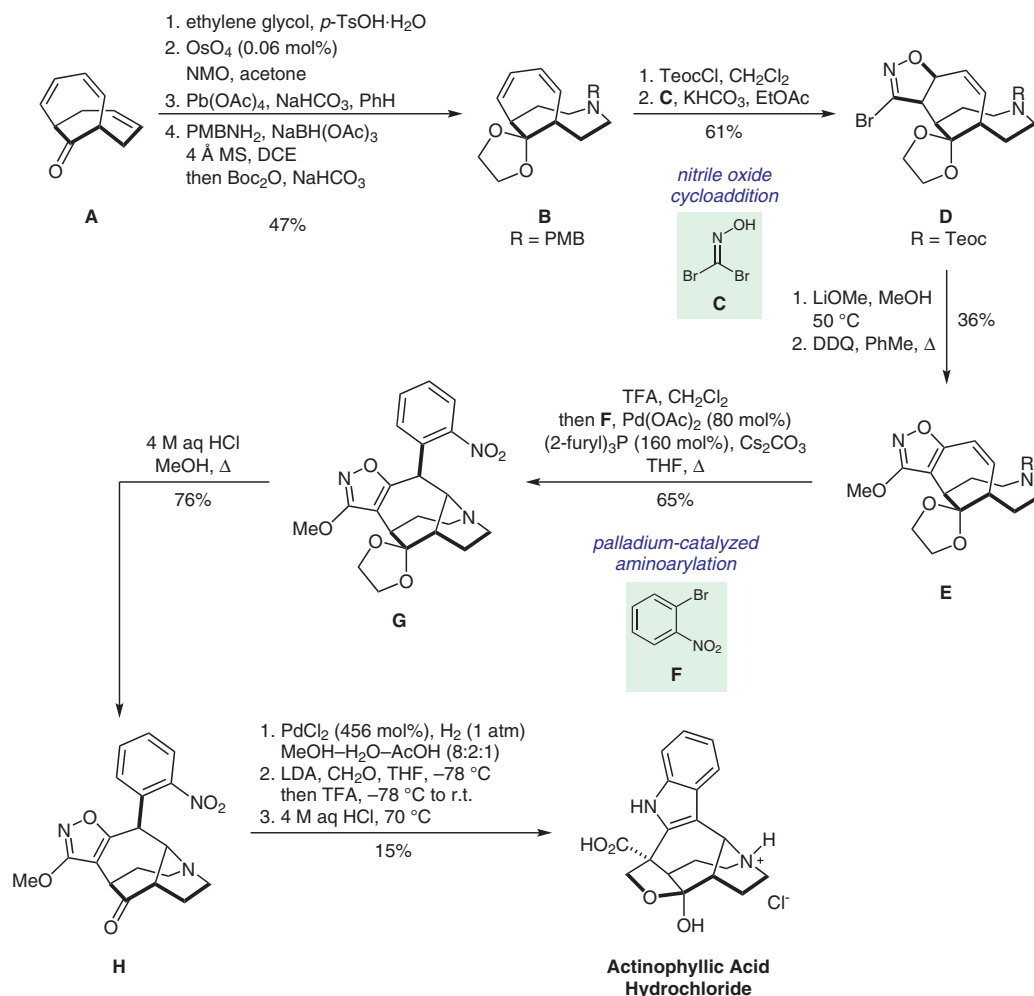


Synthesis of Actinophyllic Acid



Significance: Actinophyllic acid is a highly congested, polycyclic indole alkaloid found in *Alstonia actinophylla*. It is a potent inhibitor in the coupled enzyme assay TAFIa/hippuricase. Chen and co-workers report a 13-step total synthesis of the title compound based on a desymmetrization strategy.

Comment: Nitrile oxide cycloaddition with dibromoimine **C** under basic conditions gave isoxazoline **D**. Two more steps led to isoxazole **E**, which was subjected to a deprotection/palladium-catalyzed aminoarylation sequence. Indole synthesis followed by acetal formation completed the total synthesis of actinophyllic acid.