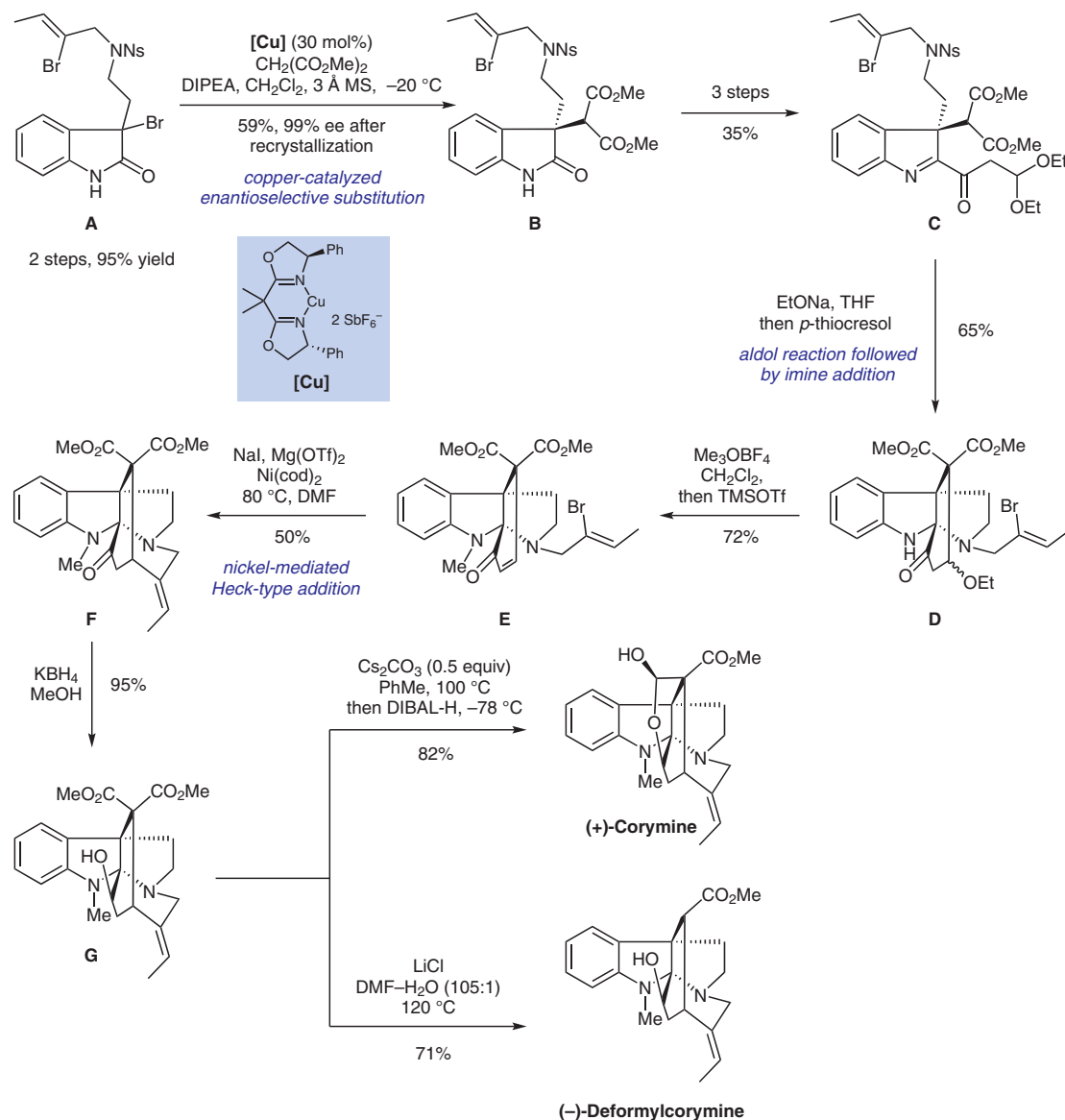


Total Synthesis of (+)-Corymine and (-)-Deformylcorymine



Significance: The authors report the first total synthesis of the two natural products (+)-corymine and (-)-deformylcorymine. These structurally complex alkaloids pose an interesting synthetic challenge due to their intriguing caged molecular structure.

Comment: Copper-catalyzed enantioselective substitution allows the preparation of malonate **B**. A sequence of four steps yields ketone **D**. Nickel-mediated Heck-type reaction gives access to **F**, which is subsequently transformed into the advanced intermediate **G**. This caged product can then be converted into (+)-corymine or (-)-deformylcorymine.