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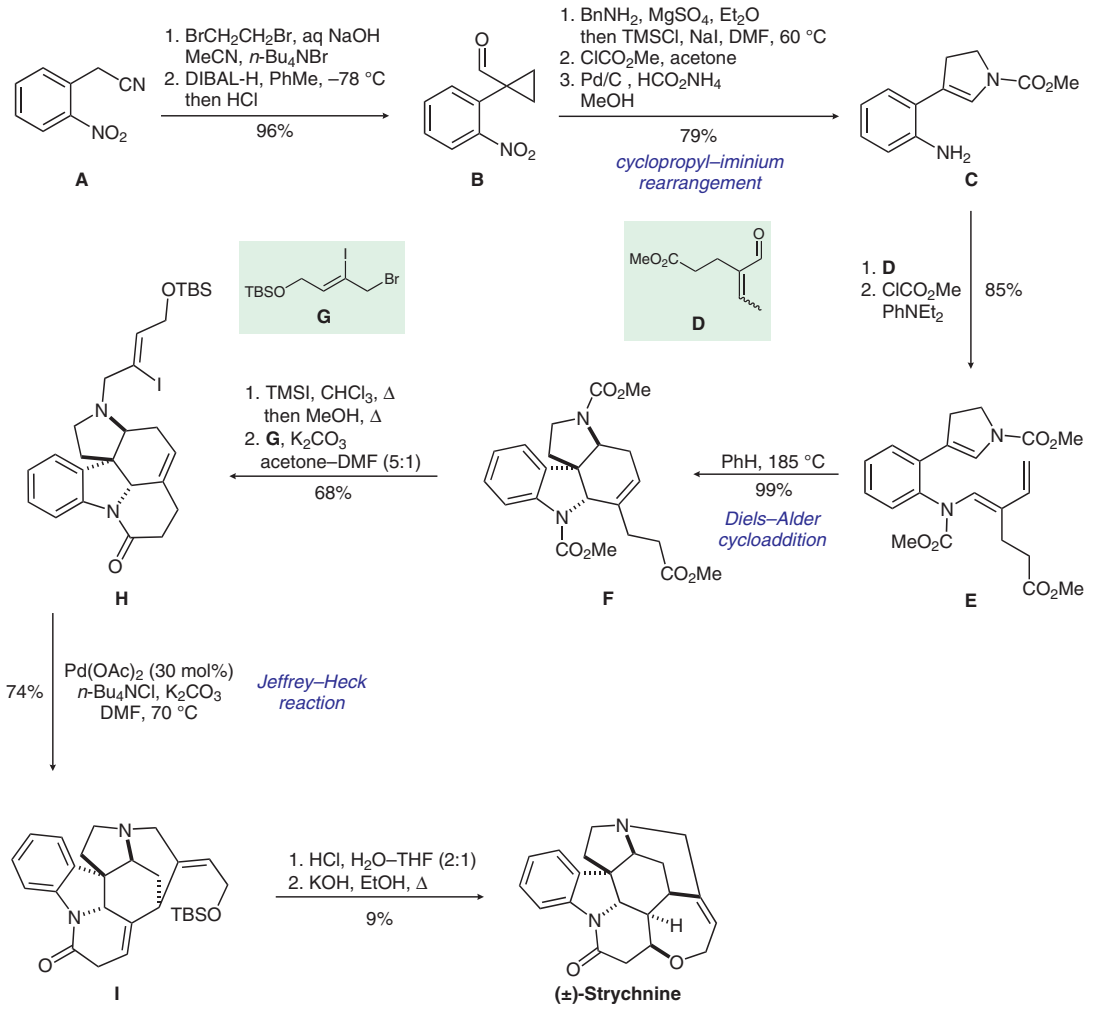
A Short, Stereocontrolled Synthesis of Strychnine
J. Org. Chem. **1994**, *59*, 2685–2686, DOI: 10.1021/jo00089a008.

Total Synthesis of (±)-Strychnine



Significance: The heptacyclic alkaloid strychnine has been the focus of numerous synthetic efforts over the last 75 years since the first total synthesis by Woodward. In 1994, Rawal and Iwasa reported a concise, stereo-controlled total synthesis of racemic strychnine notable for its elegance.

Comment: Elaboration of starting material **A** to aniline **C** involves a cyclopropyl-iminium rearrangement. After alkylation to yield **E**, Diels–Alder cycloaddition gives rise to carbamate **F.** The Jeffrey modification of the Heck reaction yields advanced intermediate **I**, which is then converted to the natural product.

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Synthesis of Natural Products and Potential Drugs

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Jeffrey–Heck reaction

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