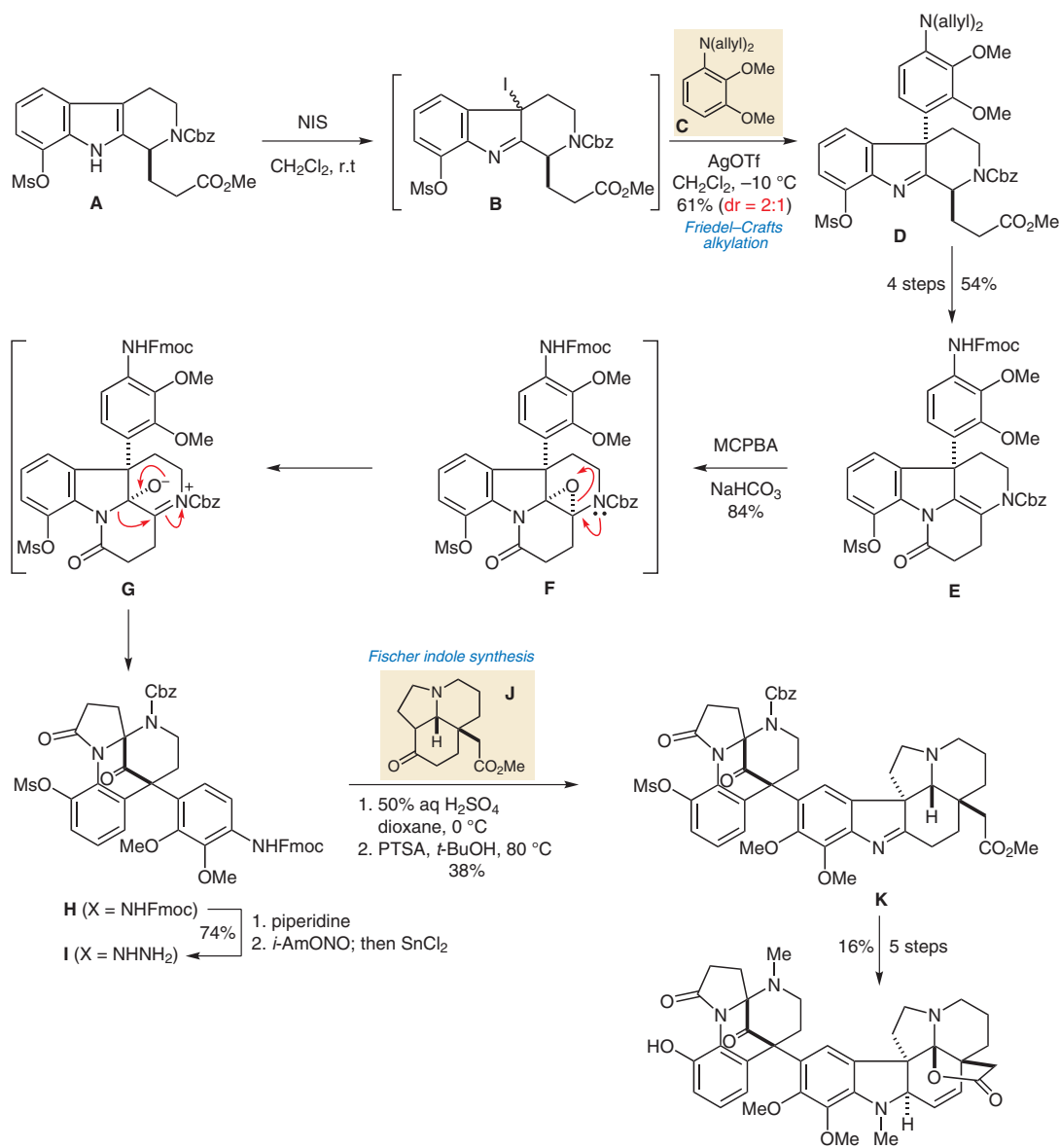


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 (TOHOKU UNIVERSITY, SENDAI AND UNIVERSITY OF TOKYO, JAPAN)
 Total Synthesis of (+)-Haplophytine
Angew. Chem. Int. Ed. **2009**, *48*, 7600-7603.

Synthesis of (+)-Haplophytine



Significance: The first total synthesis of haplophytine features a Friedel-Crafts alkylation to create the quaternary center in **D** and an oxidative hydroxylation **F** \rightarrow **G** \rightarrow **H**.

Comment: The stereogenic center in tetrahydro- β -carboline **A** was installed via a Noyori asymmetric hydrogenation. The Fischer indole synthesis gave two regioisomers (5:3, **K** major).

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Category

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Key words

haplophytine

indole alkaloids

Fischer indole synthesis

Friedel-Crafts alkylation

quaternary centers

SYNFACTS
of the month

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