Syntheses of (+)-Flabellidine and (−)-Lycodine

**Significance:** In the wake of their interesting biological activities, *Lycopodium* alkaloids have attracted great attention from the synthetic community. A biosynthetic pathway has been proposed, in which the skeleton is constructed via a cyclization cascade. Inspired by this hypothesis, Takayama and co-workers report a successful implementation of this strategy leading to a synthesis of (−)-lycodine and the first synthesis of (+)-flabellidine.

**Comment:** Subjecting B to (+)-CSA triggered a cascade resulting in the formation of four rings and three contiguous stereogenic centers. Upon one-pot debenzylation–N-Boc protection of the C and D mixture, the obtained diastereomers E and F were separated, with E being further elaborated to the target natural products (+)-flabellidine and (−)-lycodine.

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**Category**

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*Lycopodium* alkaloids

lycodine

flabellidine

cyclization cascade