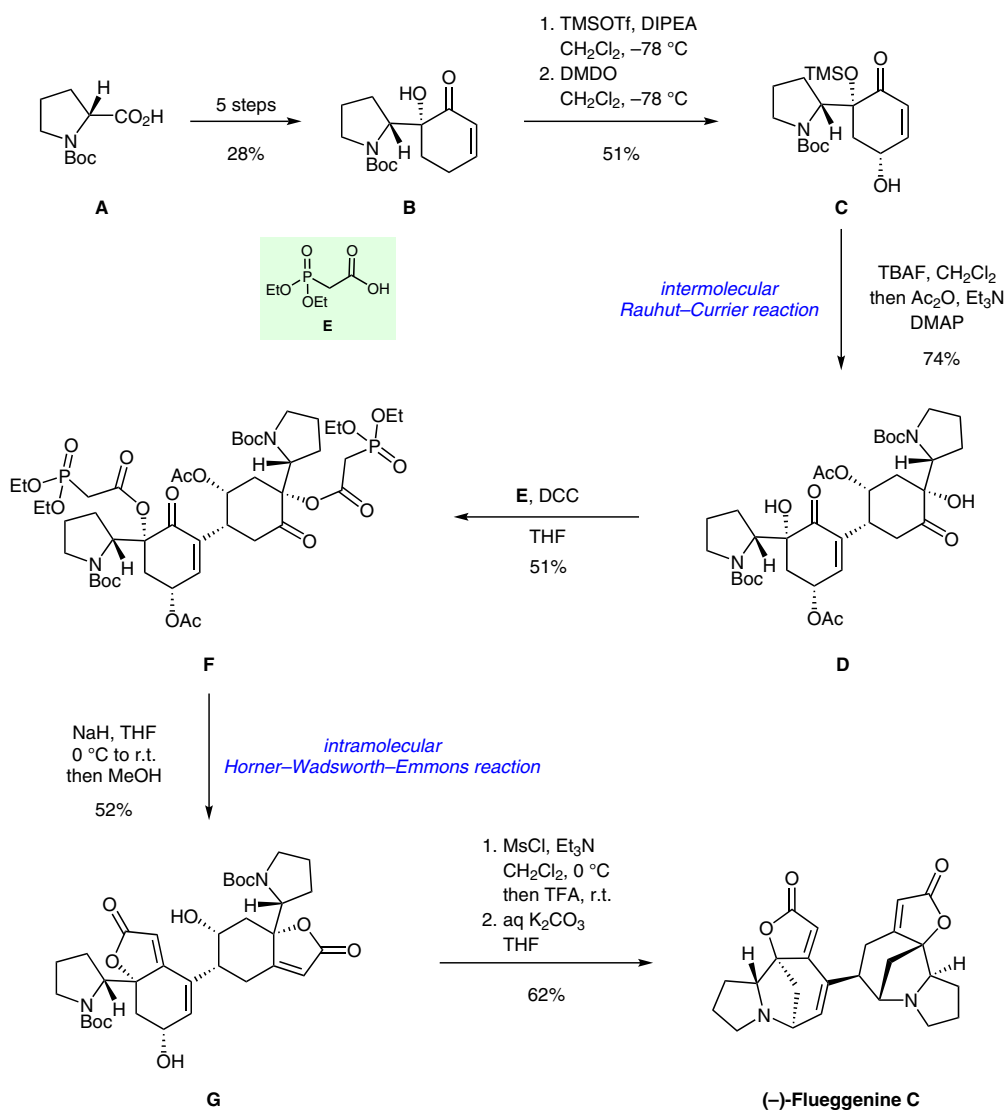


Total Synthesis of (–)-Flueggeine C



Significance: Jeon and Han report the first total synthesis of the dimeric securinega alkaloid (–)-flueggeine C. The key dimerization step is enabled by a bio-inspired Rauhut–Carrier reaction accelerated by the presence of an internal nucleophile. This reaction is pertinent in the biosynthesis of dimeric and oligomeric securinega alkaloids.

Comment: After efficiently synthesizing intermediate **C** in seven steps and 14% overall yield, the pivotal Rauhut–Carrier dimerization and subsequent acetylation provided **D** in 74% yield. HWE olefination of **F** afforded unsaturated lactone **G**. The final ring closure was facilitated by S_N2 displacement of a mesylate culminating at the natural product.