Synthesis of (–)-Viridin and (–)-Viridiol

Significance: Viridin and Viridiol belong to the class of furanosteroids and were isolated from the fungal species of Gliocladium virens and Trichoderma viride.

Comment: Unsaturated ester A, accessed in four steps from L-(+)-ribose, underwent intramolecular [3+2] cycloaddition after nitrile oxide formation, affording isoxazoline B. Cobalt-catalyzed MHAT radical cyclization was used to construct the steroid skeleton of G.