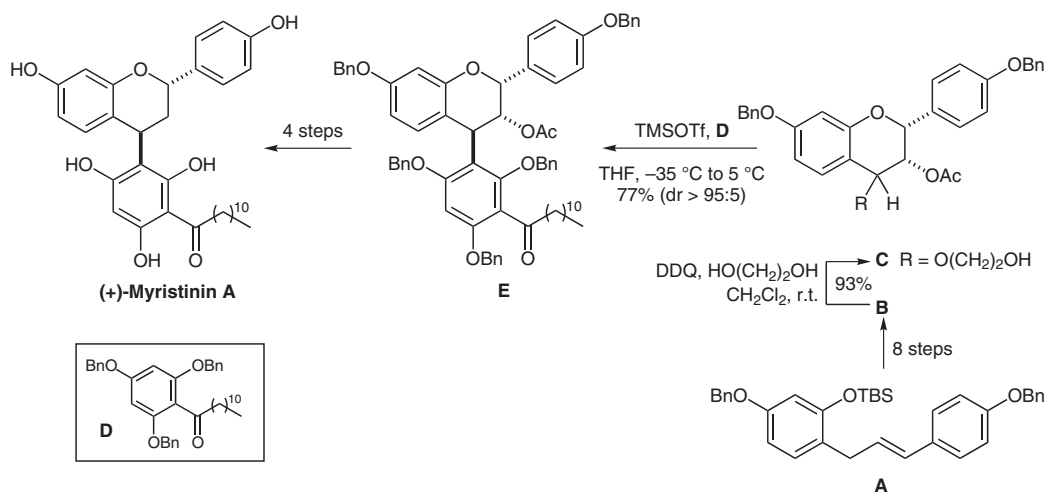


D. J. MALONEY, J.-Z. DENG, S. R. STARCK, Z. GAO, S. M. HECHT* (UNIVERSITY OF VIRGINIA, CHARLOTTESVILLE, USA)

(+)-Myristinin A, a Naturally Occurring DNA Polymerase β Inhibitor and Potent DNA Damaging Agent
J. Am. Chem. Soc. **2005**, *127*, 4140-4141.

Total Synthesis of (+)-Myristinin A, a Potent DNA-Damaging Agent



Significance: Myristinin A is a flavanoid recently isolated from *Myristica cinnamomea* and *Knema elegans*. It displays DNA-damaging and polymerase β inhibitory activity. Hecht and co-workers provide details of the absolute stereochemistry of the natural product as well as biological studies related to its DNA-cleaving abilities.

Comment: The key step in this synthesis is the benzylic oxidation of **B** to generate **C** in excellent yield. Installation of this 4-O-alkylated moiety allows the Lewis acid-induced incorporation of **D** with excellent stereocontrol (>95:5) affording **E**.

SYNFACTS Contributors: Philip Kocienski, Thomas Snaddon
Synfacts 2005, 0, 0014-0014

DOI: 10.1055/s-2005-865352; **Reg-No.:** K01305SF

2005 © THIEME STUTTGART • NEW YORK