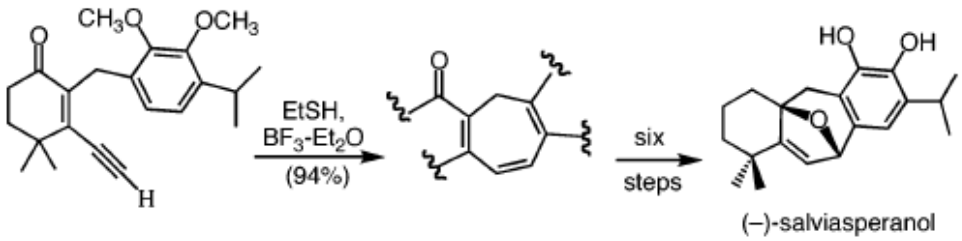
Literature Report
12/6/2007 D. Marten

Total Synthesis of (-)-Salviasperanol

- **George Majetich,* Ge Zou, Jeremy Grove**
- *Department of Chemistry, University of Georgia,*



Key step is intramolecular Friedel-Crafts (or **cyclialkylation**) strategy

Org. Letters, 2007, ASAP Dec. 4

Two other articles are published together with this one. All deal with this same chemistry and class of natural products. Two other papers are in the special issue of Heterocycles, Vol. 73, 2007 which has not yet been released.

Majetich, G.; Li, Y.; Zou, G. *Heterocycles* **2007**, *73*, 217-225

Majetich, G.; Li, Y.; Zou, G. *Heterocycles* **2007**, *73*, 227-235

Icetexane and abietane diterpenoids from *Salvia gilliessi*

Phytochemistry 53 (2000) 911-915

Matias Nieto, Eduardo E. Garcia, Oscar S. Giordano, Carlos E. Tonn*; Argentina

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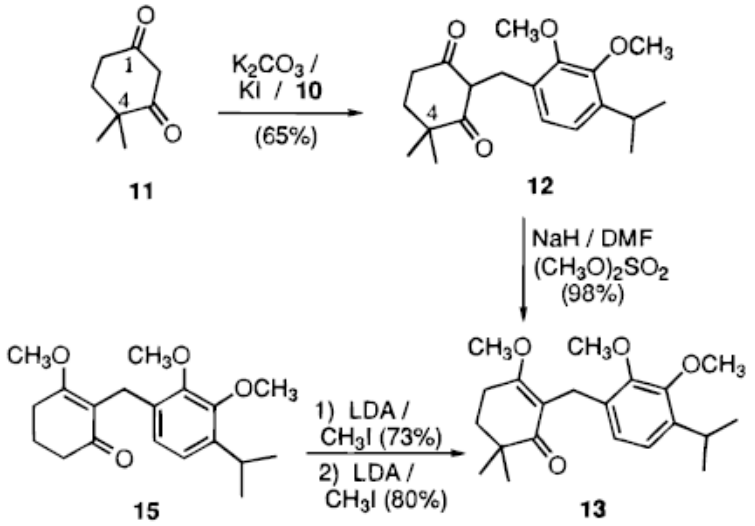
Alkylation in the 4,4-dimethyl-1,3-cyclohexanedione system:
Majetich, *J. Org. Chem.*, ***61***, *No. 23*, **1996**, 8169-8185



Formation of **11** using methyl isopropyl ketone, *t*-butyl acrylate and KO-*t*Bu
J. Org. Chem. **2001,** *66*, 8000-8009

Regiochemistry of enol ether formation in 11:
J. Org. Chem. **2006**, *71*, 2384-2388

Enantioselective reduction of ketones to secondary alcohols using the CBS methodology, see the review in:
Corey–Bakshi–Shibata (CBS): Corey, Helal. *Angew. Chem. Int. Ed.* **1998**, *37*, 1986 - 2012; uses an Oxazaborolidine complex.

Myers' use of Mitsunobu chemistry for a reductive allylic transposition in allyl alcohols.
DEAD, PPh_3, NH_2NHSO_2Ar; Diazine (R-N=N-H) as intermediate.

(a) Myers, A. G.; Zheng, B. *Tetrahedron Lett.* **1996**, *27*, 4841-4844.
(b) Myers, Zheng, B.; Movassaghi, M. *J. Org. Chem.* **1997**, *62*, 7507-7507.