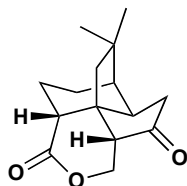
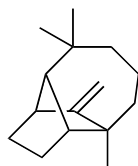


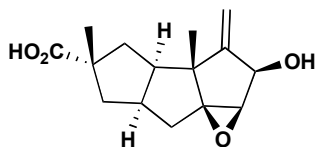
Syntheses discussed:



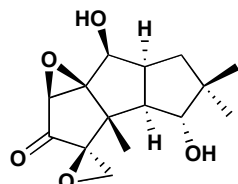
**Quadrone**



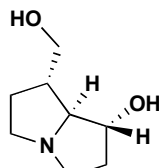
**(-)-Longifolene**



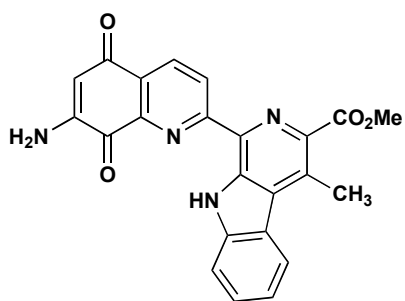
**(+)-Hirsutic Acid C**



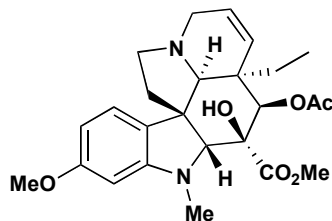
**(±) Coriolin**



**(-)-Hastanecine**



**Lavendamycin Methyl Ester**



**(±)-Vindoline**

Methodologies discussed:

**Manganese (III)-mediated  $\gamma$ -lactone annulation**

William E. Fristad, John R. Peterson  
*J. Org. Chem.* **1985**, *50*, 10-18.

**Manganese(III)-mediated spriolactonization**

William E. Fristad, Susan S. Hershberger  
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**Synthesis of (±)-Podocarpic acid**

Barry B. Snider, Raju Mohan, Steven A. Kates  
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**Applications of cyclopropylboranes in organic synthesis.  
A stereocontrolled route to substituted cyclopropanol derivatives.**

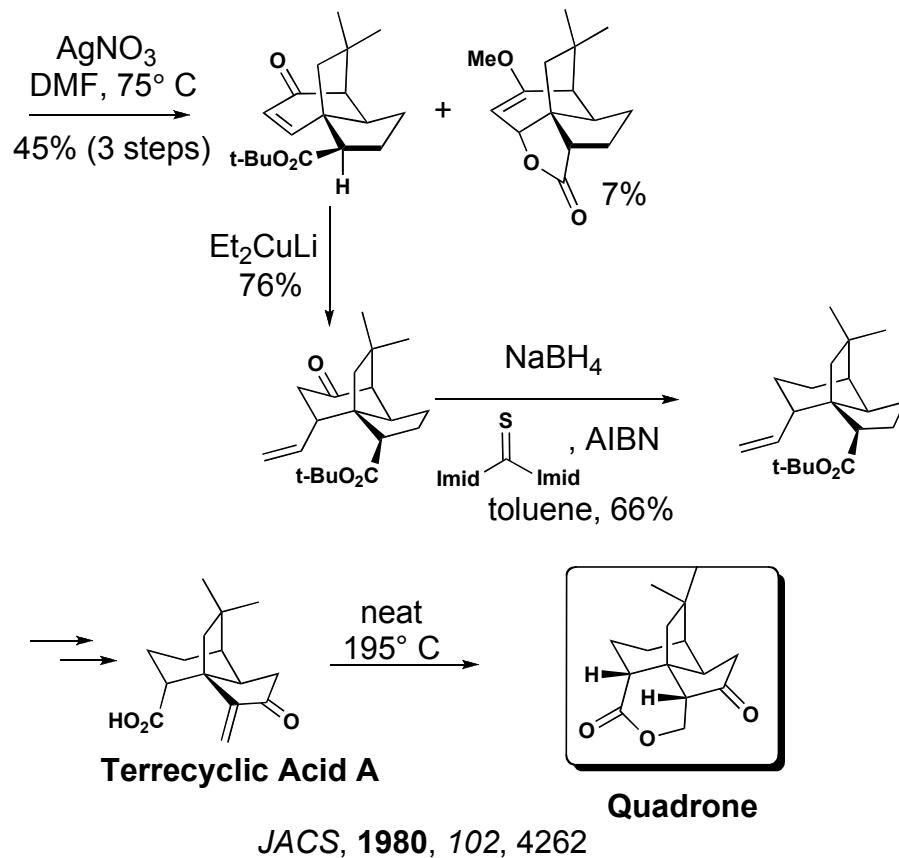
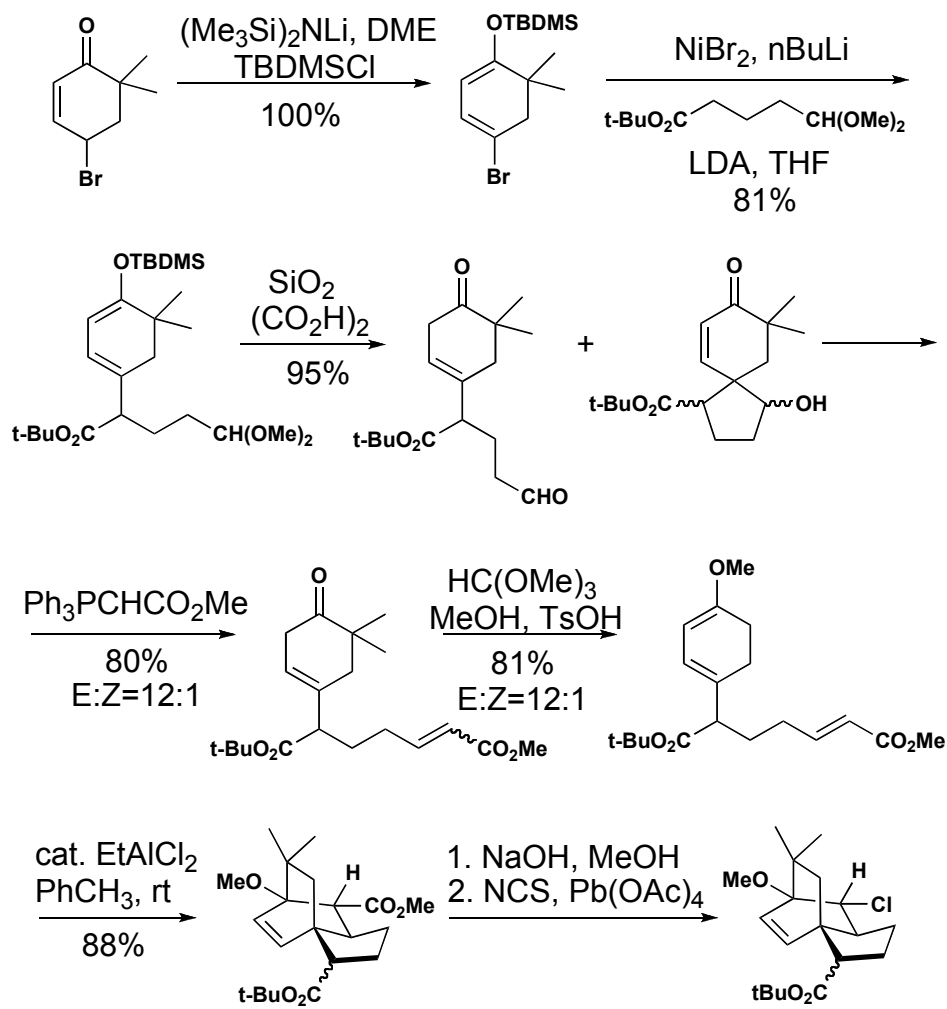
Rick L. Danheiser, Ann C. Savoca  
*J. Org. Chem.*, **1985**, *50*, 2401-2403

**2-Siloxy-substituted methyl cyclopropanecarboxylates  
as building blocks in synthesis: efficient one-pot  
conversion to  $\gamma$ -butyrolactones**

Erich L. Grimm, Hans-Ulrich Reissig  
*J. Org. Chem.*, **1985**, *50*, 242-244.

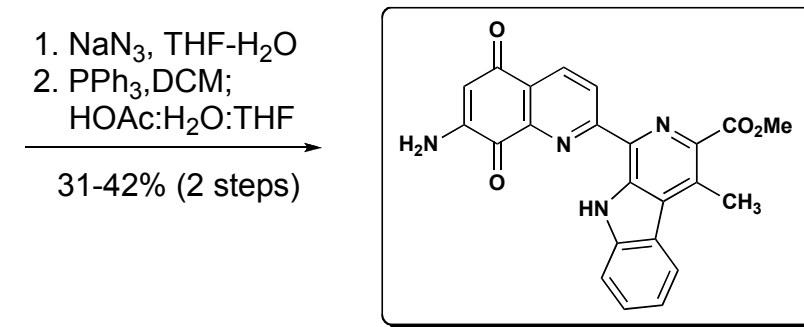
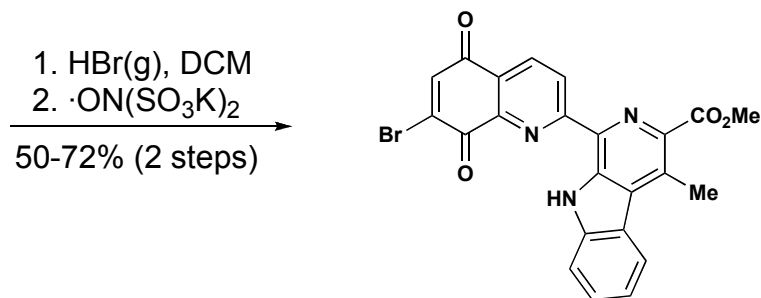
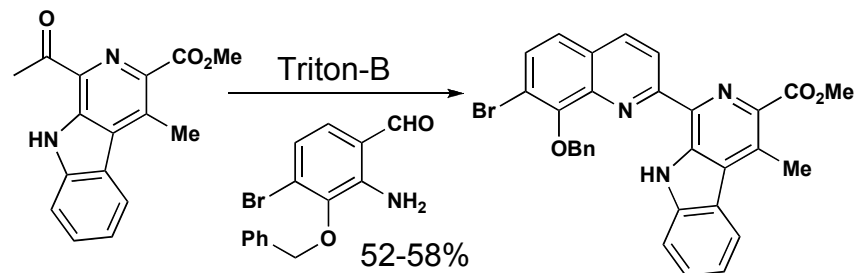
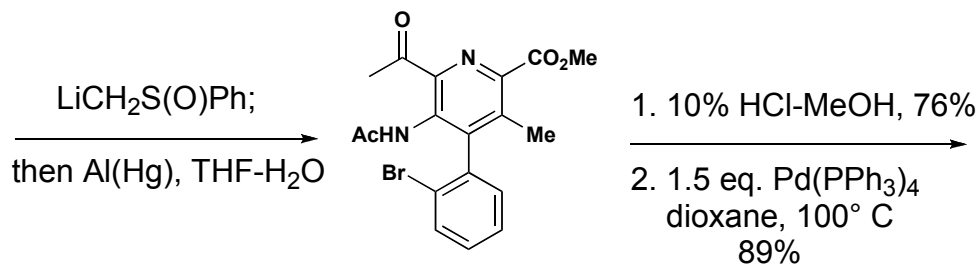
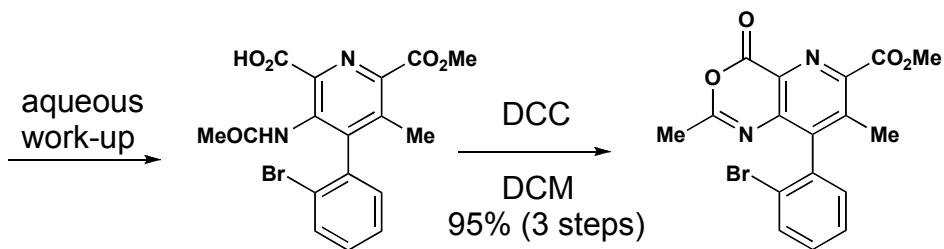
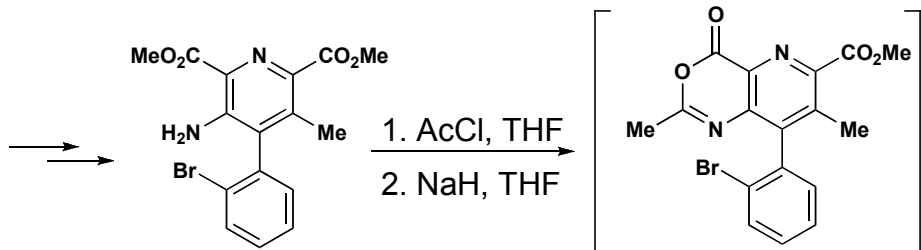
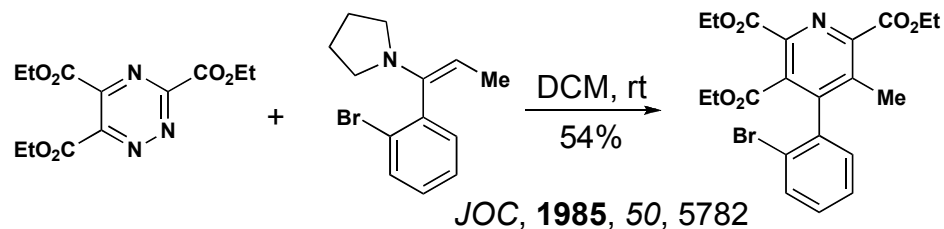
## Total synthesis of Quadrone and Terrecyclic Acid A

Paul A. Wender, Donald J. Wolanin ;  
*J. Org. Chem.* **1985**, *50*, 4418-4420



## Total synthesis of Lavendamycin Methyl Ester

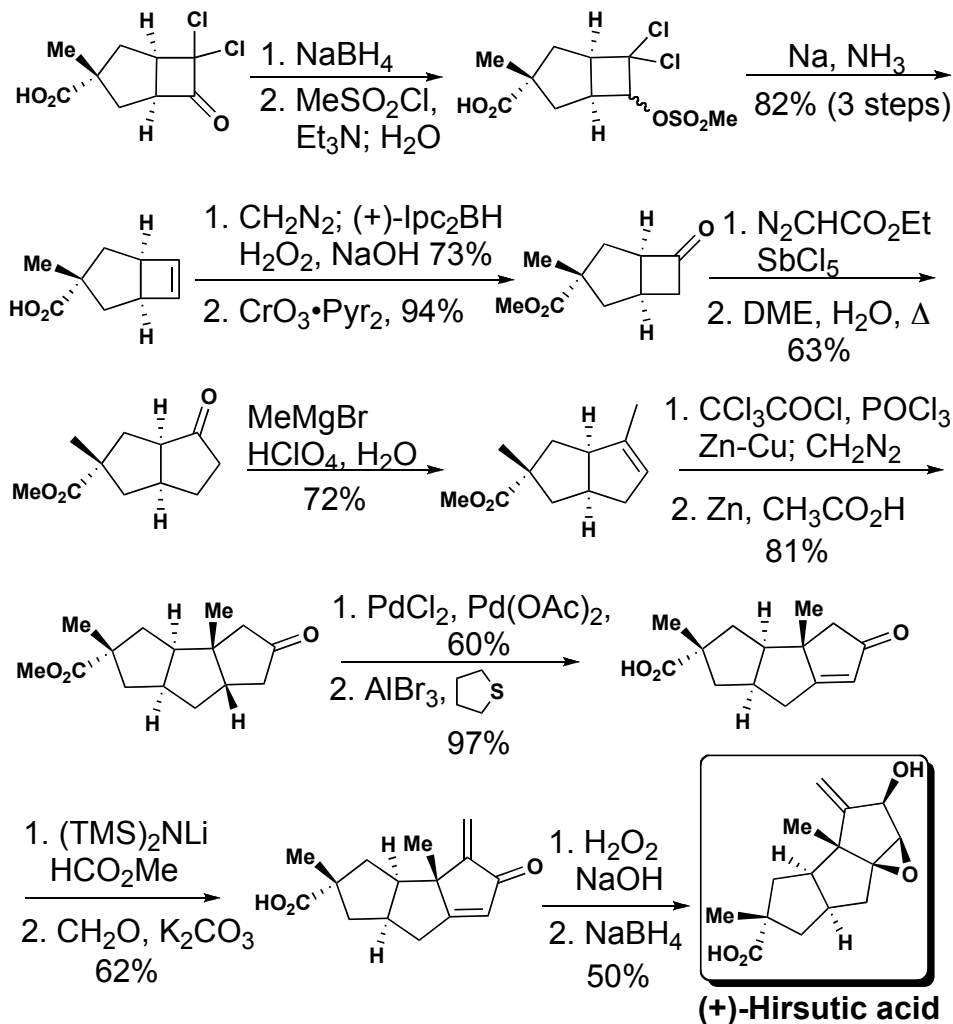
Dale L. Boger, Steven R. Duff, James S. Panek, Masami Yasuda  
*J. Org. Chem.*, **1985**, *50*, 5790-5795



Lavendamycin Methyl Ester

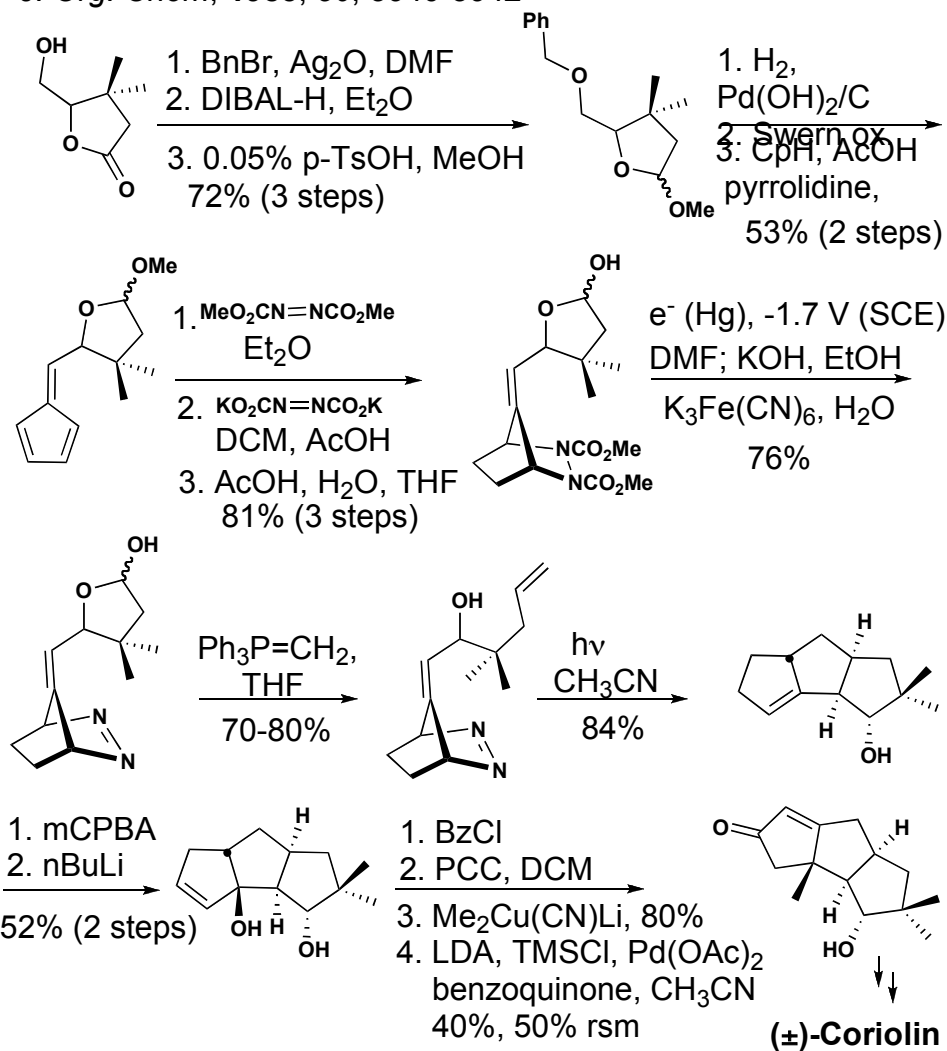
## An efficient, enantioconvergent total synthesis of natural Hirsutic Acid C

Andrew E. Greene, Marie-Jacqueline Luche, A. Aarao Serra  
*J. Org. Chem.*, **1985**, *50*, 3957-3962.



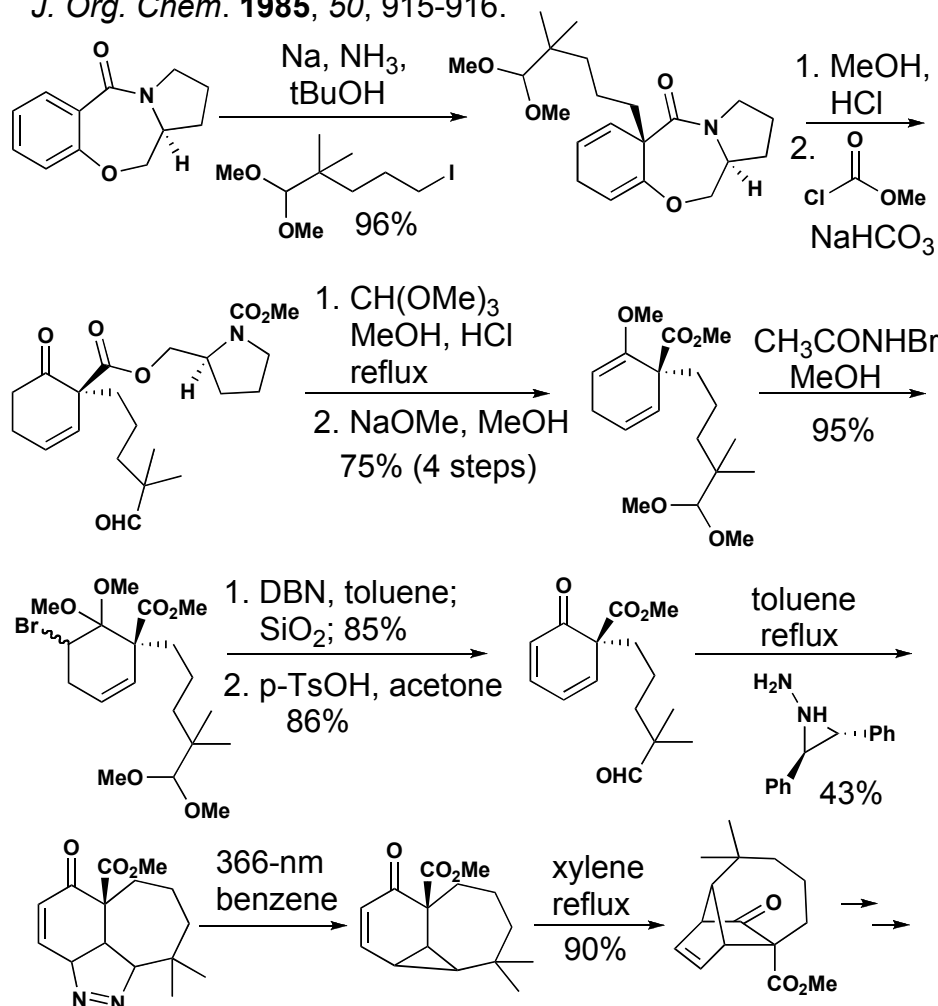
## Intramolecular 1,3-Diyl trapping reactions. A formal total synthesis of ( $\pm$ )-Coriolin

Luc Van Hijfte, R. Daniel Little  
*J. Org. Chem.*, **1985**, *50*, 3940-3942



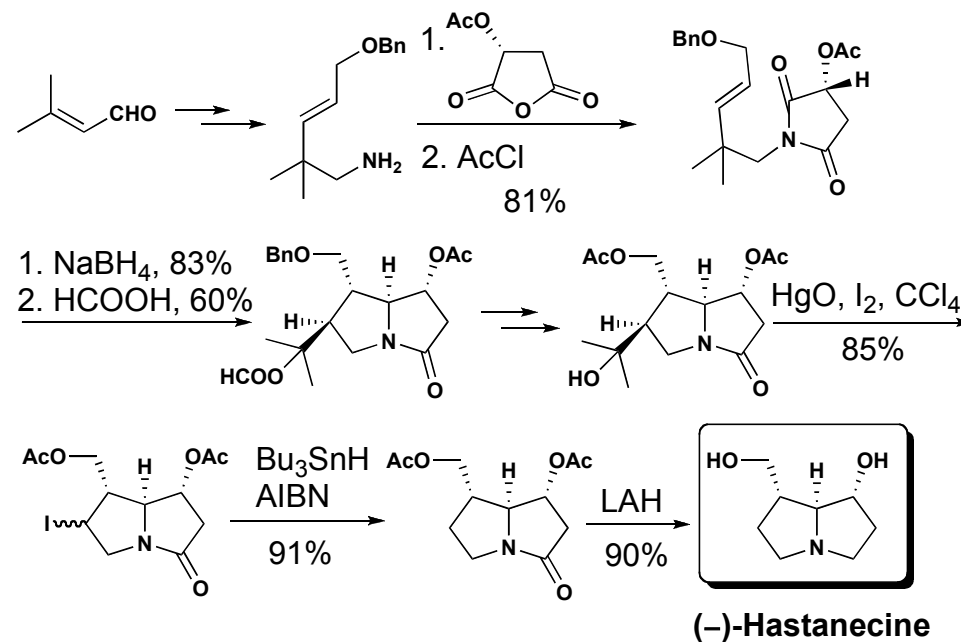
## The intramolecular diene-Carbene cycloaddition equivalence and an enantioselective Birch reduction-alkylation to the chiral auxiliary approach. Total synthesis of (±)- and (-)-Longifolene

Arthur G. Schultz, Salvador Puig  
*J. Org. Chem.* **1985**, *50*, 915-916.



## N-Acyliminium ion rearrangements: generalities and applications to the synthesis of pyrrolizidine alkaloids

David J. Hart, Tend-Kuei Yang  
*J. Org. Chem.*, **1985**, *50*, 235-242

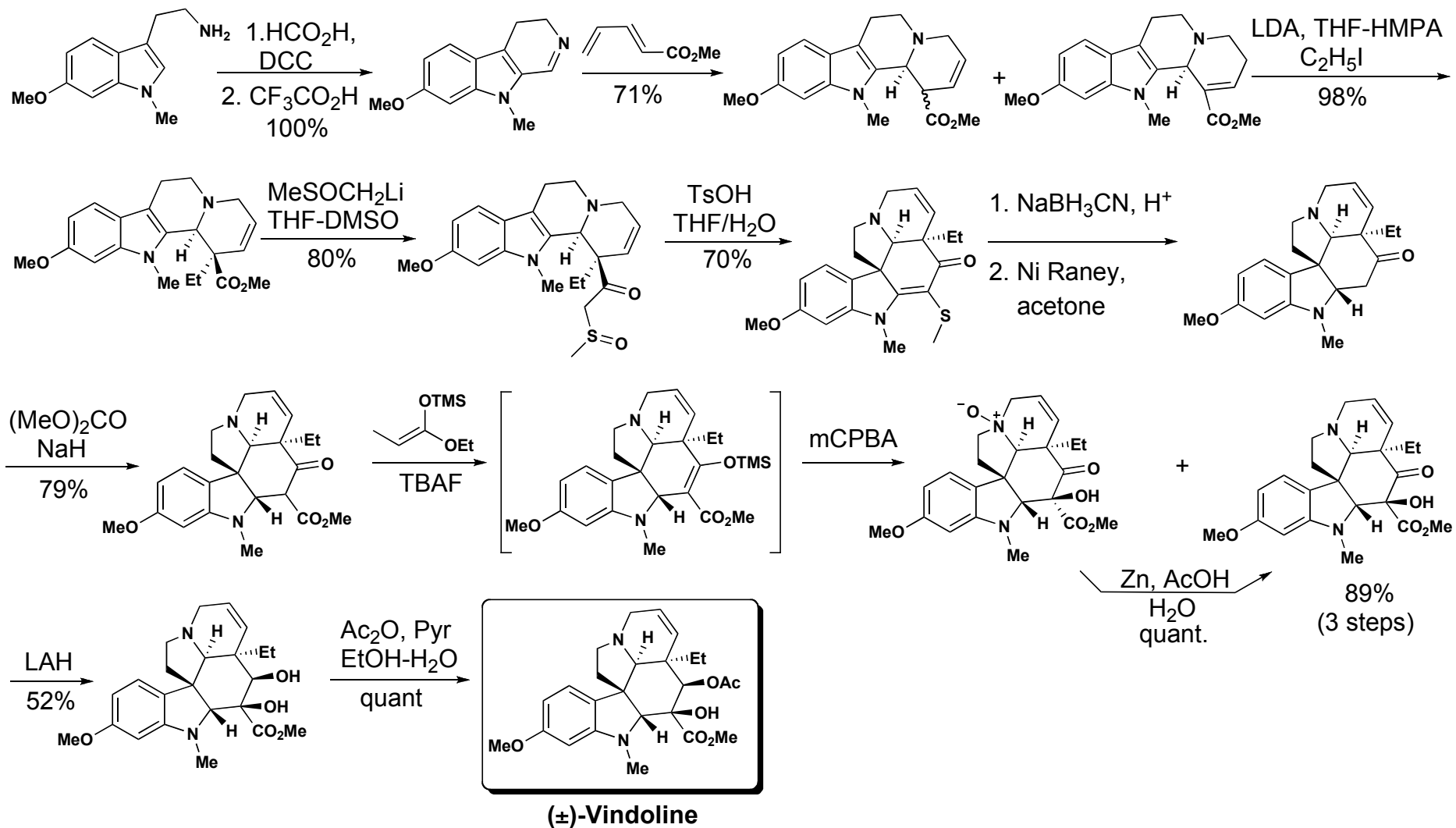


(-)-Longifolene

## A new efficient total synthesis of vindorosine and vindoline

R. Zo Andriamialisoa, Nicole Langois, Yves Langois

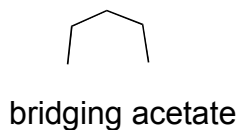
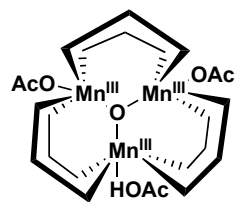
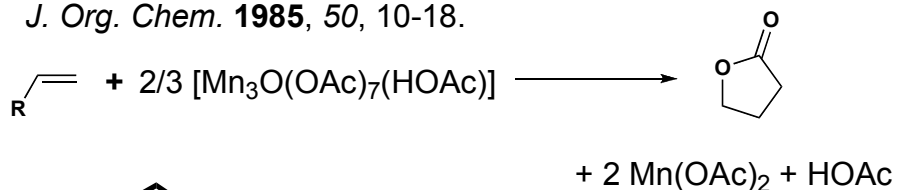
*J. Org. Chem.*, **1985**, *50*, 961-967.



## Manganese (III)-mediated $\gamma$ -lactone annulation

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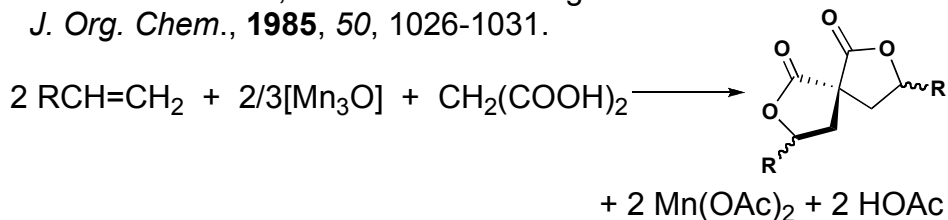


$[Mn_3O(OAc)_7(HOAc)]$

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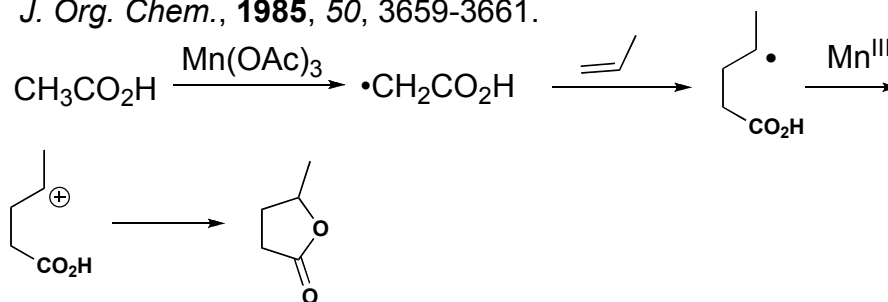
Entry	Alkene	Yield. %
1.	1-hexene	100
2.	1-octene	100
3.	allyl chloride	30
4.	cyclohexene	16

## Manganese(III)-based oxidative free-radical cyclization.

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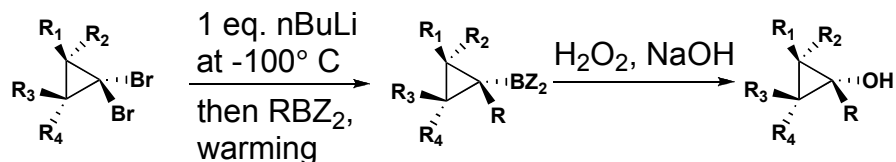


Unsaturated $\beta$ -keto ester	Products	Yield %
		75
		$\alpha$ -OH 41% $\beta$ -OH 8%
		unsat 36 sat 10

Rxn. cond.: 2 eq.  $Mn(OAc)_3$ , 1 eq.  $Cu(OAc)_2$ , 1h at 60° C

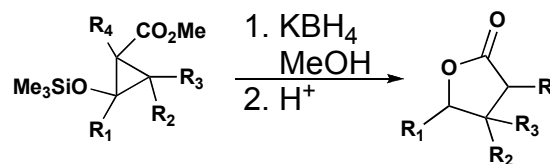
## Applications of cyclopropylboranes in organic synthesis. A stereocontrolled route to substituted cyclopropanol derivatives.

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Erich L. Grimm, Hans-Ulrich Reissig  
*J. Org. Chem.*, **1985**, *50*, 242-244.



Entry	Substrate	Borane	Products	Yield, %
1.				82
2.			 93 : 7	57
3.		Et <sub>3</sub> B		71
4.		Me <sub>3</sub> B		50
5.		Me <sub>3</sub> B		53

Entry	Substrate	Product	Yield, %
1.			78
2.			91
3.			95
4.			89