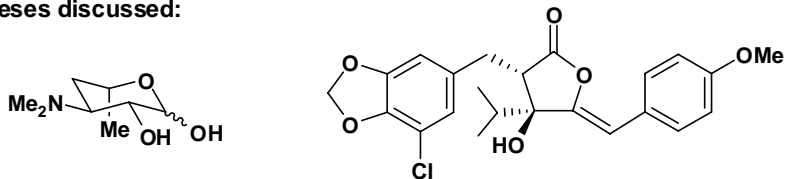


Statistics for *J. Org. Chem.* 1984, Volume 49, Issues 1-26:

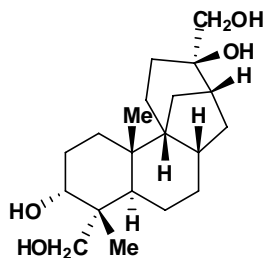
- 1313 Papers
- 14 Herbert C. Brown
- 8 Albert Padwa
- 8 Leo A. Paquette
- 7 Dale L. Boger
- 7 George A. Olah
- ...
- 4 Samuel J. Danishefsky
- 1 Elias J. Corey

Syntheses discussed:

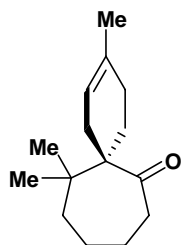


5-*epi*-Desosamine

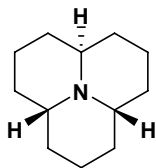
Cyanobacterin



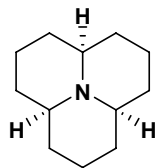
(±)-Aphidicolin



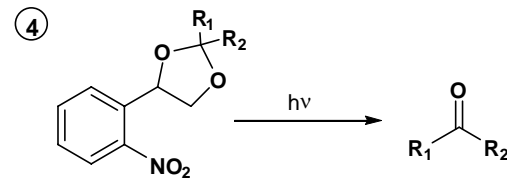
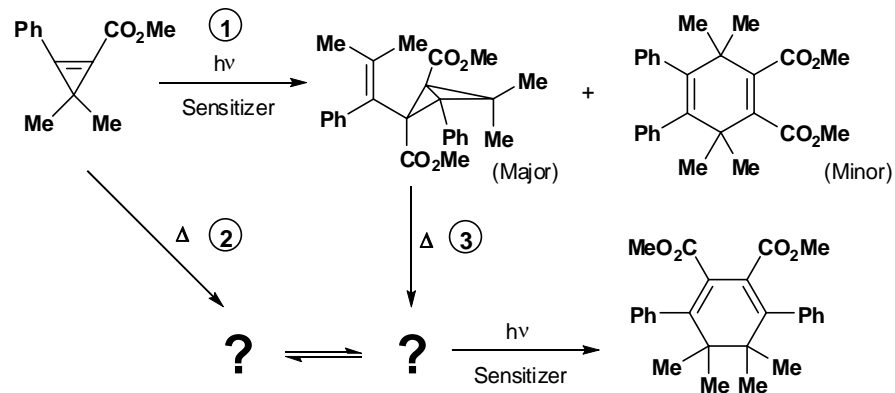
(±)-β-Chamigrene



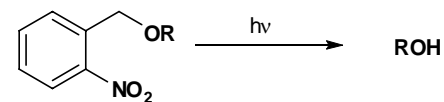
Perhydropyrido[2,1,6-*de*]quinolizines



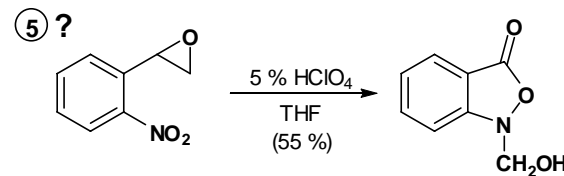
Problems of the Day:



Alternatively:



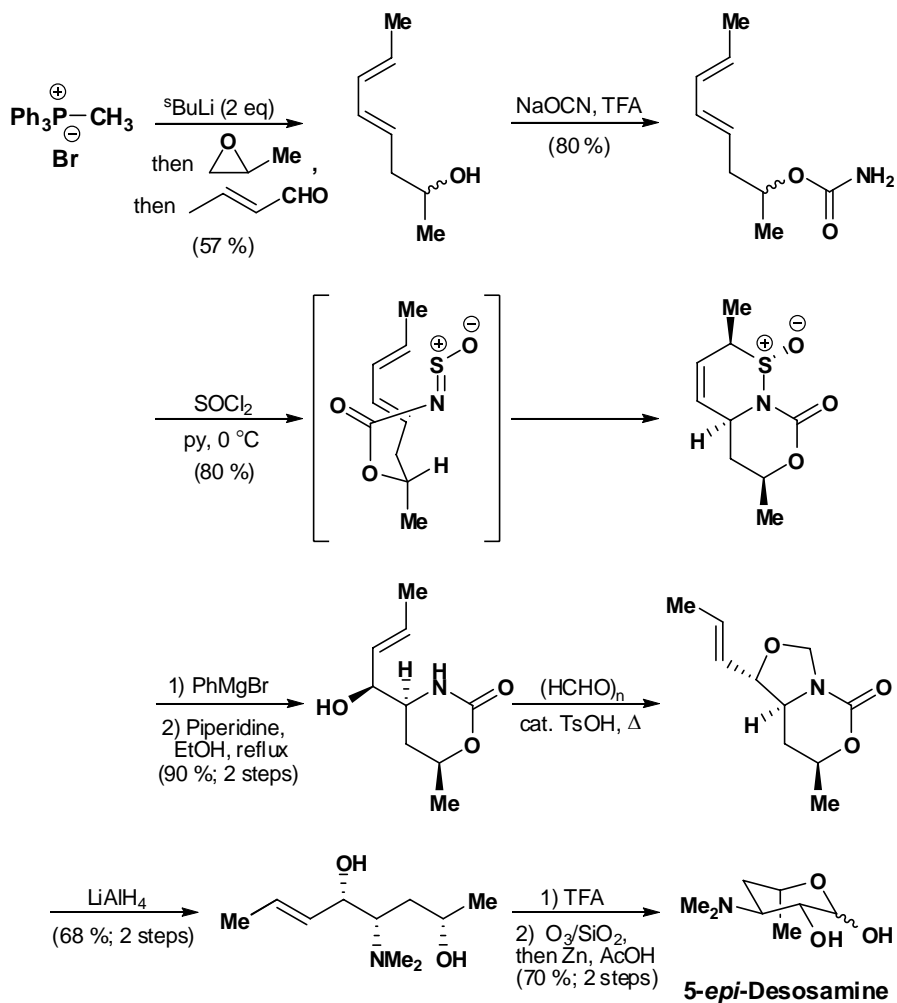
Mechanism and side product?



(Disclaimer: The proposed mechanism is neither discussed in the paper nor in the references, and thus the answer given is merely an opinion/suggestion.)

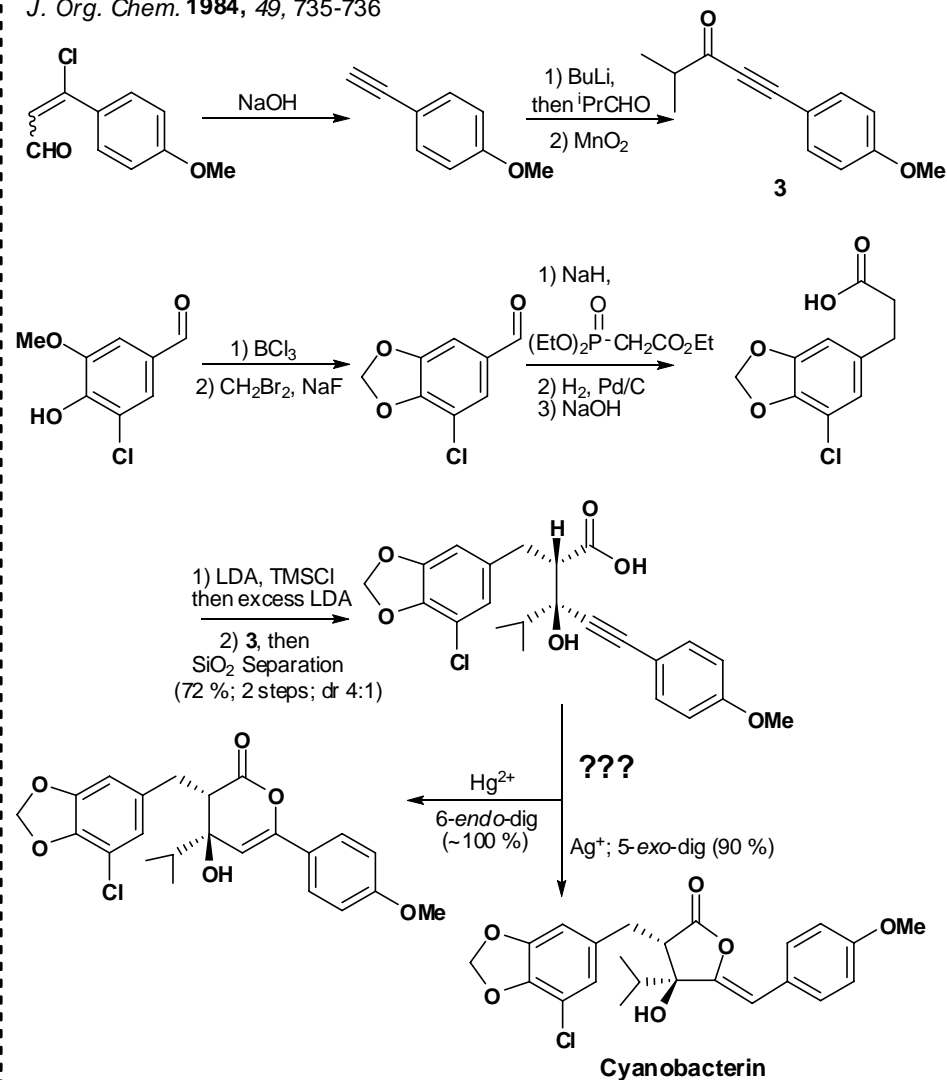
**Synthesis of 5-*epi*-Desosamine via a Stereoselective Intramolecular *N*-Sulfinyl Diels-Alder Cycloaddition**

S. W. Remiszewski, R. R. Whittle and S. M. Weinreb\*  
*J. Org. Chem.* **1984**, *49*, 3243-3244



**Total Synthesis and X-Ray Structure Determination of Cyanobacterin**

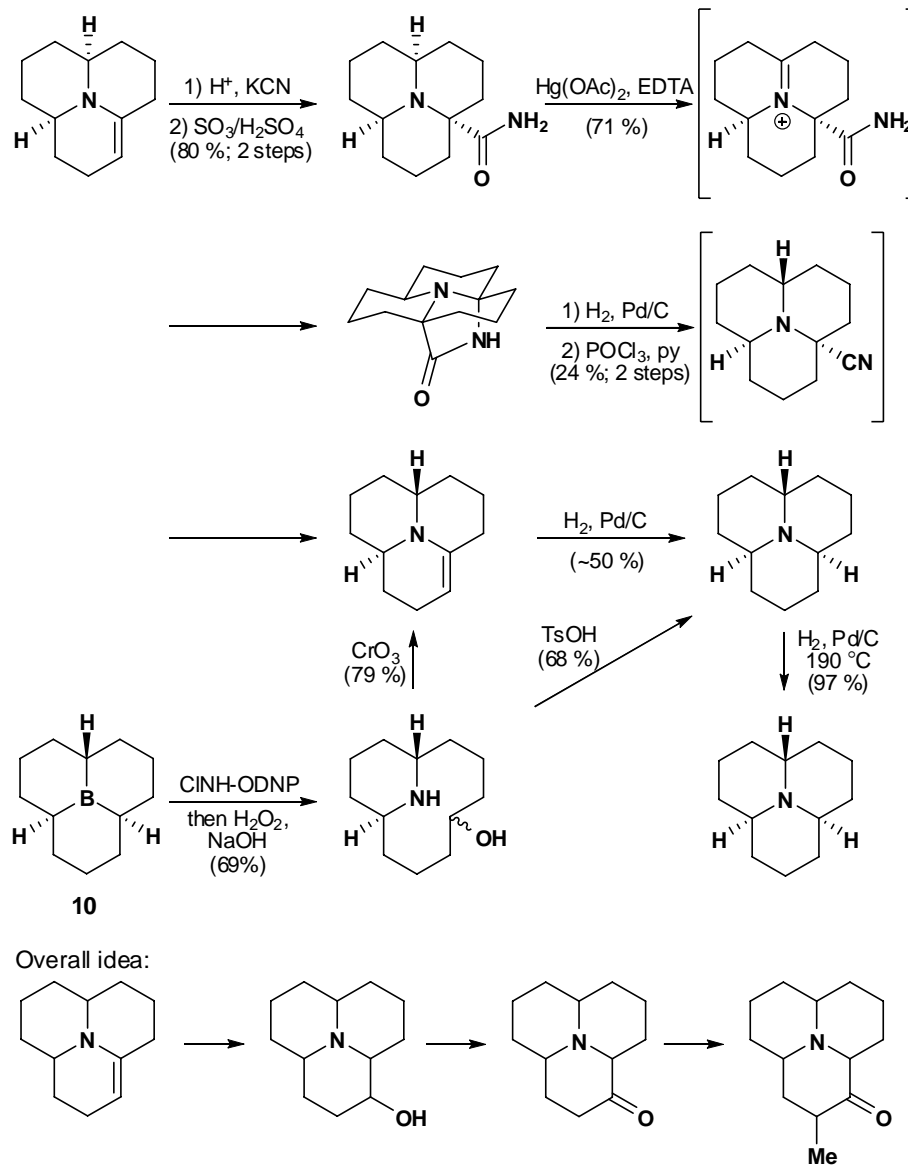
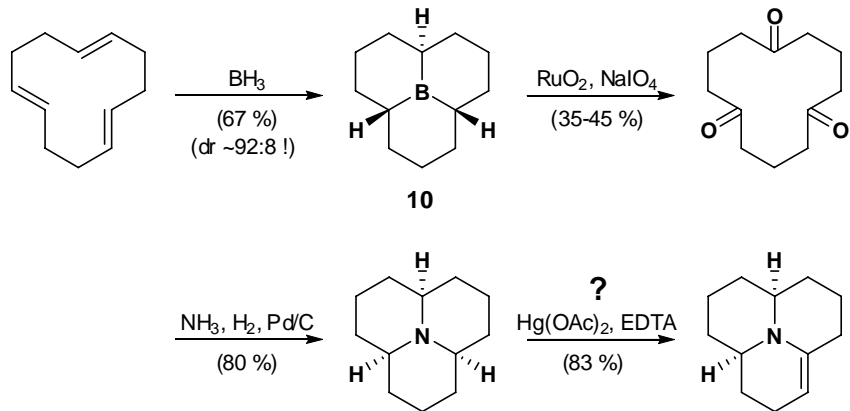
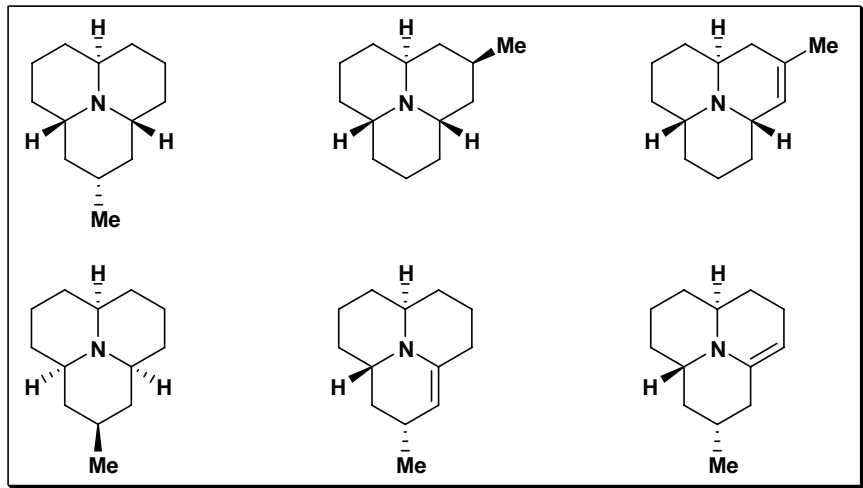
T. -T. Jong, P. G. Williard\* and J. P. Porwoll  
*J. Org. Chem.* **1984**, *49*, 735-736





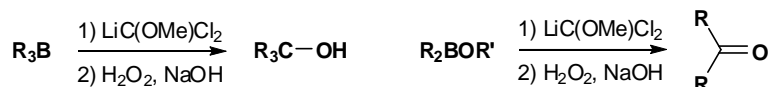
**Stereo- and Regioselective Total Synthesis of the Hydropyrido[2,1-*d*]quino-  
lizine Ladybug Defensive Alkaloids**

R. H. Mueller,\* M. E. Thompson, R. M. DiPardo  
*J. Org. Chem.* **1984**, *49*, 2217-2231



Herbert C. Brown (Purdue U.)

1) One-carbon extension into a carboxylic acid: *J. Org. Chem.* **1984**, *49*, 892-898



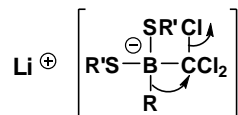
*J. Am. Chem. Soc.* **1971**, *93*, 2070-2071    *J. Am. Chem. Soc.* **1975**, *95*, 6876-6877

Analogous reaction was unsuccessful with *bis*-boronic esters:

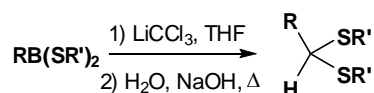


Does not form

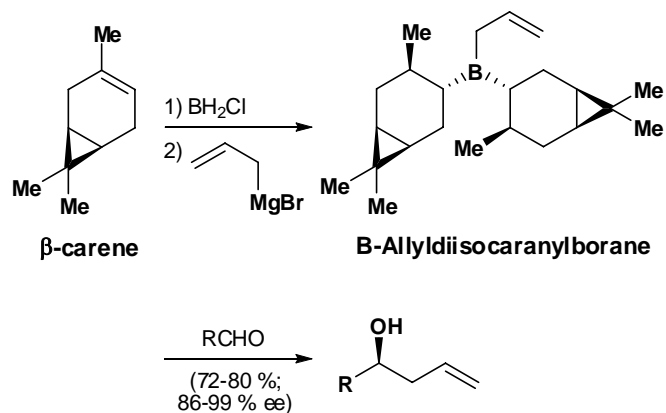
via a boron-ate complex:



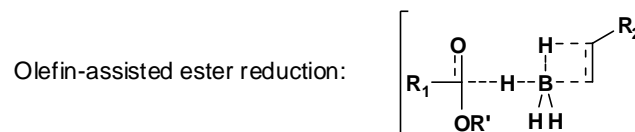
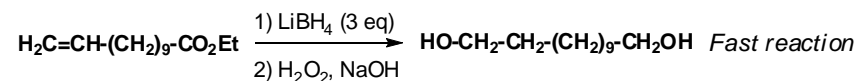
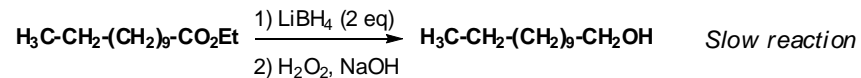
Also:



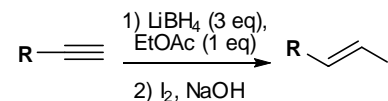
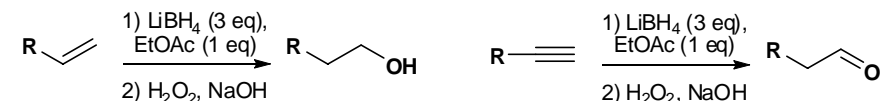
2) Enantioselective allylation: *J. Org. Chem.* **1984**, *49*, 4089-4091



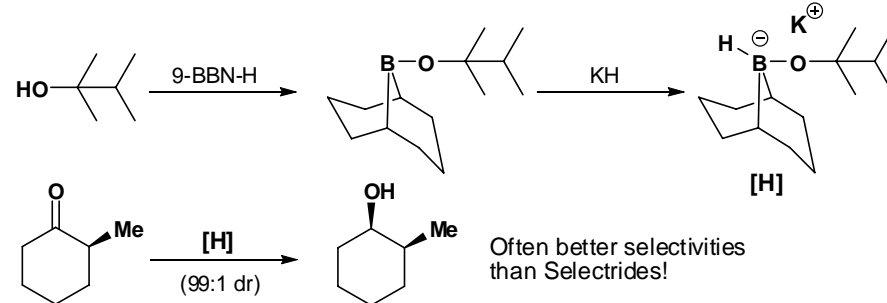
3)  $\text{LiBH}_4$  reduction of olefins in the presence of esters: *J. Org. Chem.* **1984**, *49*, 3891-3898; 4822-4827



Deliberately add an ester to reduce olefins:

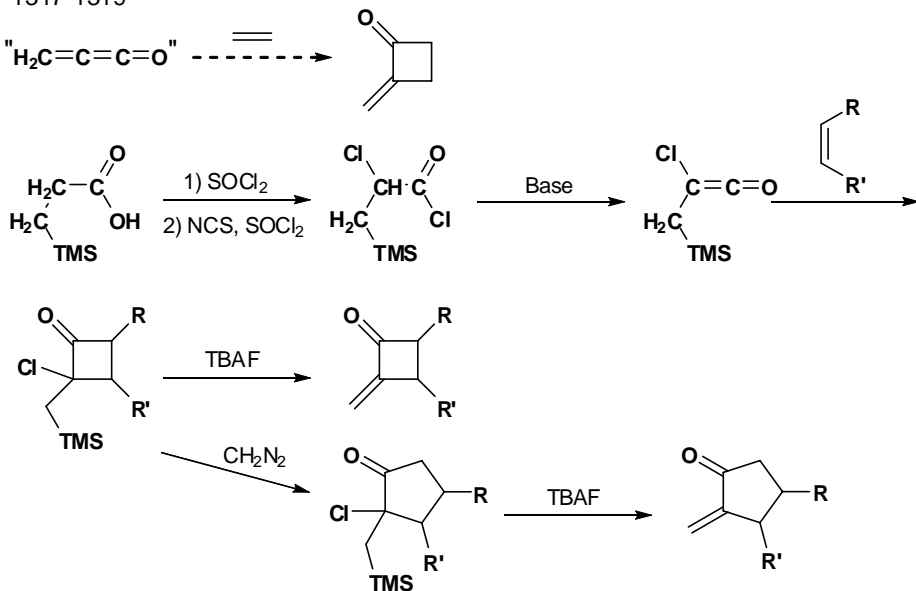


4) Stereoselective cyclic ketone reductions: *J. Org. Chem.* **1984**, *49*, 2073-2074

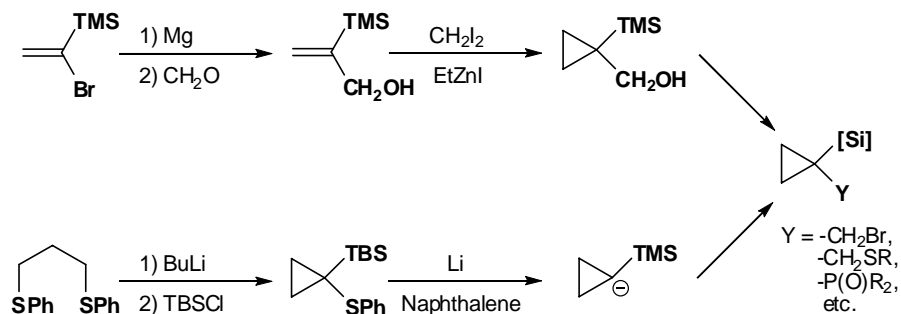


## Leo A. Paquette (Ohio State U.)

1) Methylene ketene equivalents in [2+2] cycloadditions: *J. Org. Chem.* **1984**, *49*, 1317-1319

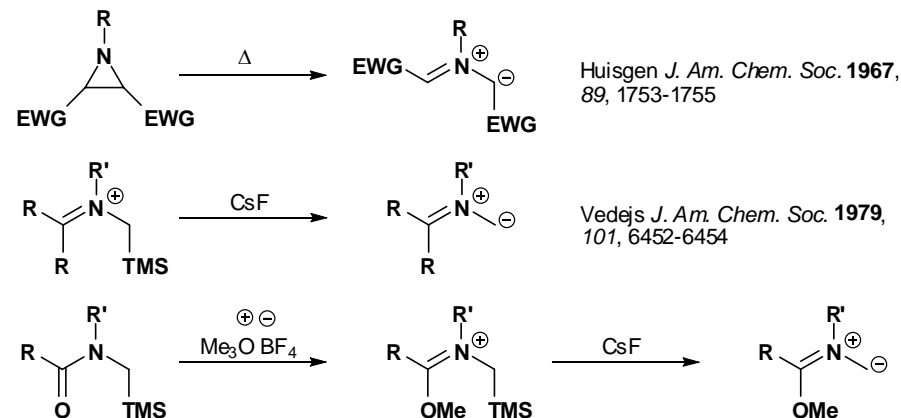


2) Trimethylsilyl cyclopropanes in synthesis: *J. Org. Chem.* **1984**, *49*, 3604-3609; 3610-3617; 3618-3621



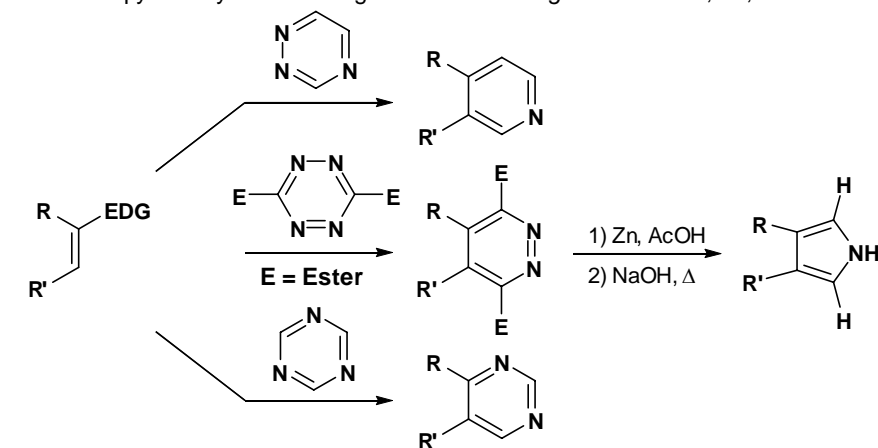
## Albert Padwa (Emory U.)

Generation of azomethine ylides from amides: *J. Org. Chem.* **1984**, *49*, 3314-3322



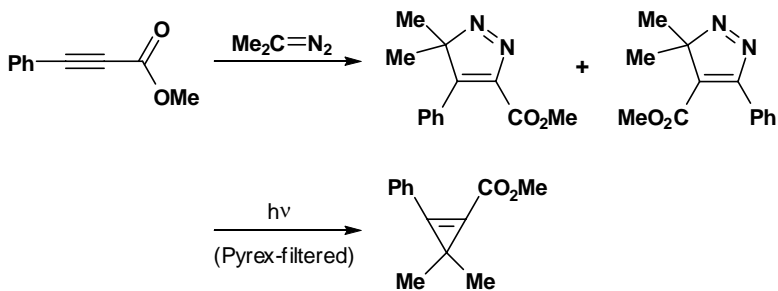
## Dale L. Boger (U. of Kansas)

Studies in pyrrole synthesis using tetrazines: *J. Org. Chem.* **1984**, *49*, 4405-4409

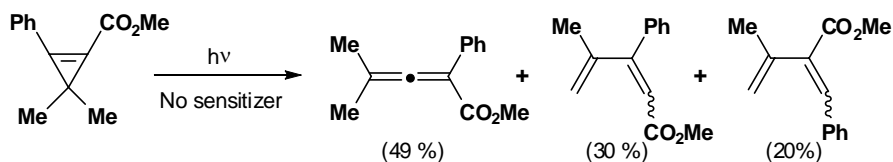


**Cycloaddition Reactions of Strained Ring Systems. Photochemistry of 1-Phenyl-2-carbomethoxy-3,3-dimethylcyclopropene**

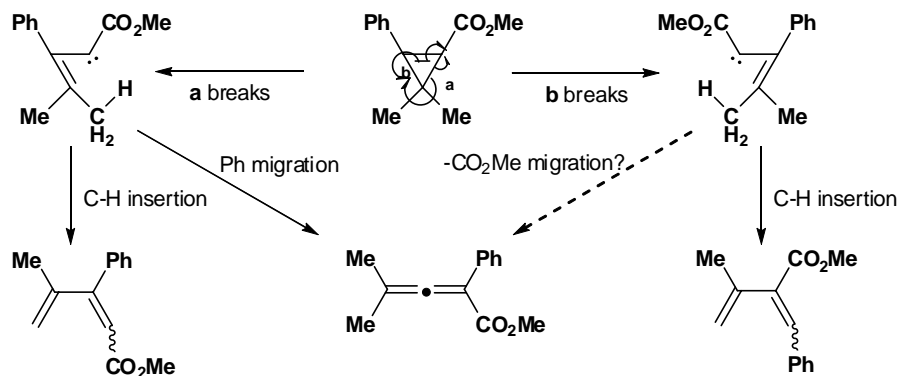
A. Padwa\* and G. D. Kennedy  
*J. Org. Chem.* **1984**, *49*, 4344-4352



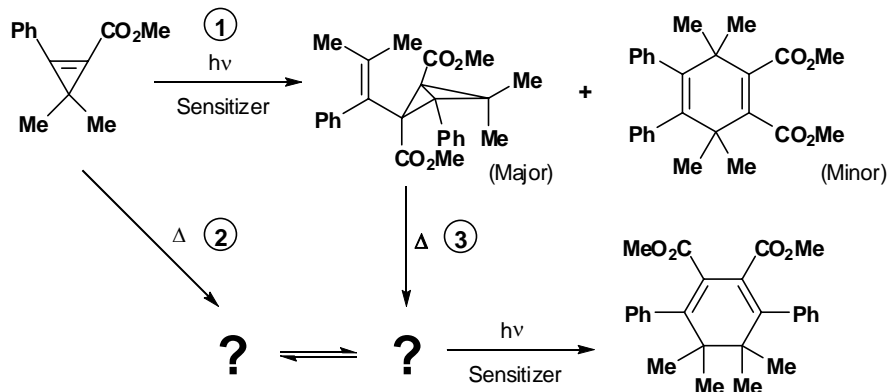
Electronically excited singlet state generation via direct photolysis:



Mechanism: Excited singlet, generates a vinyl carbene



Electronically excited triplet state generation via sensitized photolysis:



**Antibacterial Benzisoxazolones. An Unusual Rearrangement Product from *o*-Nitrostyrene Oxide en Route to the Photolabile Carbonyl Protecting Group (*o*-Nitrophenyl)ethylene glycol**

W. Wierenga,\* A. W. Harrison, B. R. Evans and C. G. Chidester  
*J. Org. Chem.* **1984**, *49*, 438-442

