

ORGANIC RADICALS: STRUCTURE, REACTIVITY, AND SYNTHESIS APPLICATIONS

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Crinipellin

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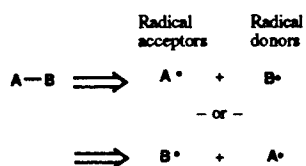
Funding

National Institutes of Health

Camptothecin

H. Liu

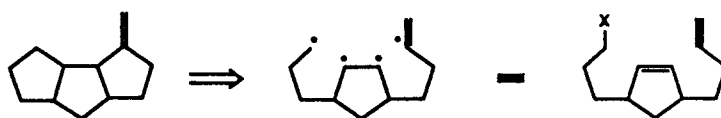
Figure 1. Notations for Retrosynthetic Planning



Synlett 1991, 63

Figure 2. Tandem Cyclization Strategies

linear triquinanes



angular triquinanes

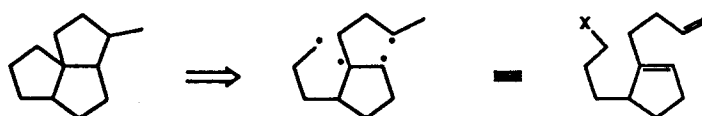


Figure 3. Hirsutene and Silphiperfolene

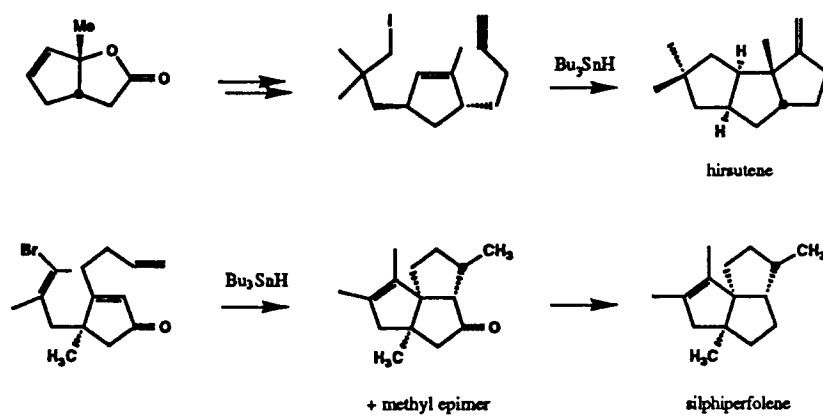


Figure 4. Crinipellin Strategy

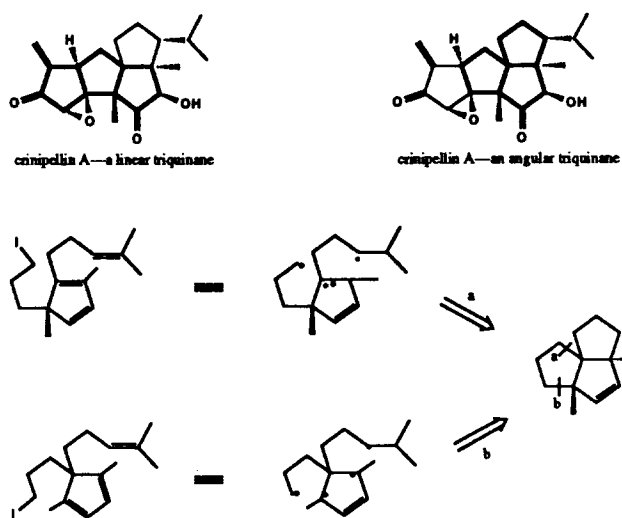


Figure 5. Crinipellin Model

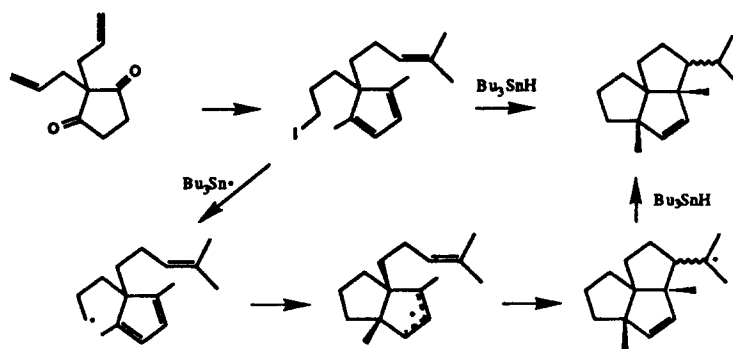


Figure 6. Current Strategy

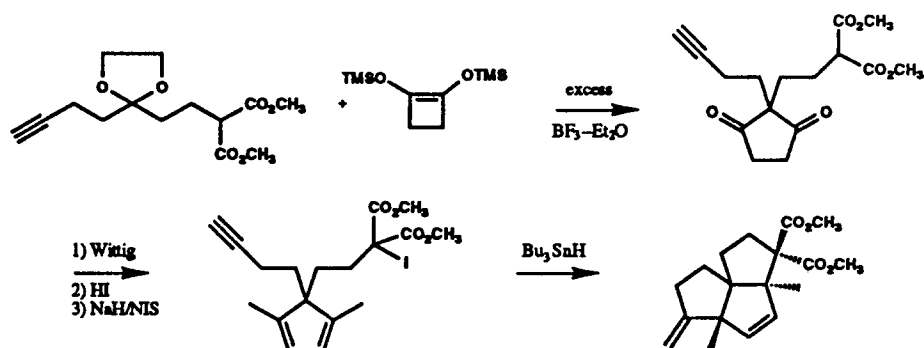


Figure 7. Strategies for Modhephene

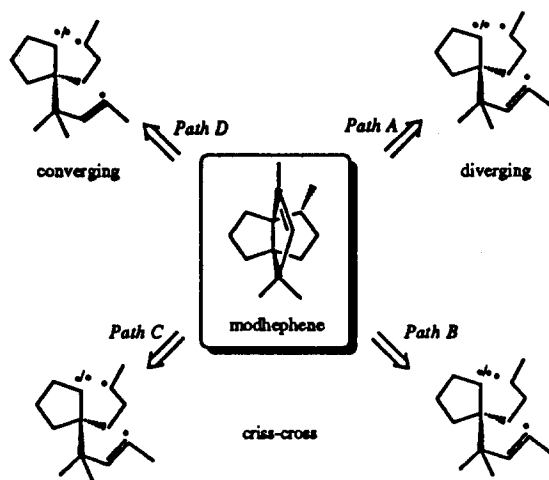


Figure 8. A Criss-cross Strategy

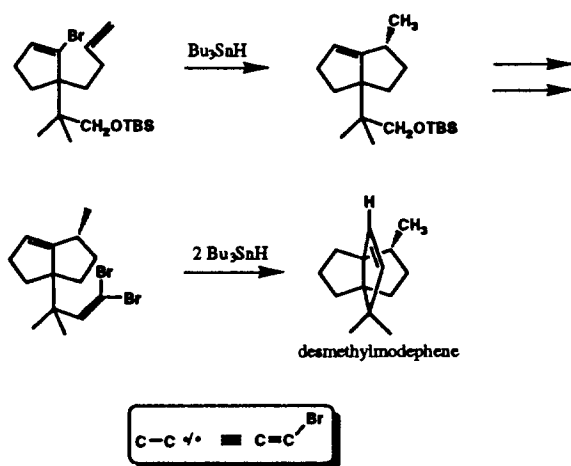


Figure 9. A Converging Strategy

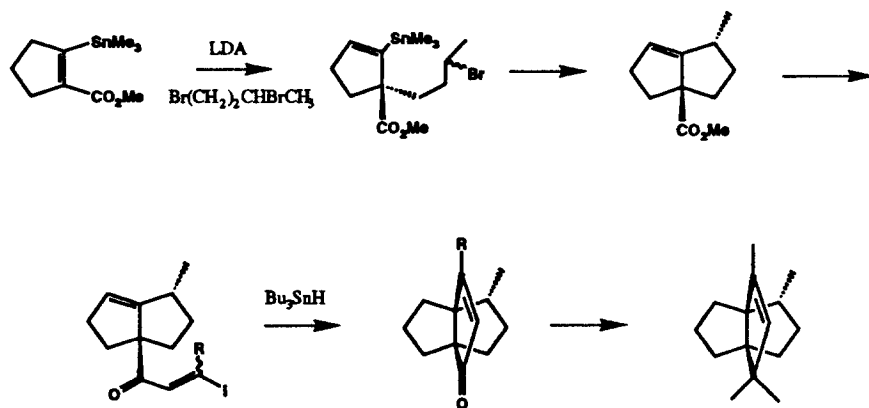


Figure 10. Tandem Cyclization Route to Propellanes

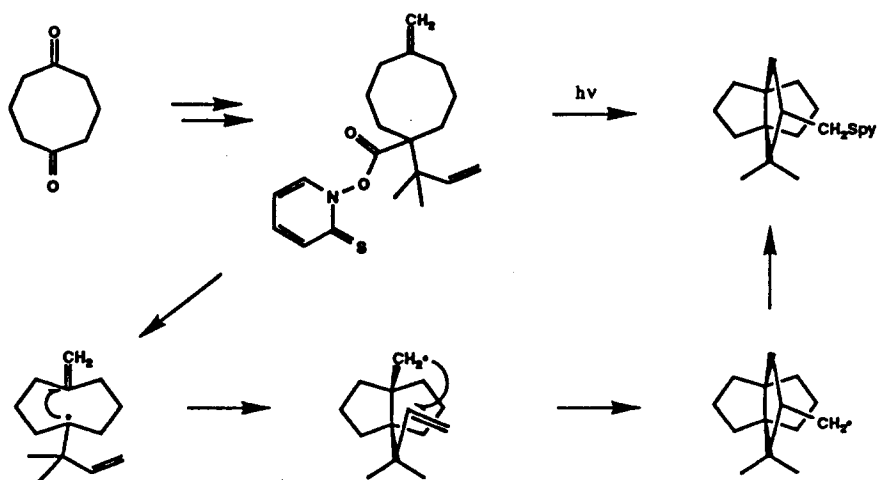


Figure 11. 3 + 2 Radical Annulations

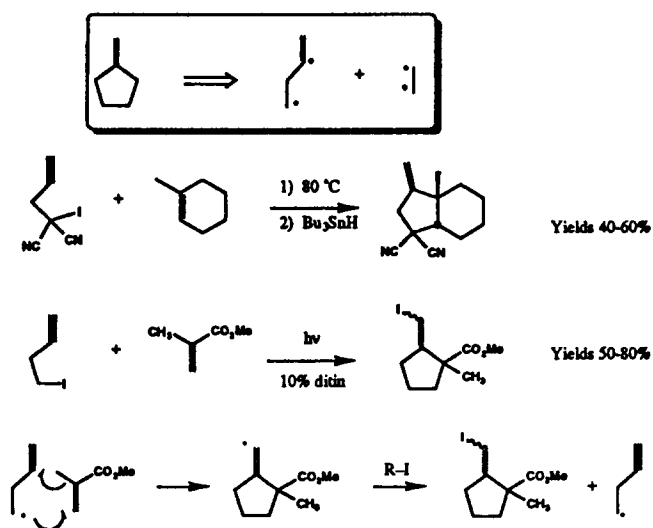


Figure 12. 4 + 1 Radical Annulations

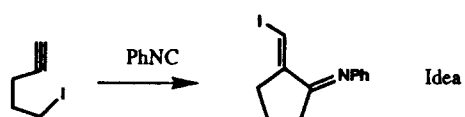
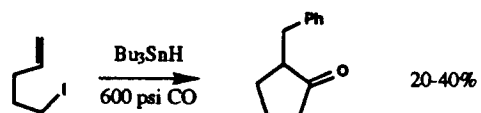
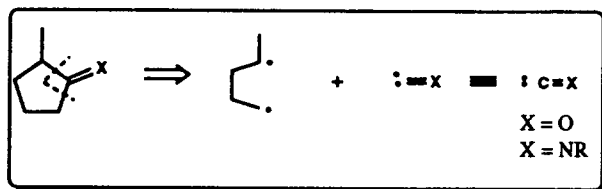


Figure 13. A 4 + 1 Radical Annulation

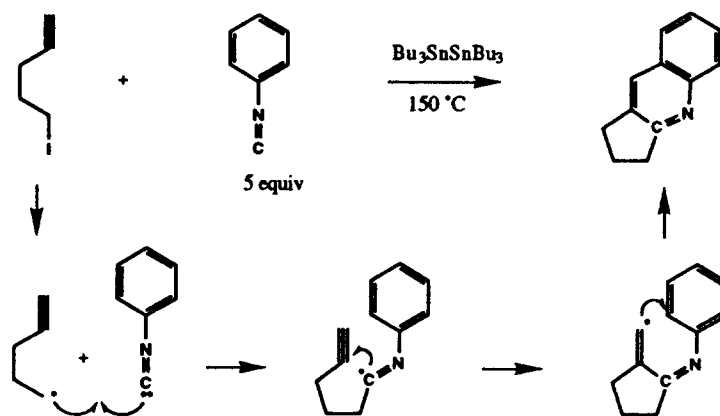


Figure 14. 4 + 1 Annulation—Regiochemistry

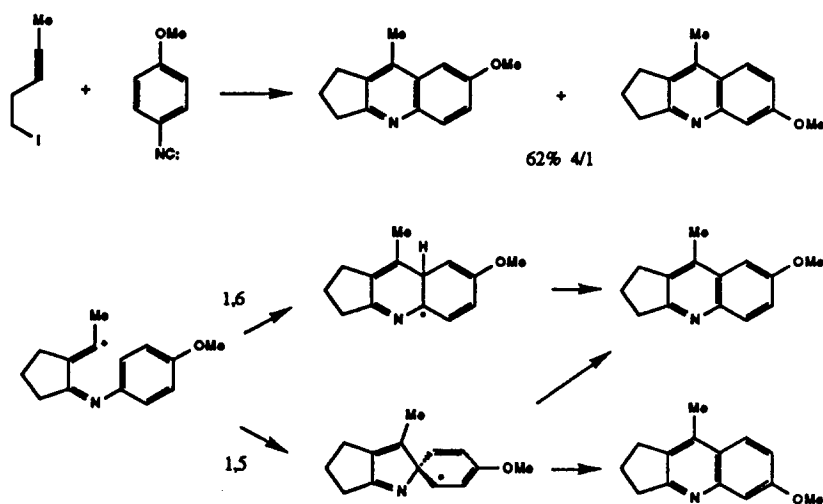


Figure 15. Mechanism of Rearrangement

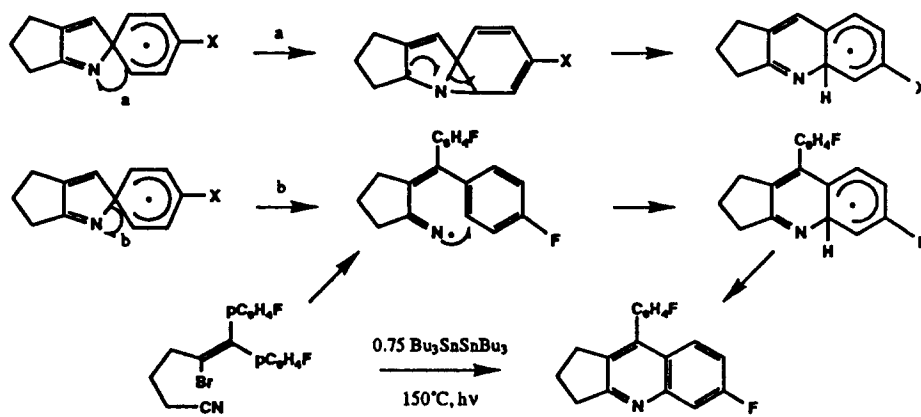


Figure 16. Mechanism of Oxidation

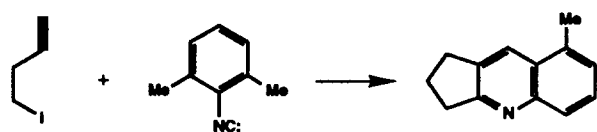
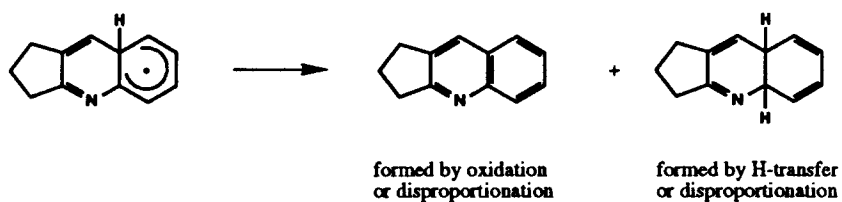


Figure 17. Camptothecin

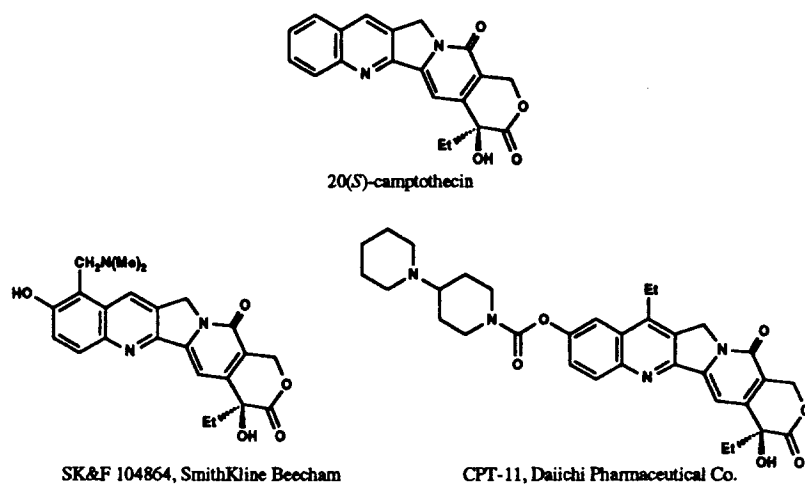


Figure 18. Camptothecin Strategy

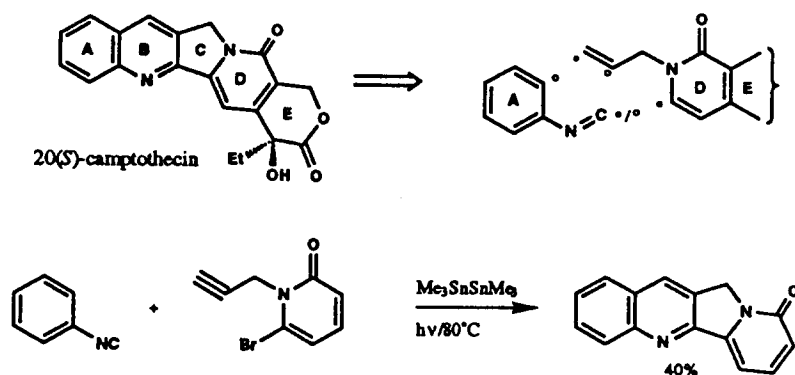


Figure 19. Camptothecin Synthesis

