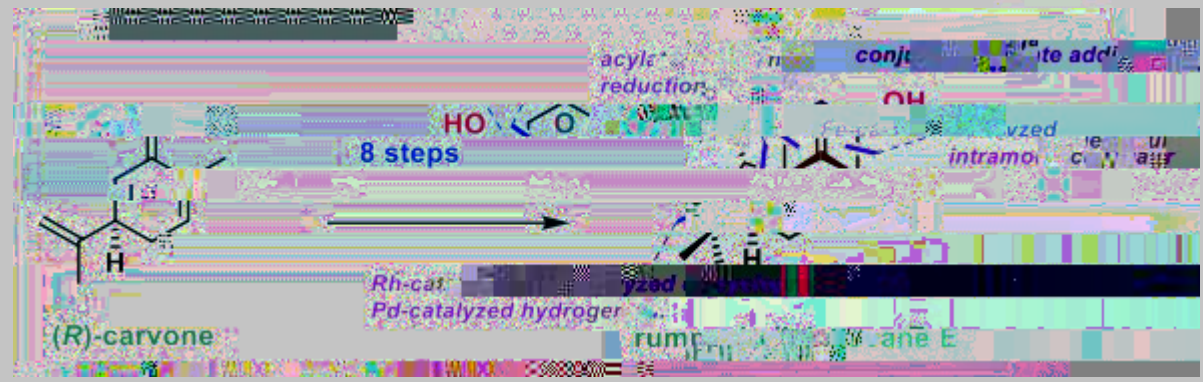


Asymmetric Total Synthesis of Rumphelleclovane E

Guanggen Liu,¹ Zhiyong Zhang,¹ Shimin Fu,¹ and Bo Liu¹



- 1,2-addition of a nucleophile to an α,β-unsaturated carbonyl compound
- 1,4-addition of a nucleophile to an α,β-unsaturated carbonyl compound
- 1,4-reduction of an α,β-unsaturated carbonyl compound
- 1,2-reduction of an α,β-unsaturated carbonyl compound
- 1,4-reduction of an α,β-unsaturated carbonyl compound

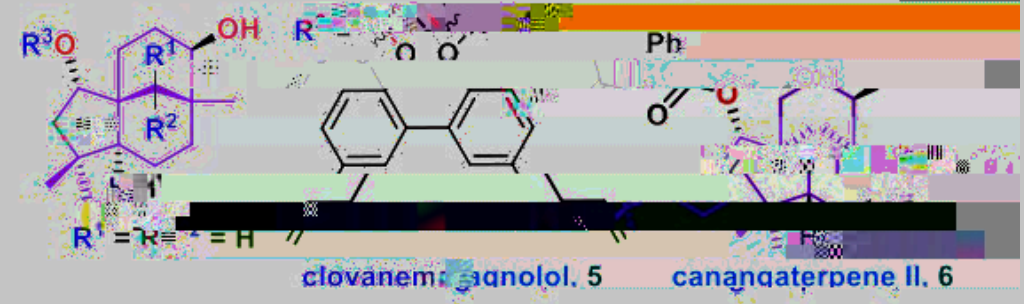
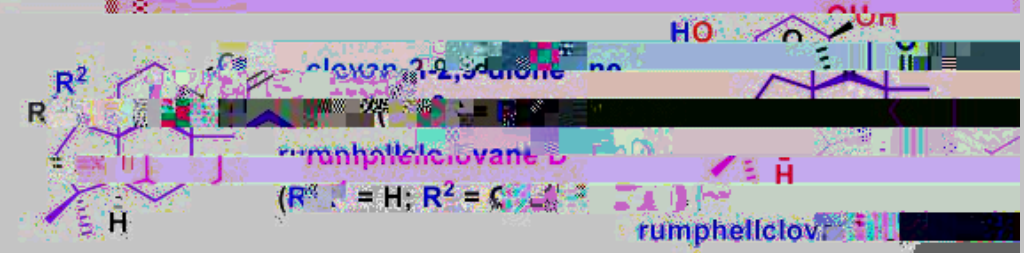
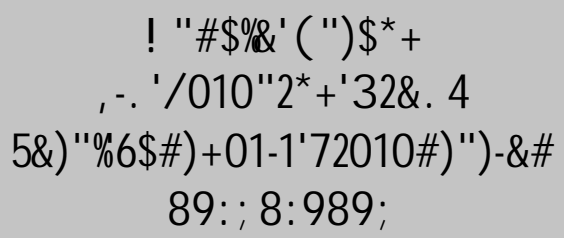


Figure 1. Asymmetric total synthesis of rumphelleclovane E.

(a) Becker et al (1965). A-AB-ABC strategy



(b) Schultz et al (1965). B-BC-ABC strategy



(c) Dreiding et al (1985).



(d) Raphael et al (1965). C-BC-ABC strategy



