

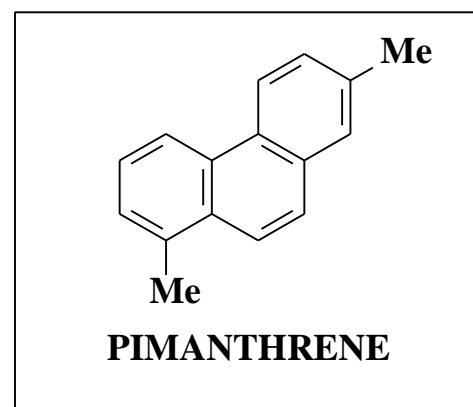
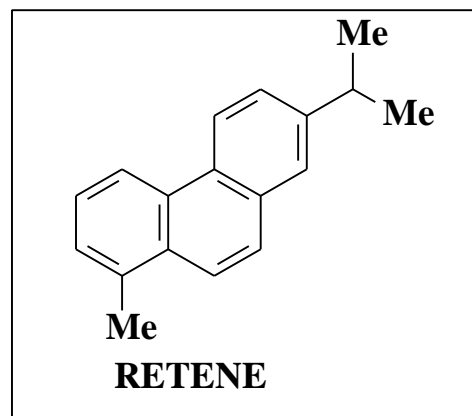
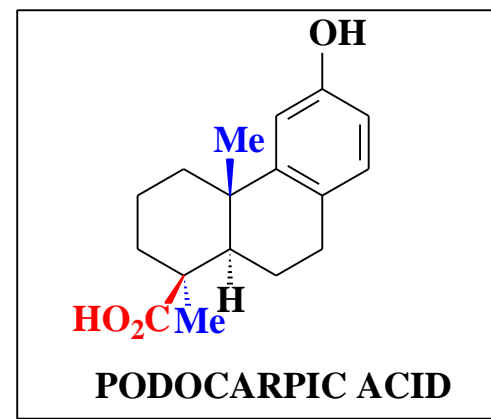
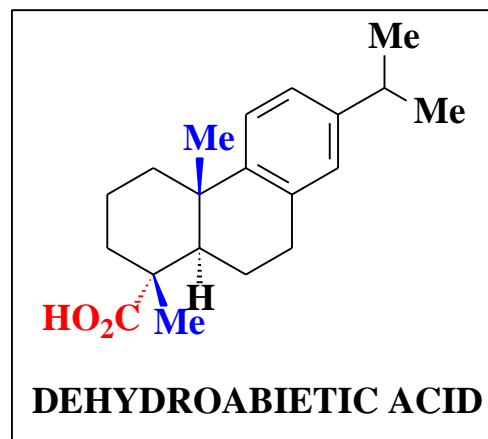
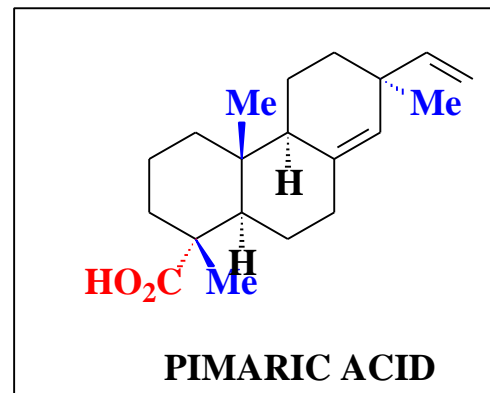
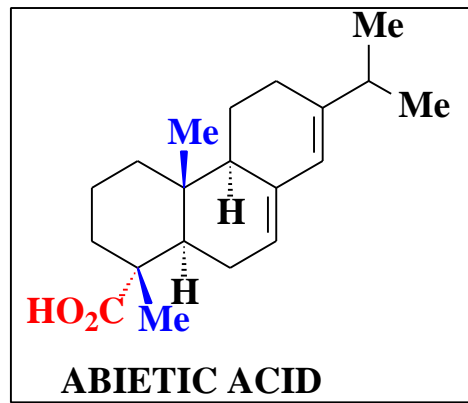
# **INTRAMOLECULAR CARBON-CARBON BOND FORMATIONS IN POLYCYCLIC SYNTHESSES**

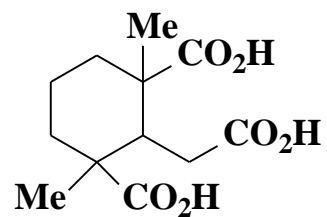
**Based upon the work at the**

**INDIAN ASSOCIATION FOR THE CULTIVATION OF SCIENCE  
KOLKATA**

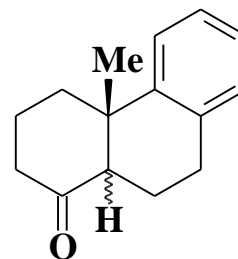
**1954 - 1959**

**1964 - 1996**



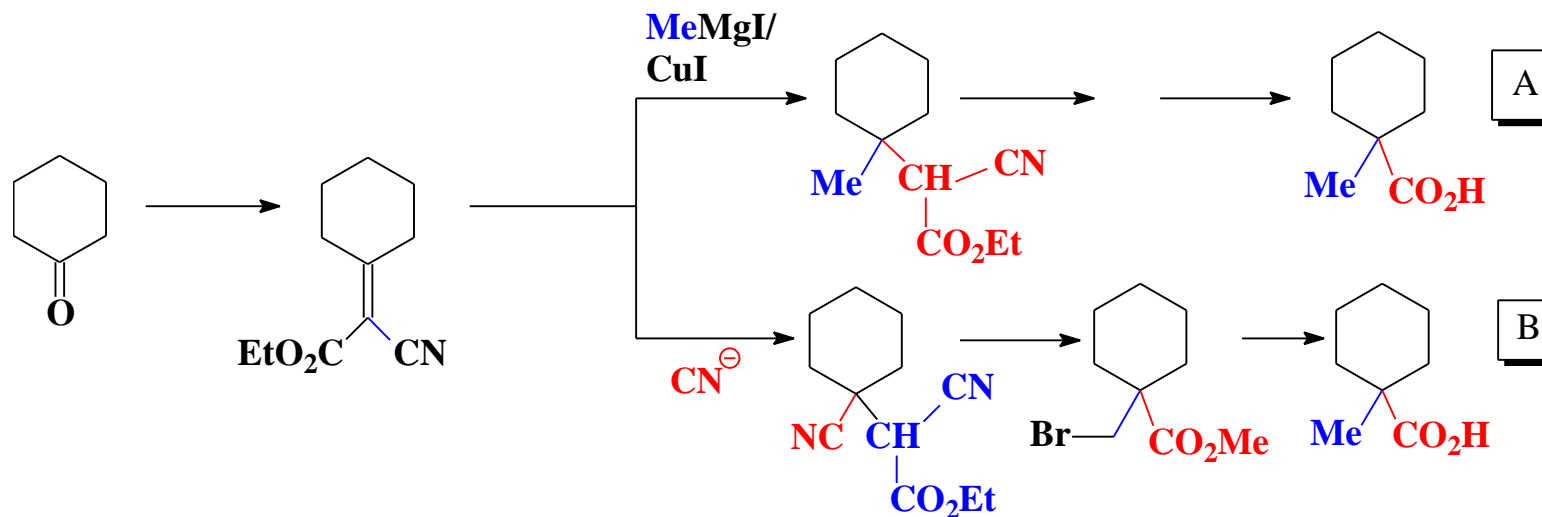


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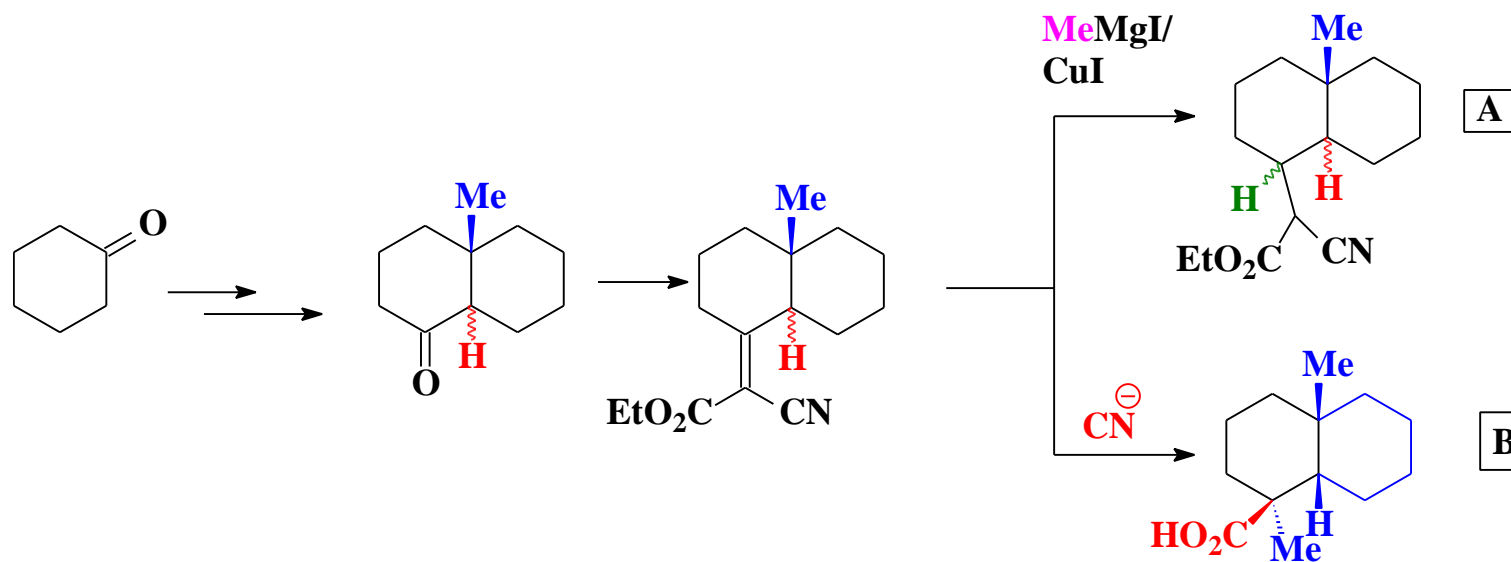


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*J. Am. Chem. Soc.* 1951, 73, 3544

N. N. Saha, P. Bagchi and P. C. Dutta,  
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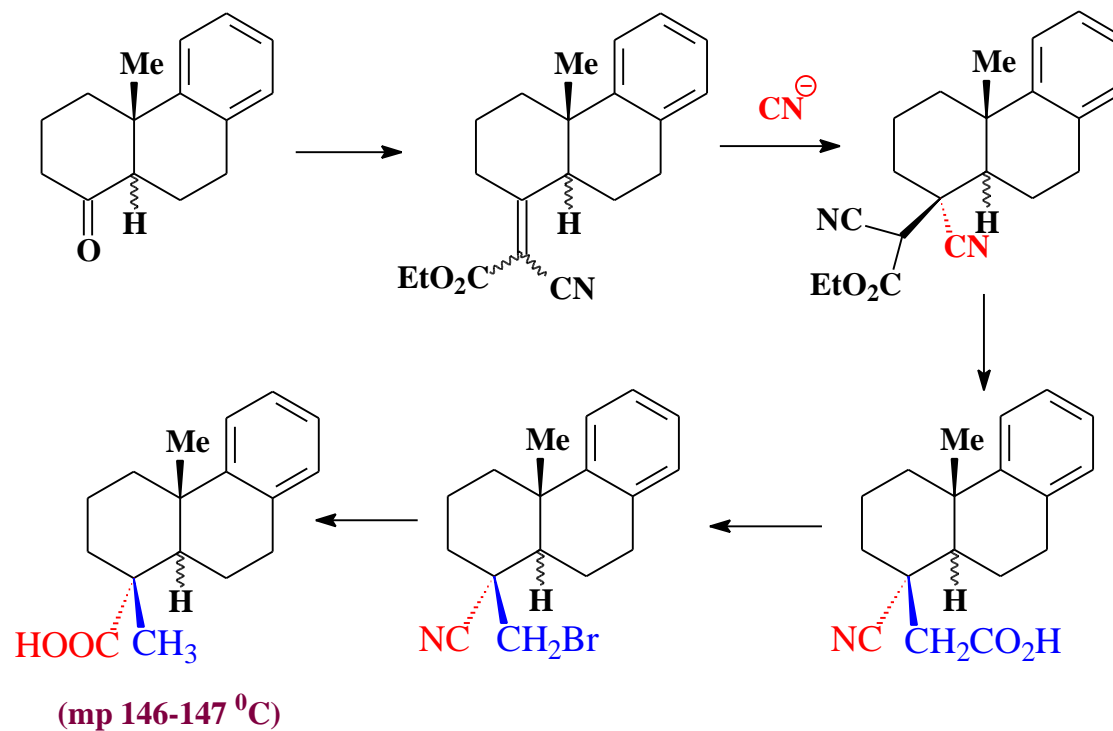
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*J. Am. Chem. Soc.*, 1957, 79, 4487

N. K. Basu, U. R. Ghatak, S. Sengupta and P. C. Dutta  
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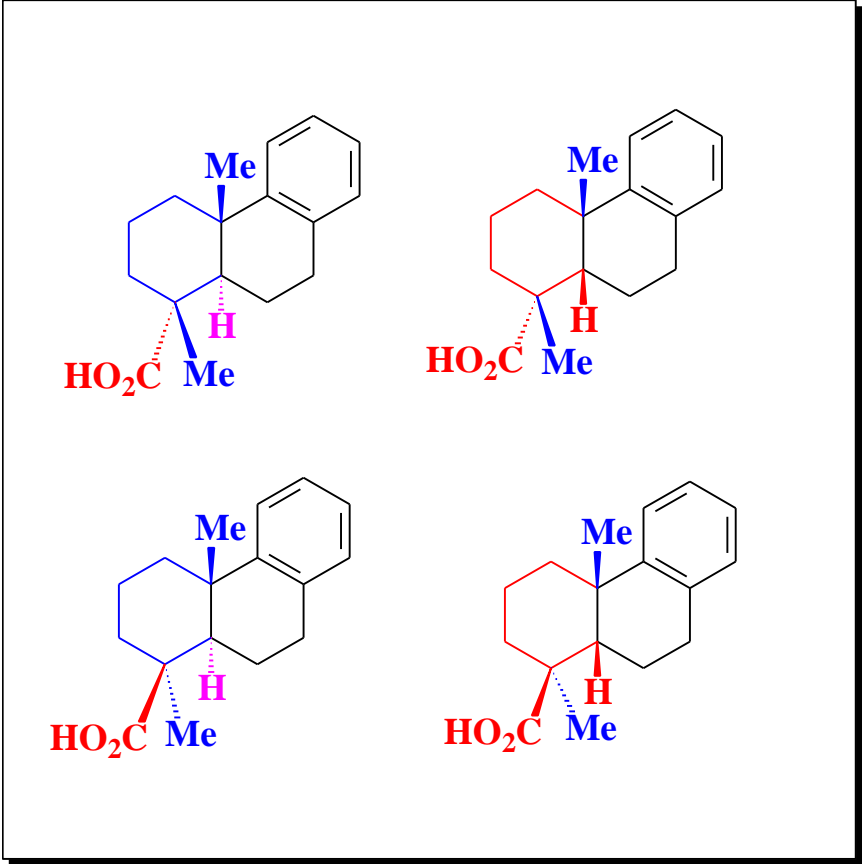
C. T. Mathew, G. C. Banerjee and P. C. Dutta,  
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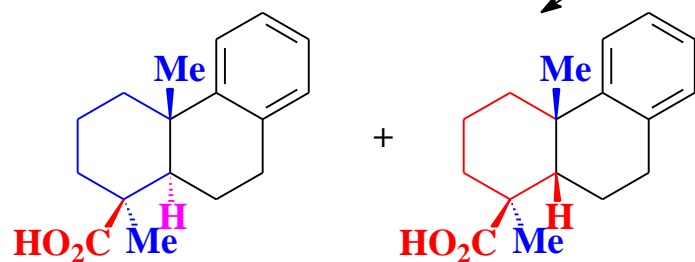
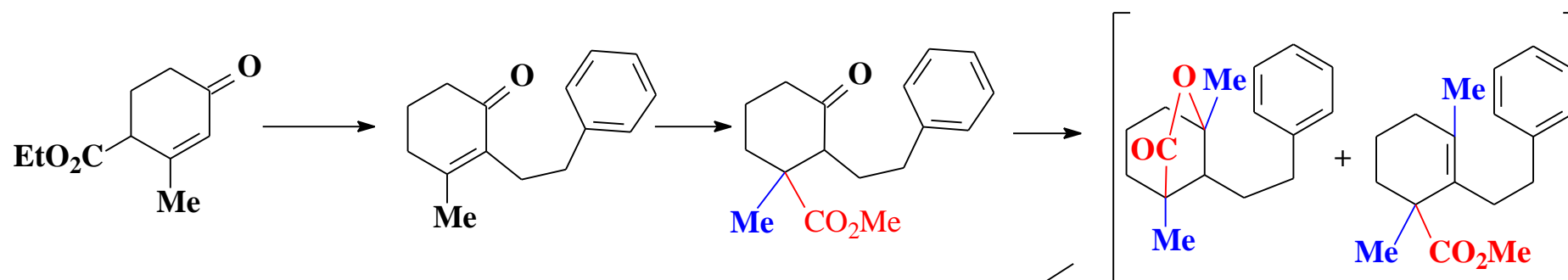


cis or trans ?

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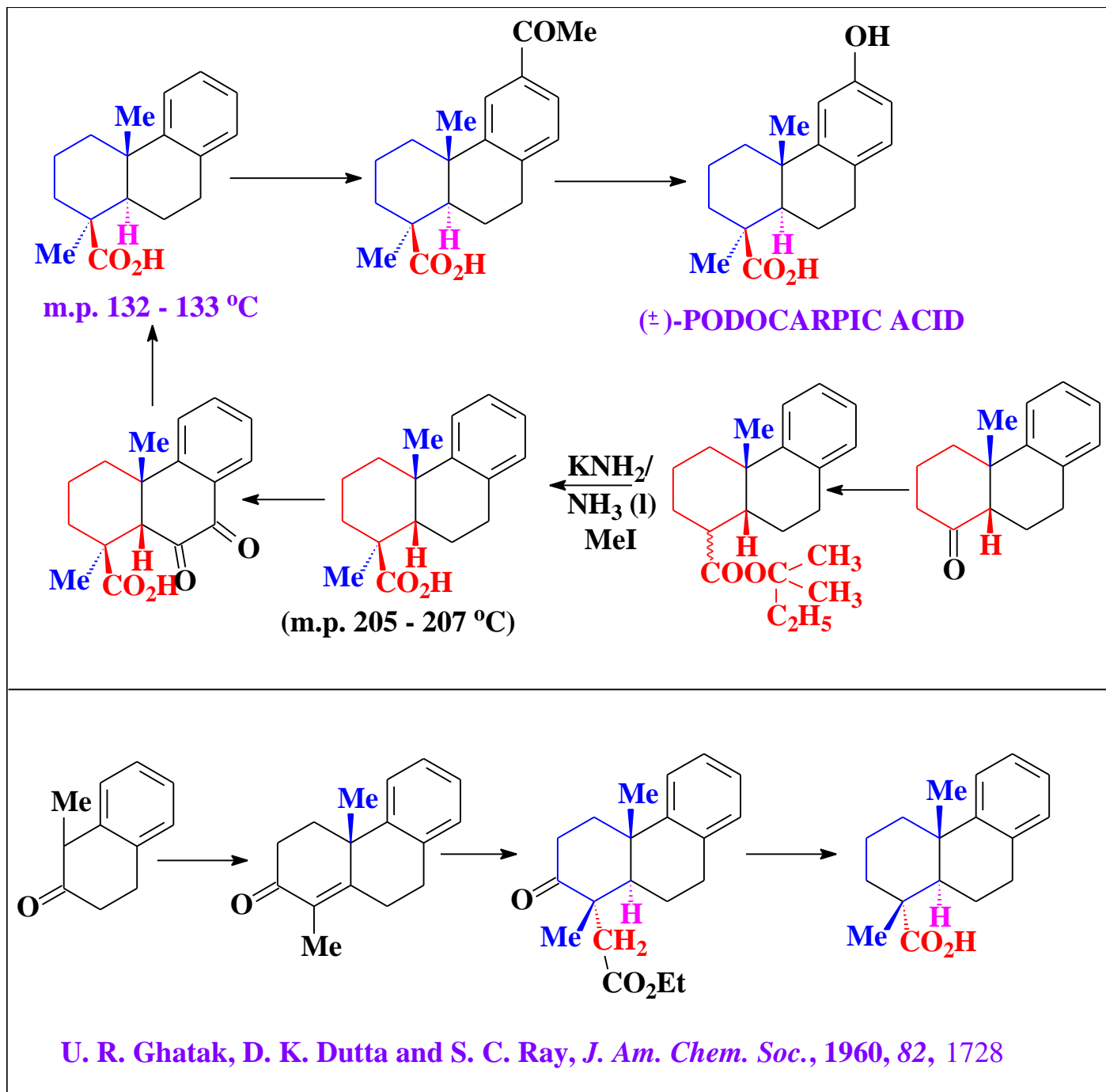


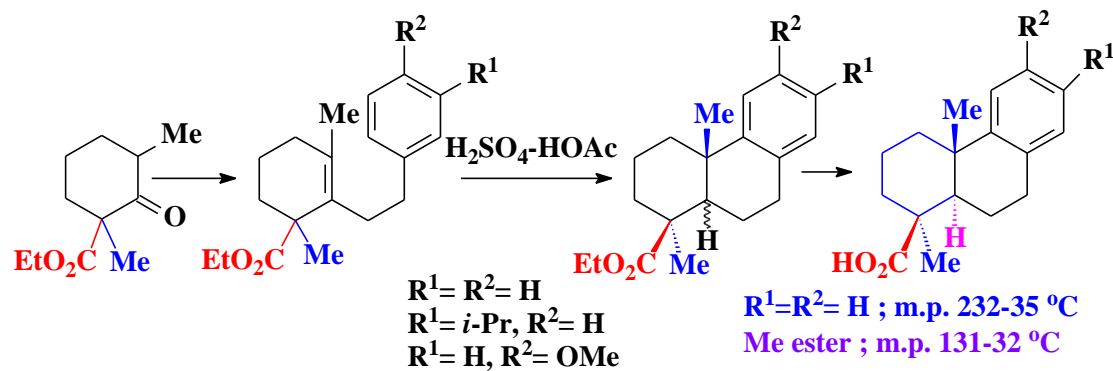


**m.p. 232 - 233 °C**  
**Methyl ester:**  
**m.p. 131 - 132 °C**

**m.p. 206 - 207 °C**  
**Methyl ester:**  
**m.p. 84 - 85 °C**

U. R. Ghatak, *Tet. Lett.*, 1959, 19  
 U. R. Ghatak, N. R. Chatterjee and B. Sanyal,  
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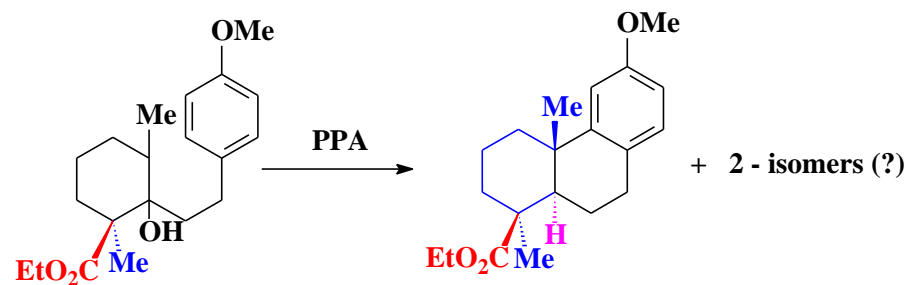




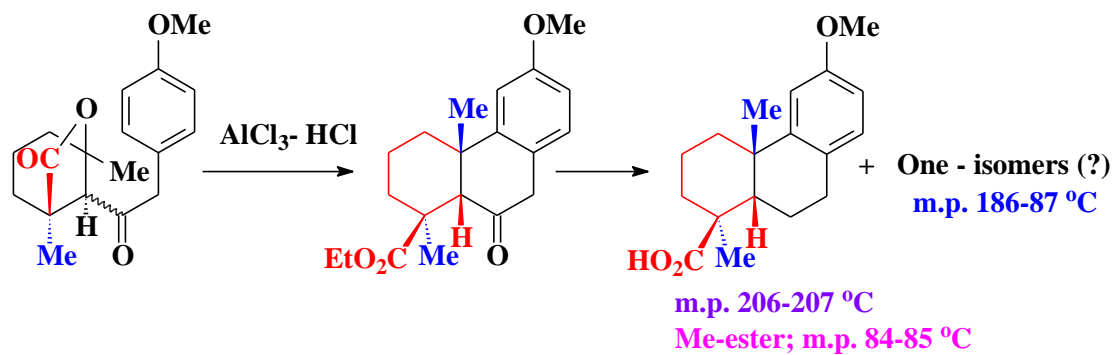
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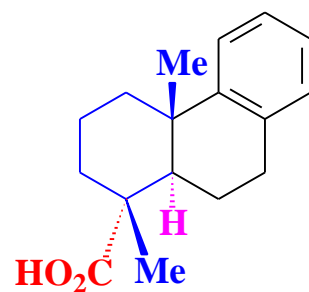
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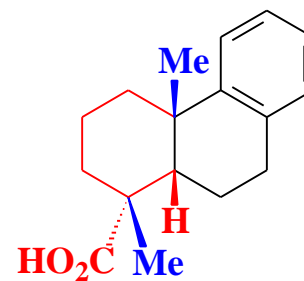
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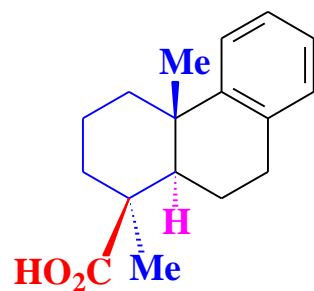


mp 174-176 °C



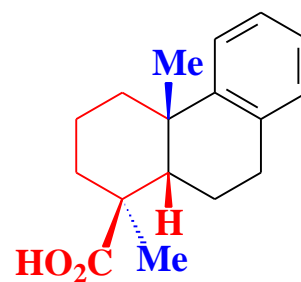
mp 146-147 °C

From I. A. C. S. Kolkata



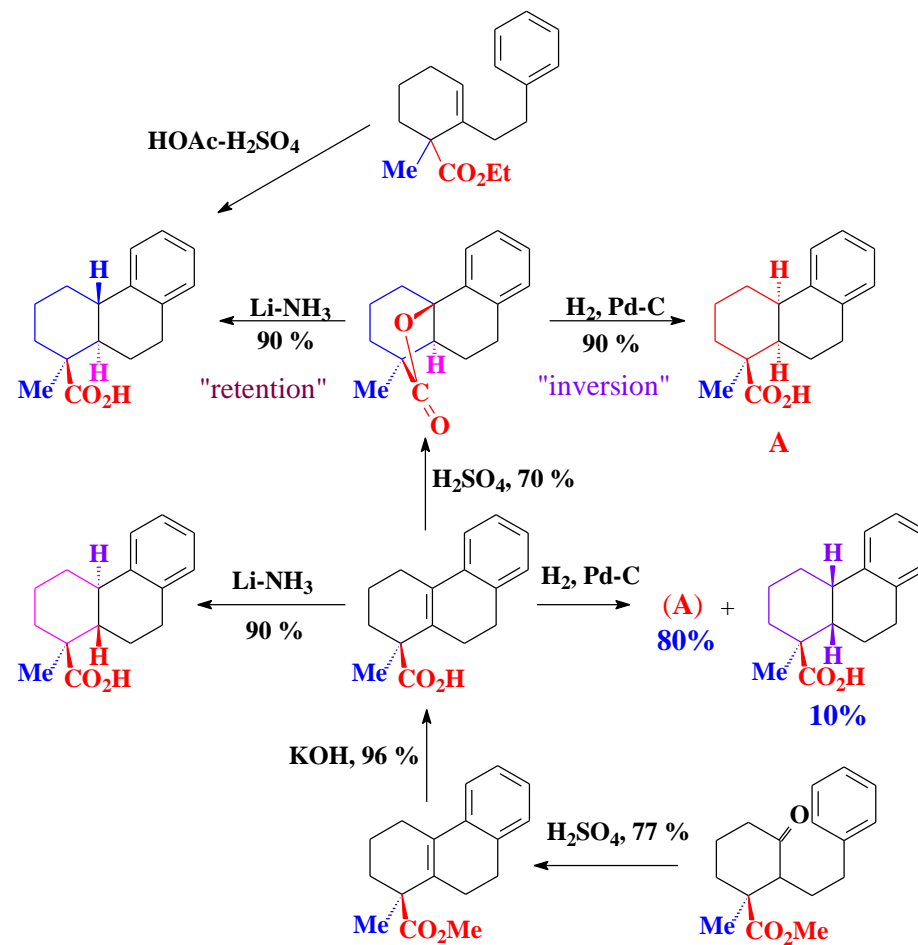
mp 232-233 °C

R. D. Howorth 1939



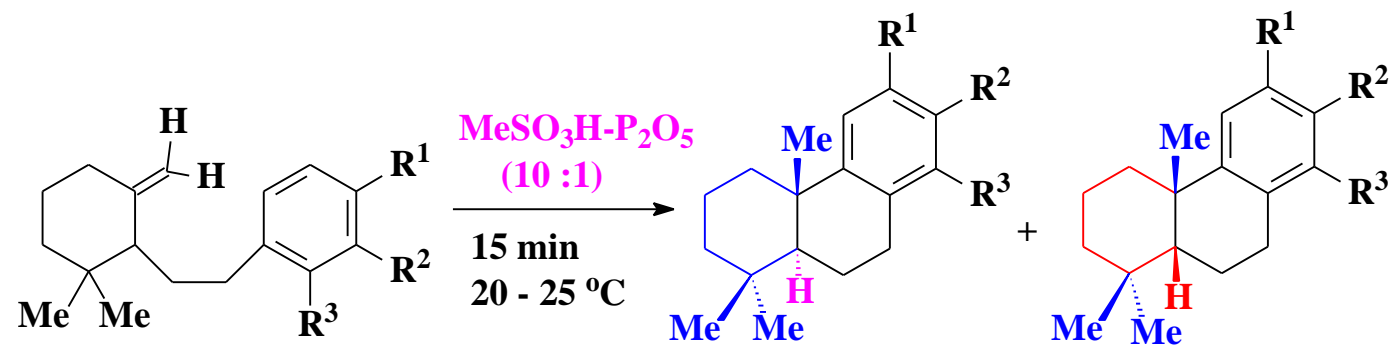
mp 205-207 °C

W. E. Parham 1955



U. R. Ghatak, N. R. Chatterjee, A. K. Banerjee, J. Chakravarty and R. E. Moore,  
*J. Org. Chem.*, 1969, 34, 3739

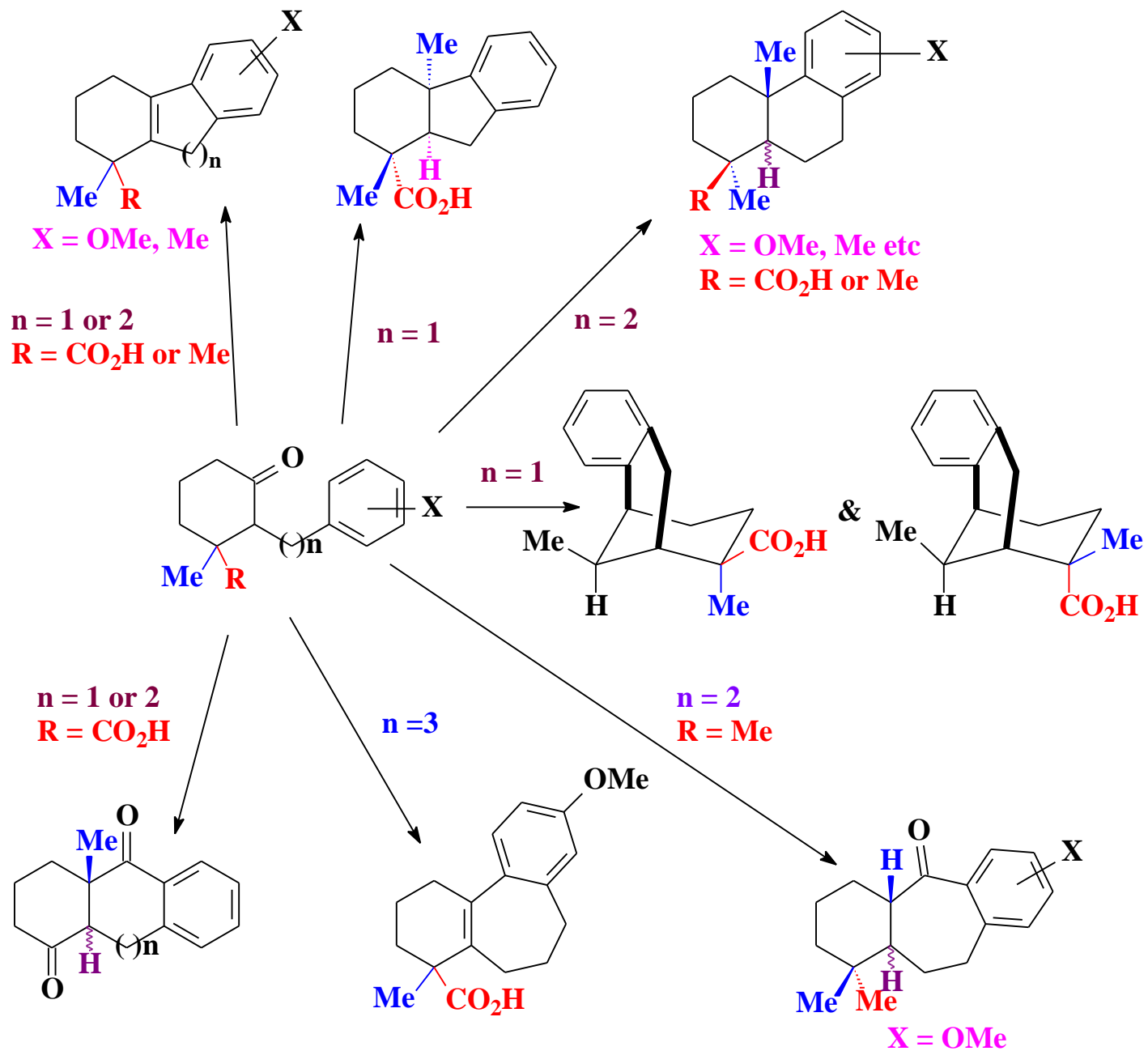
*Tet. Lett.*, 1967, 247; *Chem. Comm.*, 1967, 217; *Indian J. Chem.*, 1971, 9, 804

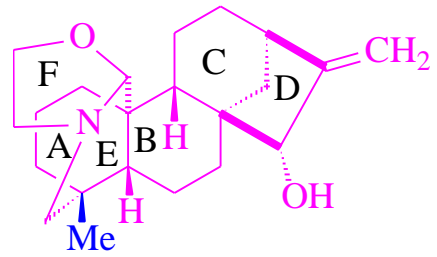


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2. $\text{R}^1 = \text{OMe}; \text{R}^2 = \text{R}^3 = \text{H}$	100	:	0
3. $\text{R}^1 = \text{R}^2 = \text{H}; \text{R}^3 = \text{OMe}$	100	:	0
4. $\text{R}^1 = \text{R}^3 = \text{H}; \text{R}^2 = \text{OMe}$	34	:	66

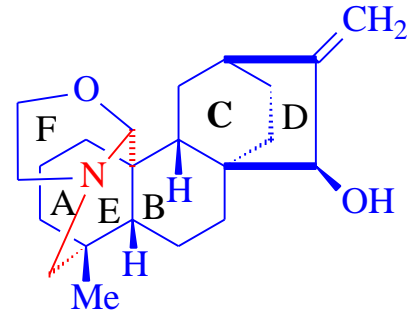
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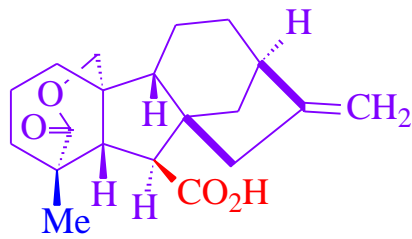




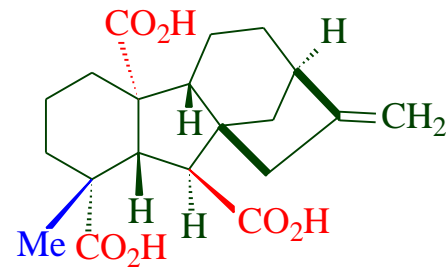
**VEATCHINE**



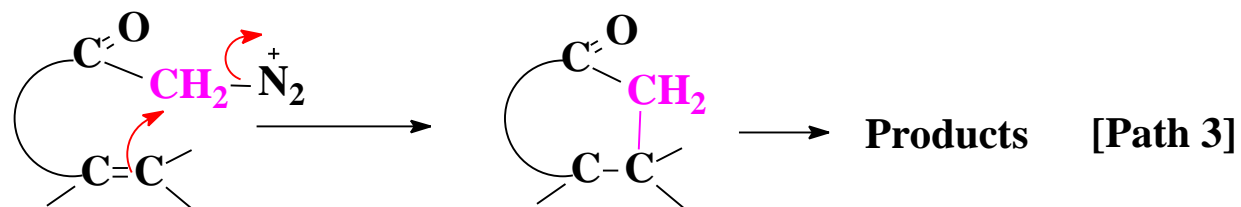
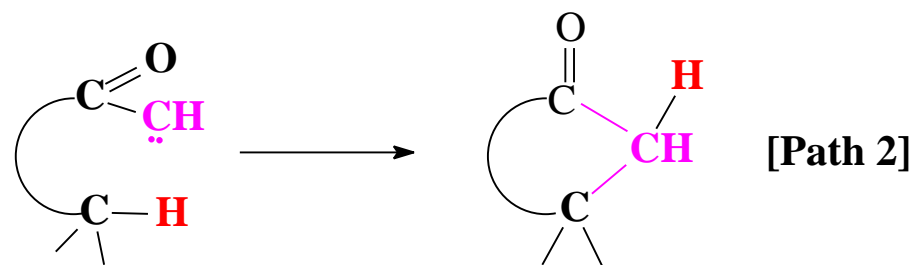
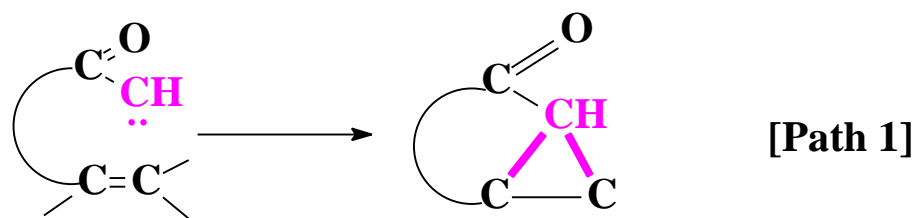
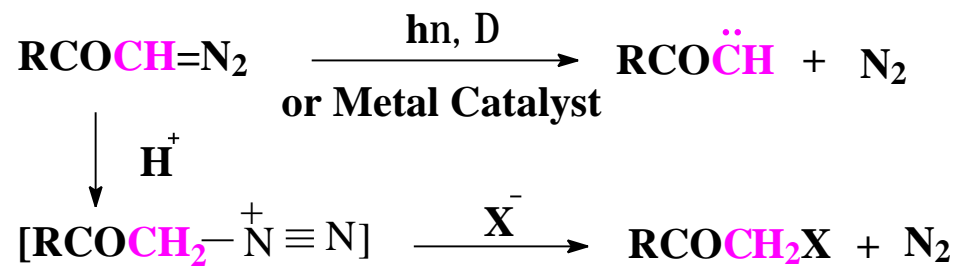
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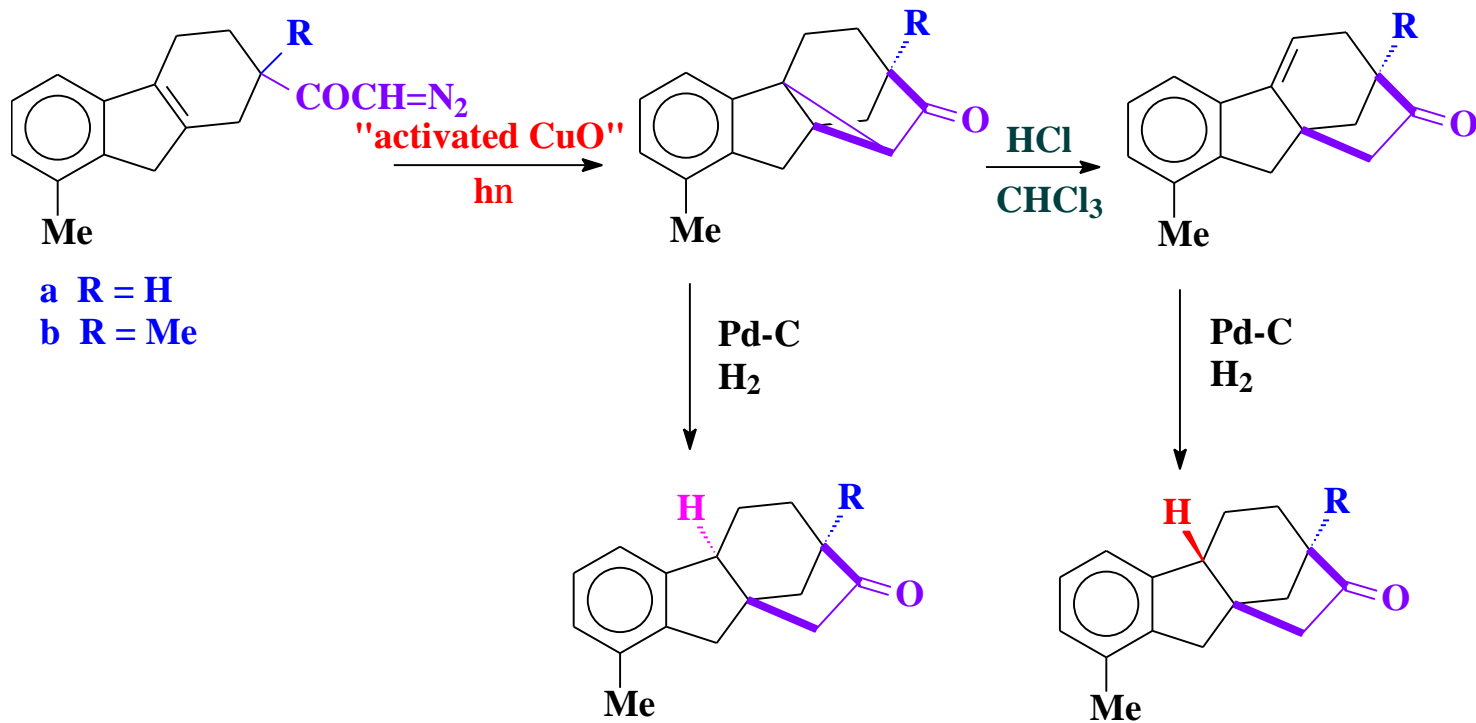
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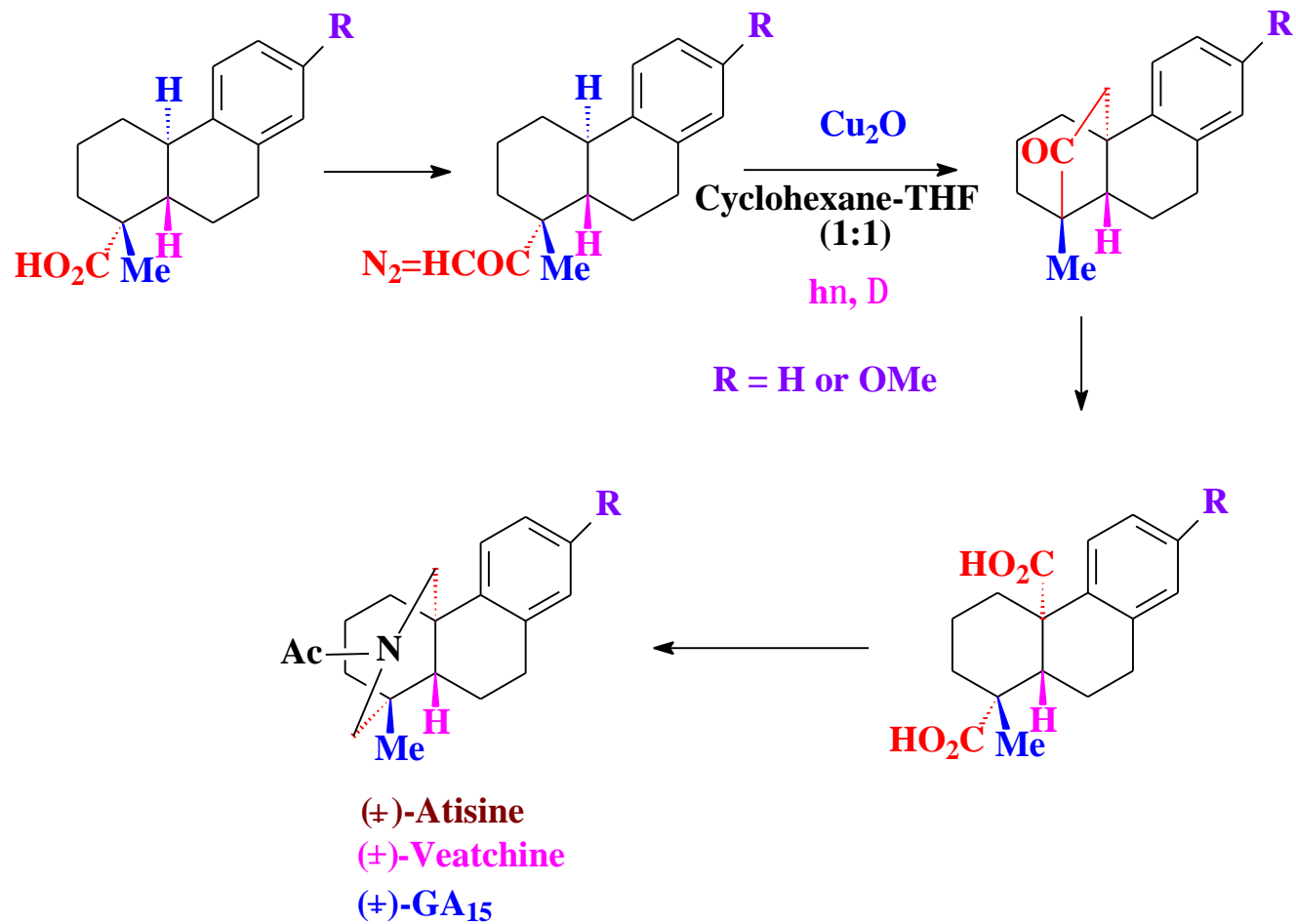
**GIBBERELLIN A<sub>25</sub>**



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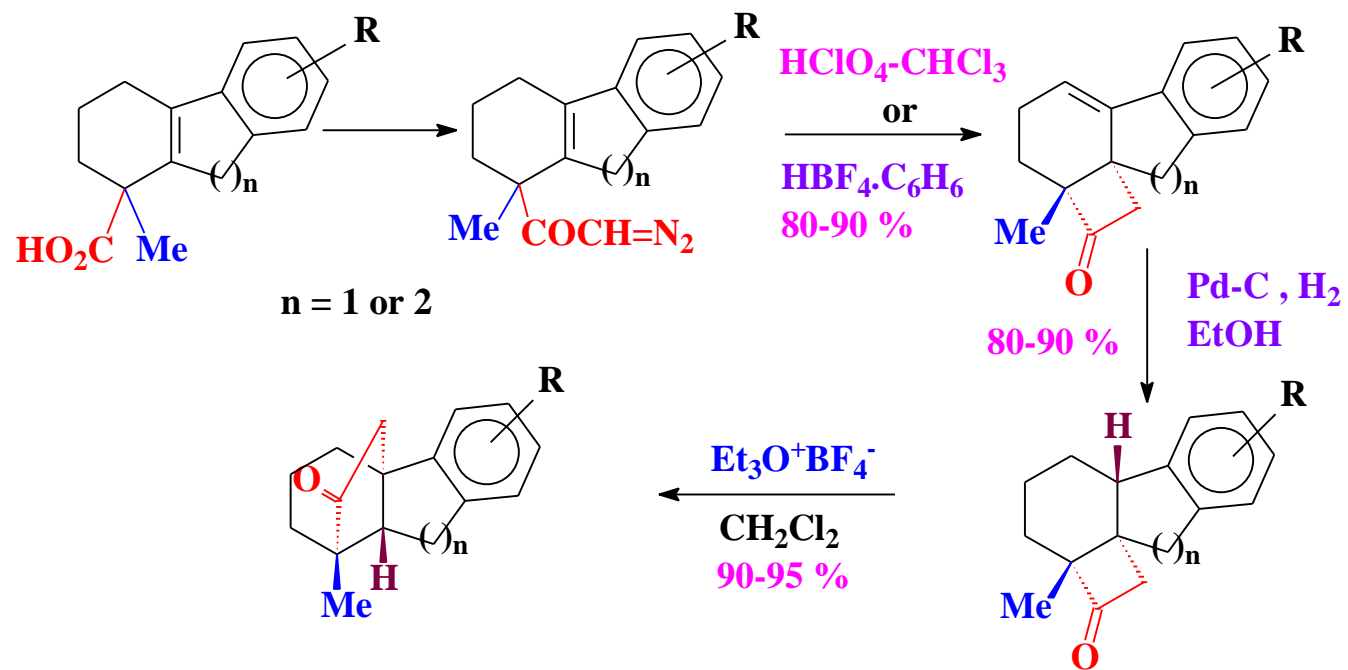


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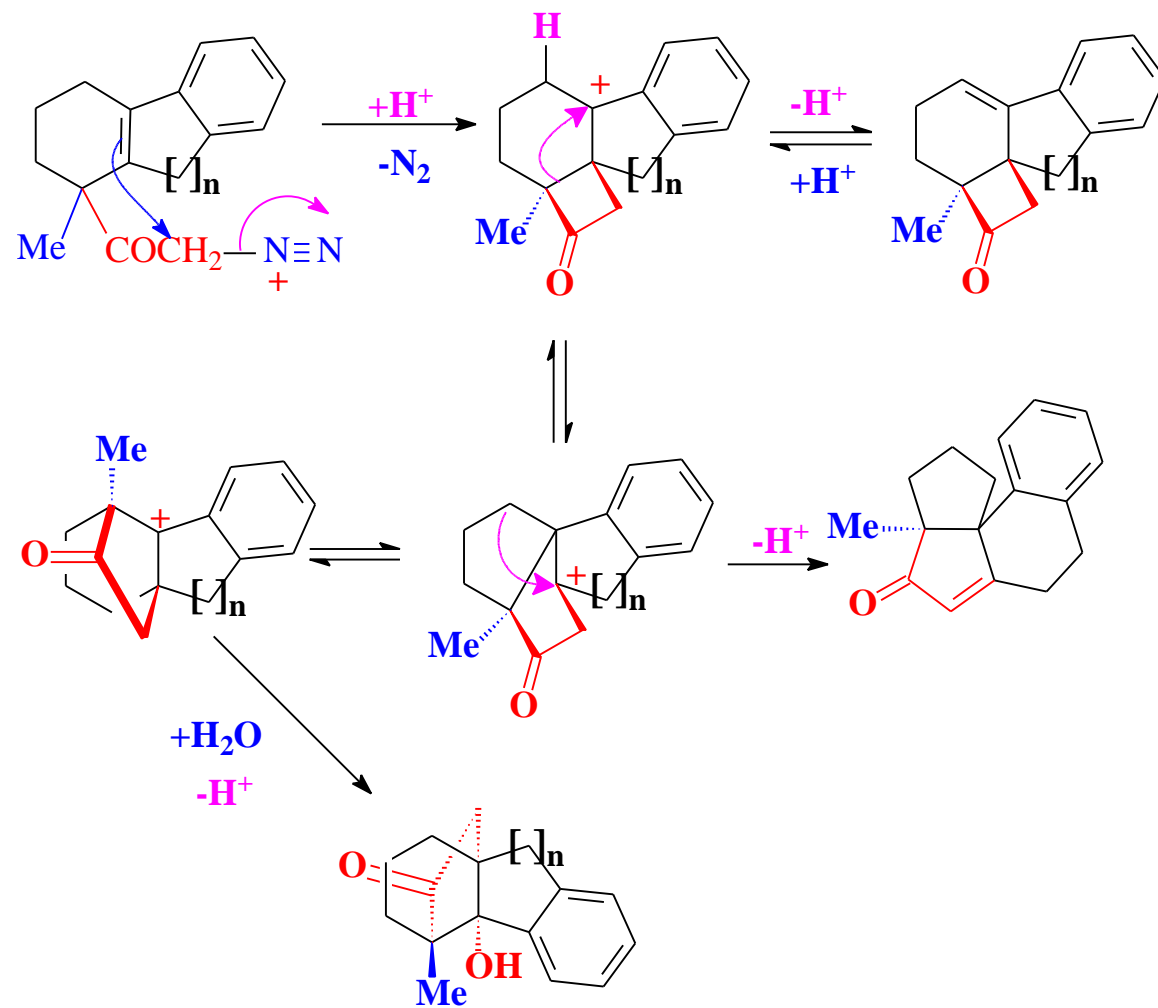
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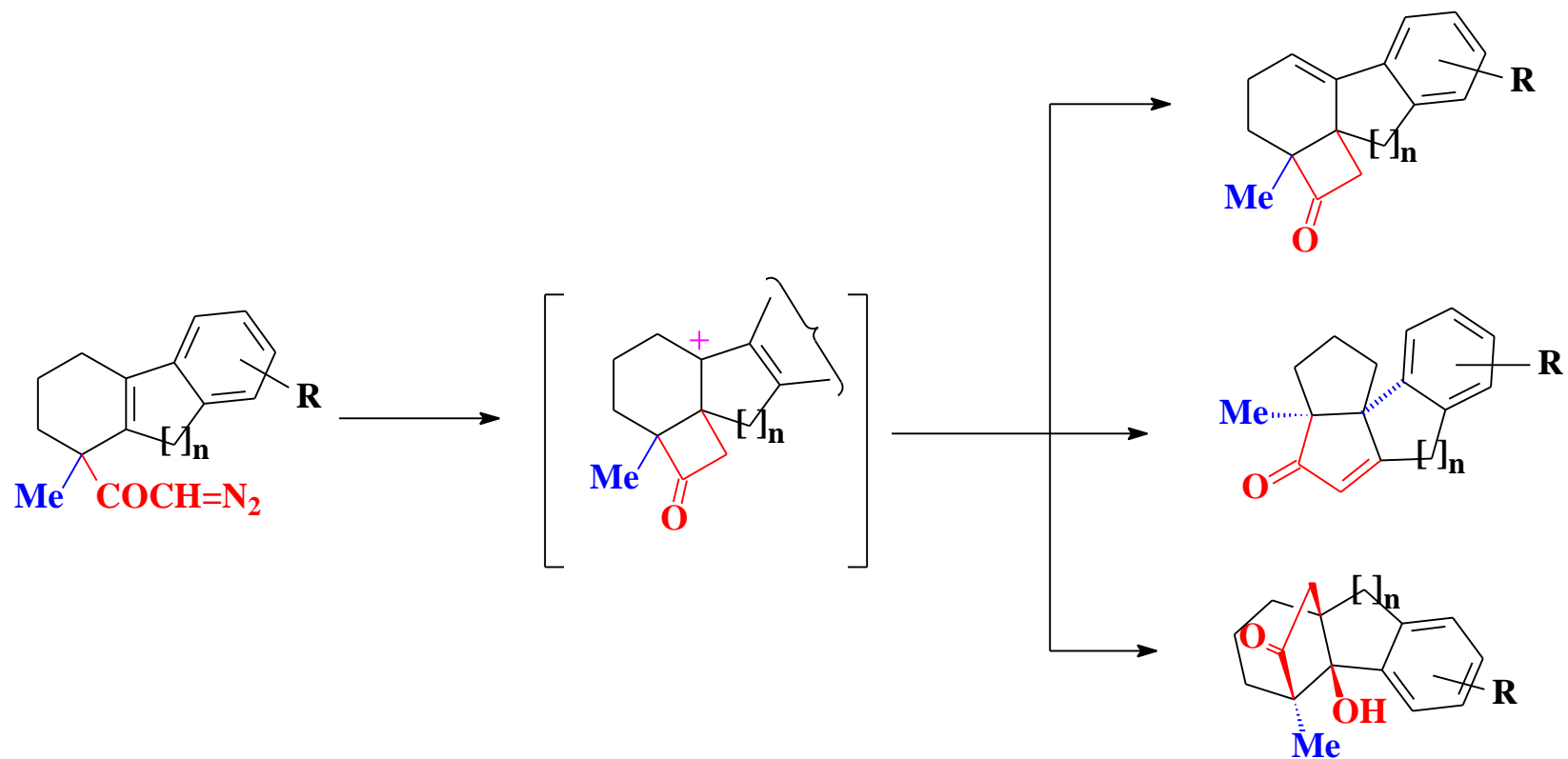
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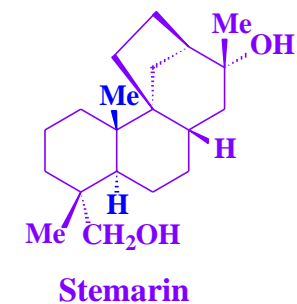
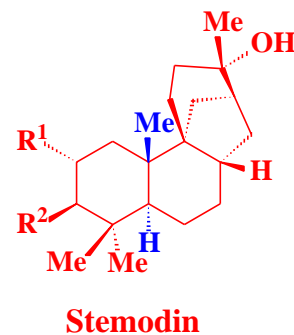
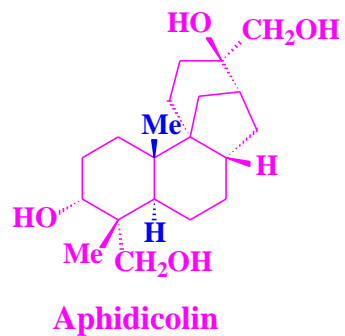
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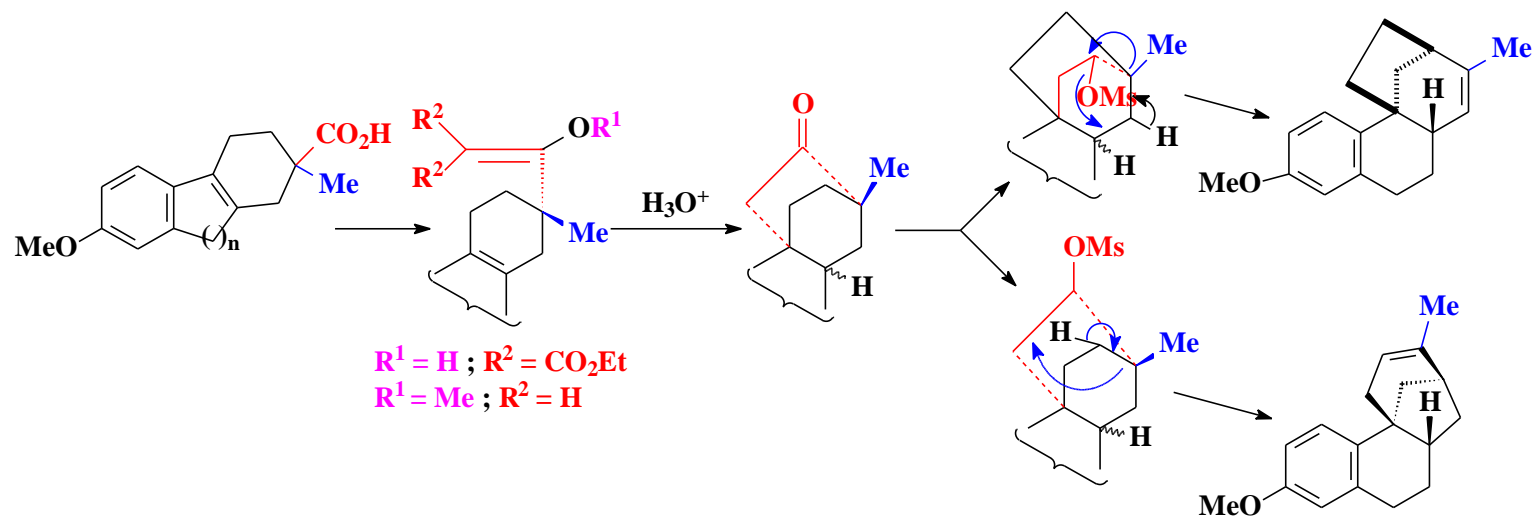


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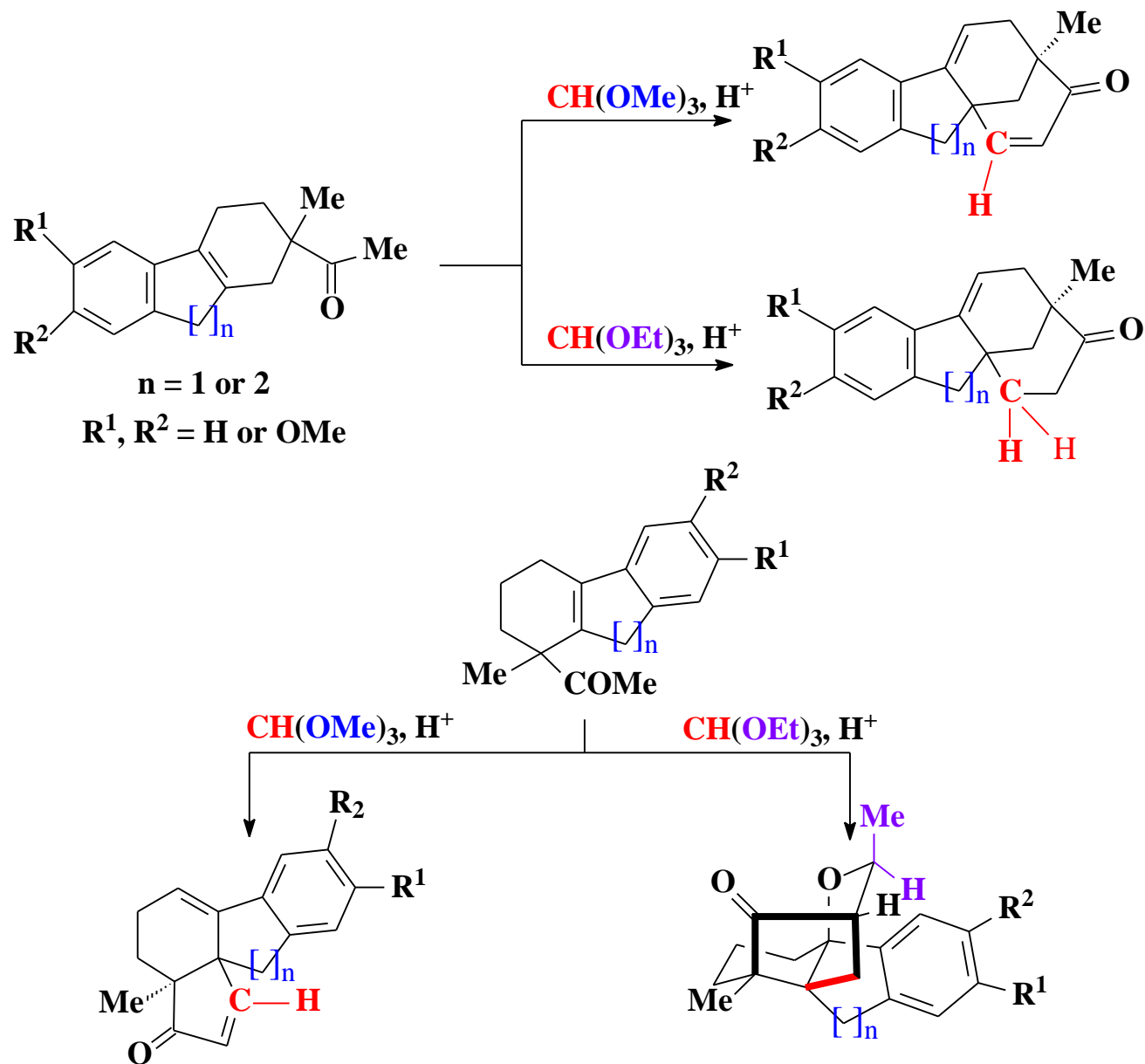


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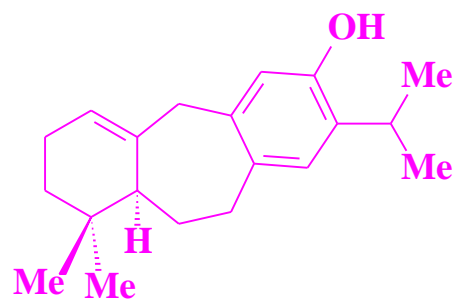


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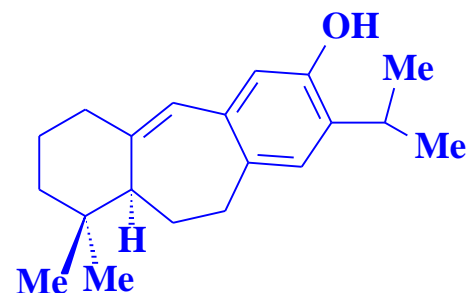
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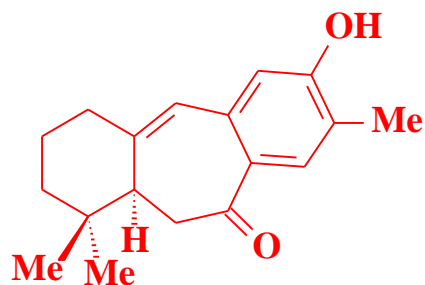
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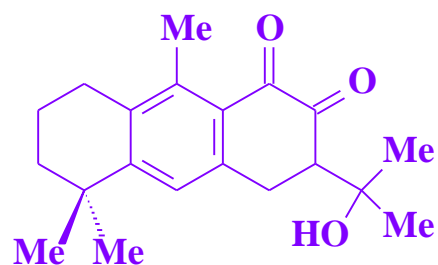
**Pisiferin**



**Isopisiferin**



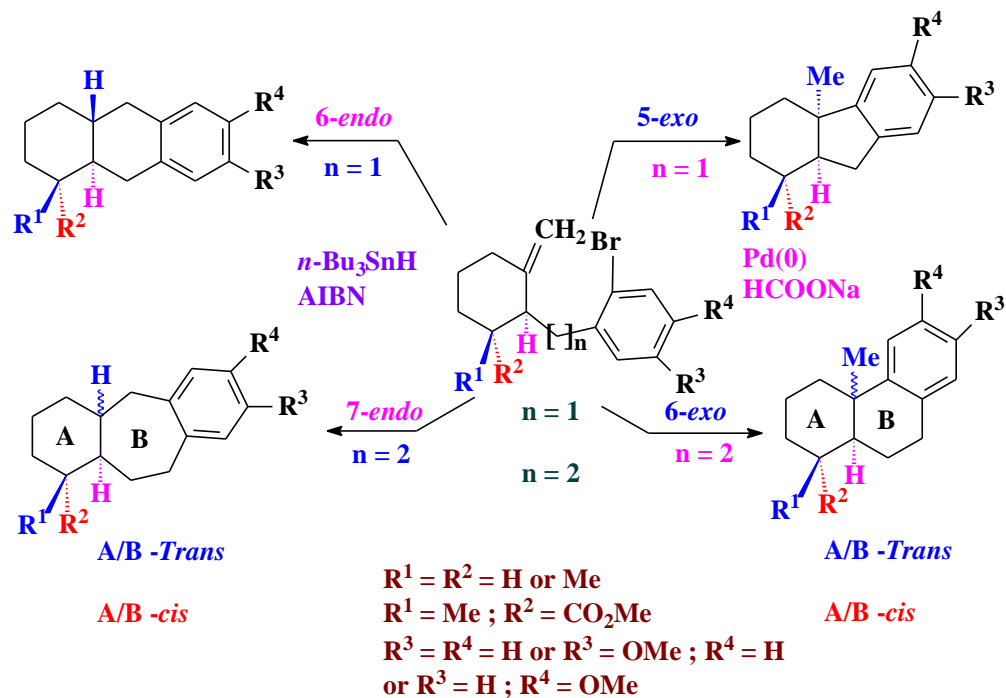
**Faveline**



**Umbrosone**

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K. Ghosh and U. R. Ghatak *Tetrahedron Lett.*, 1994, 35, 5943  
K. Ghosh and U. R. Ghatak, *J. Chem. Soc. Perkin Trans. I*, 1999, 1359

**STEREOCONTROLLED SYNTHESIS OF CONDENSED POLYCARBOCYCLIC SYSTEMS  
BY HIGHLY REGIOSELECTIVE ARYL RADICAL AND PALLADIUM CATALYZED  
CYCLIZATION REACTIONS**



A. K. Ghosh, K. Ghosh, S. Pal and U. R. Ghatak,

*J. Chem. Soc., Chem. Commun.*, 1993, 809; Corrigendum : *ibid*, 1993, 1176

S. Pal, J. K. Mukhopadhyaya and U. R. Ghatak,

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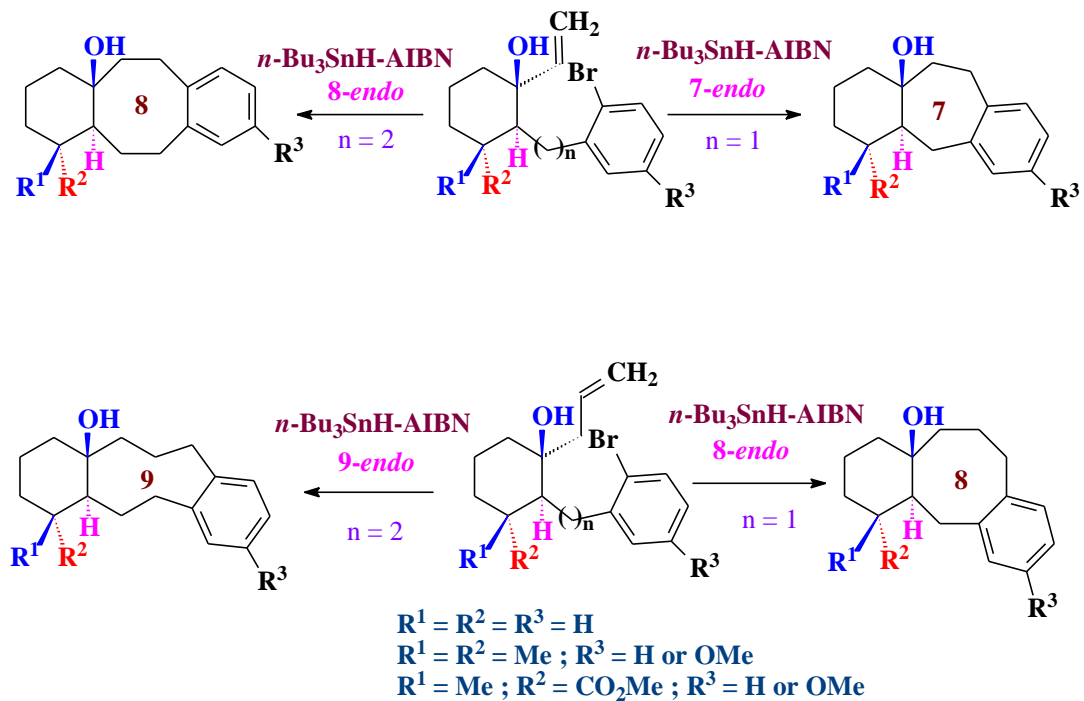
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J. K. Mukhopadhyaya, A. K. Ghosh and U. R. Ghatak,

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**A FACILE SYNTHESIS OF LINEARLY CONDENSED CYCLOHEPTANOLS,  
CYCLOOCTANOLS AND CYCLONONANOLS BY A REGIOSELECTIVE ARYL  
RADICAL CYCLIZATION PROCESS**



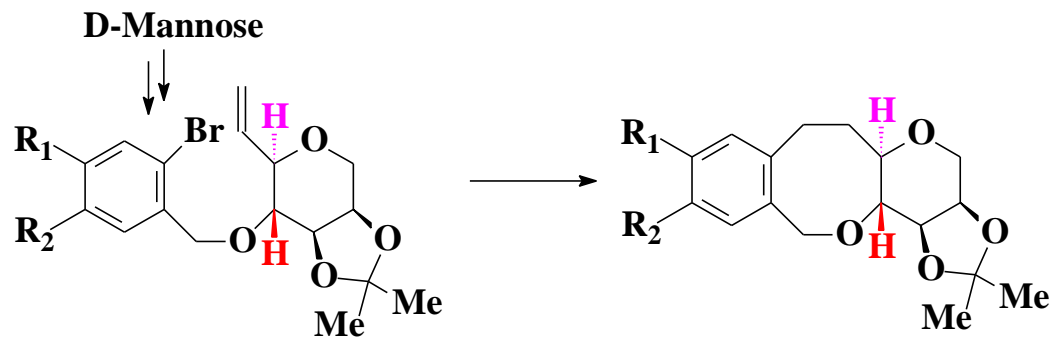
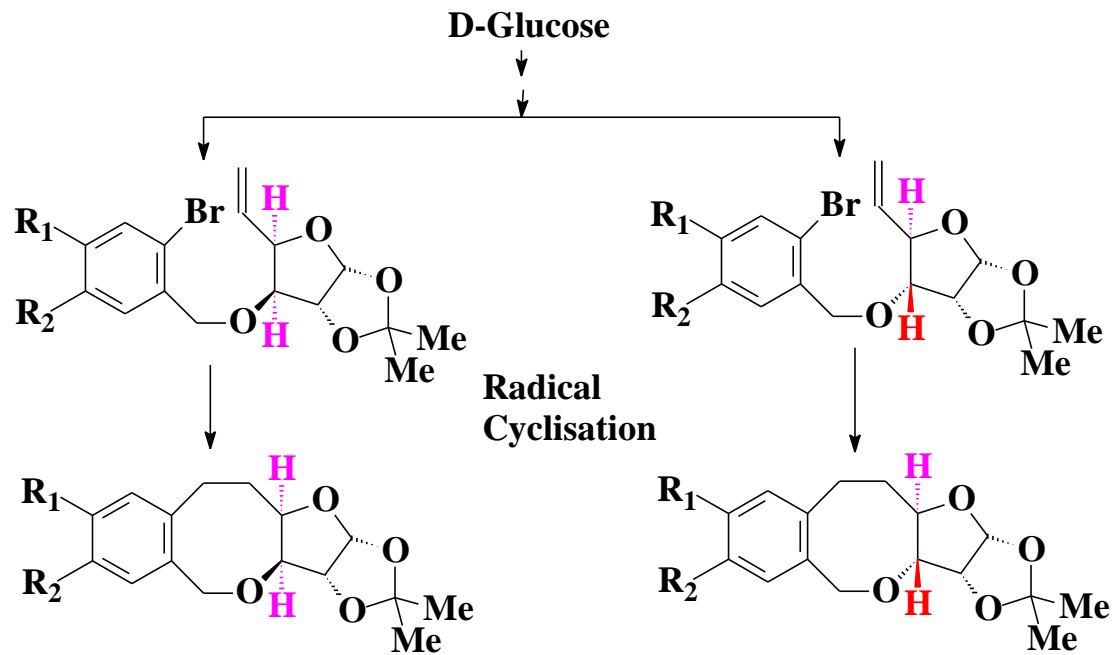
A. K. Ghosh, K. Ghosh, S. Pal and U. R. Ghatak,

*J. Chem. Soc. Chem. Commun.*, 1993, 809, Corrigendum : *ibid*, 1993, 1176

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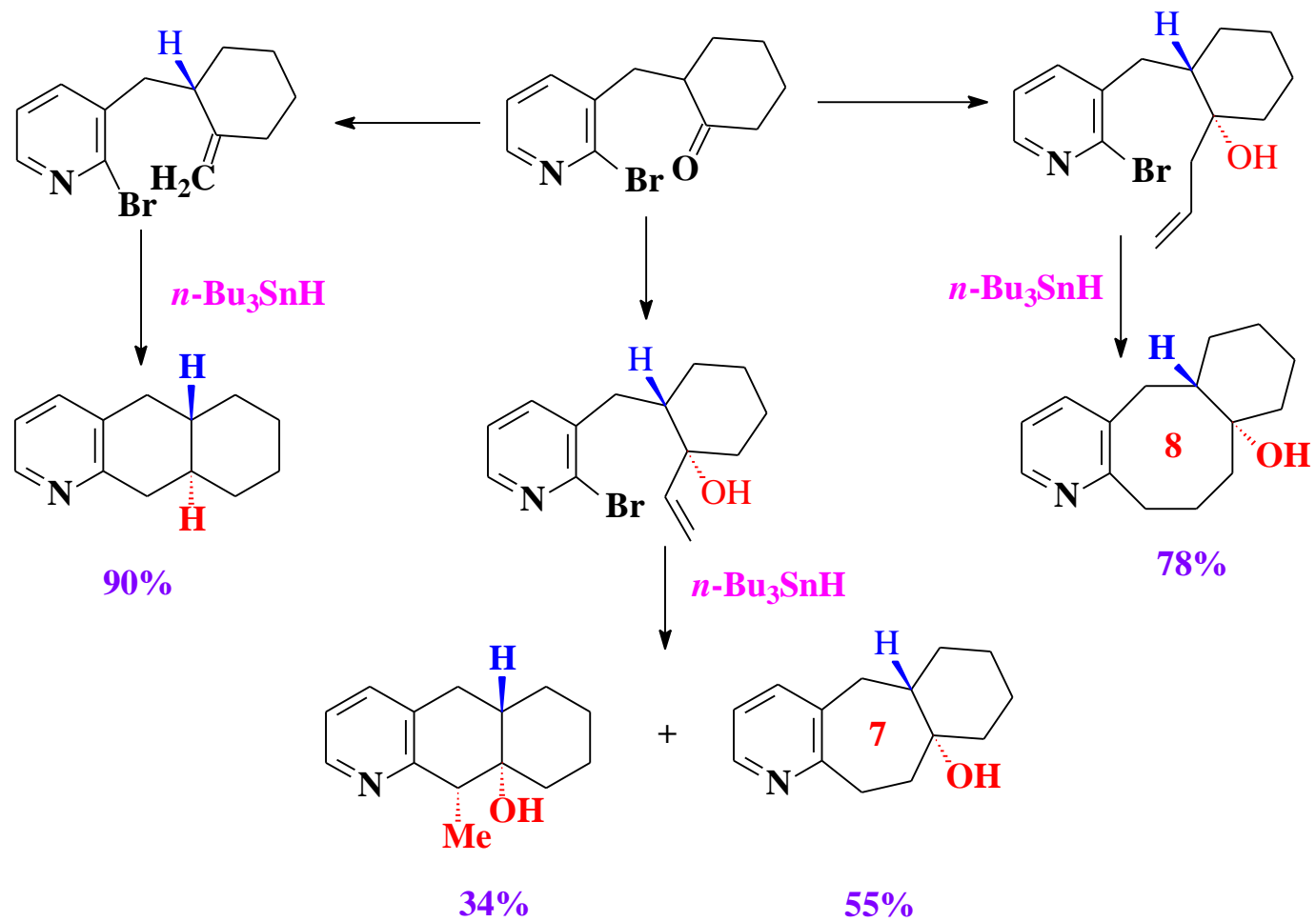


**IICB: P. Chattopadhyay and co-workers,**

*Chem. Commun.*, 1997, 2139

*J. Chem. Soc. Parkin 1*, 2001, 5977

*Tetrahedron Lett.*, 2002, 43, 5977



IICB: A. K. Banerjee and co-workers, *J. Chem. Soc. Perkin 1*, 2002, 1769

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- \* **DR. N. R. CHATTERJEE (1968)**
- \* **DR. (MRS) S. CHAKRABARTY (1973)**
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- \* **DR. (MRS) B. SANYAL (1976)**
- \* **DR. J. K. RAY (1976)**
- \* **DR. S. GHOSH (1977)**
- \* **DR. K. ALAM (1978)**
- \* **DR. G. O. S. V. SATAYANARAYANA (1979)**
- \* **DR. P. R. KANJILAL (1981)**
- \* **DR. S. C. ROY (1982)**
- \* **DR. B. C. RANU (1983)**
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- \* **DR. (MRS) B. SAHA (1984)**
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- \* **DR. B. K. BANIK (1986)**
- \* **DR. SUKUMAR GHOSH (1989)**
- \* **DR. C. MUKHOPADHYAY (1990)**
- \* **DR. S. PAL (1992)**
- \* **DR. A. K. GHOSH (1994)**
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- \* **DR. J. K. MUKHOPADHYAYA (1996)**
- \* **DR. A. K. BANERJEE (1965)**
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## ACKNOWLEDGEMENT

**DR. ASISH KR. BANERJEE**  
**MISS SUJAYA SENGUPTA**