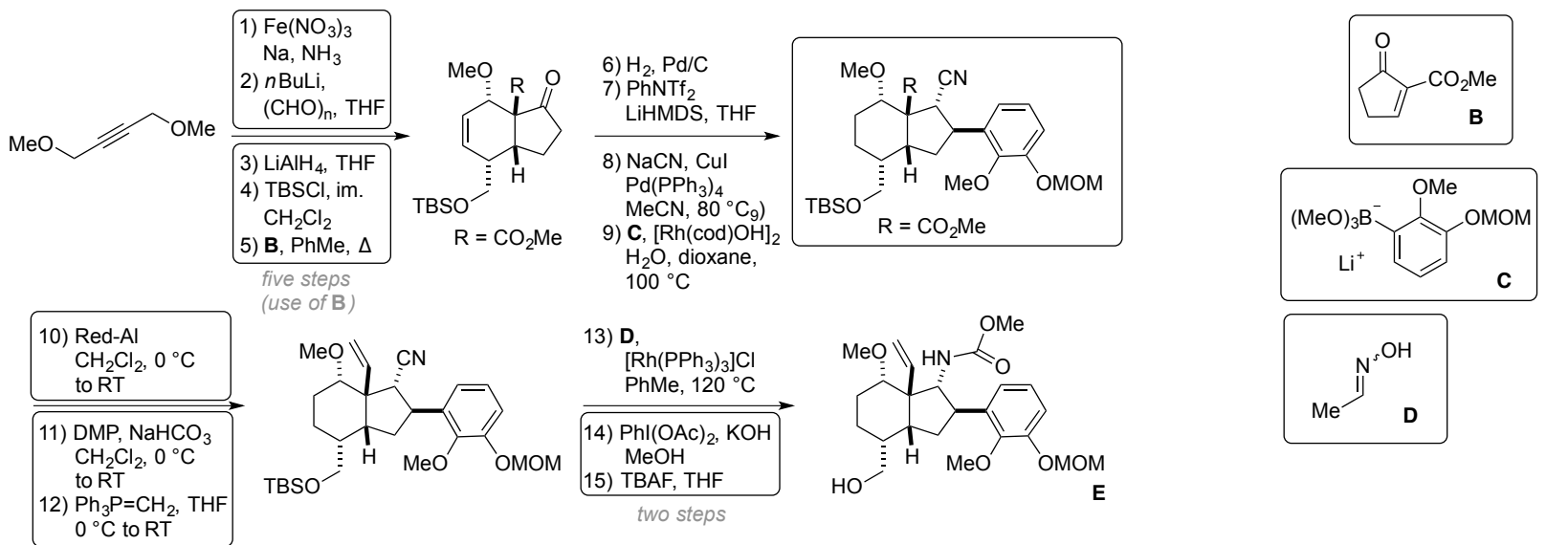
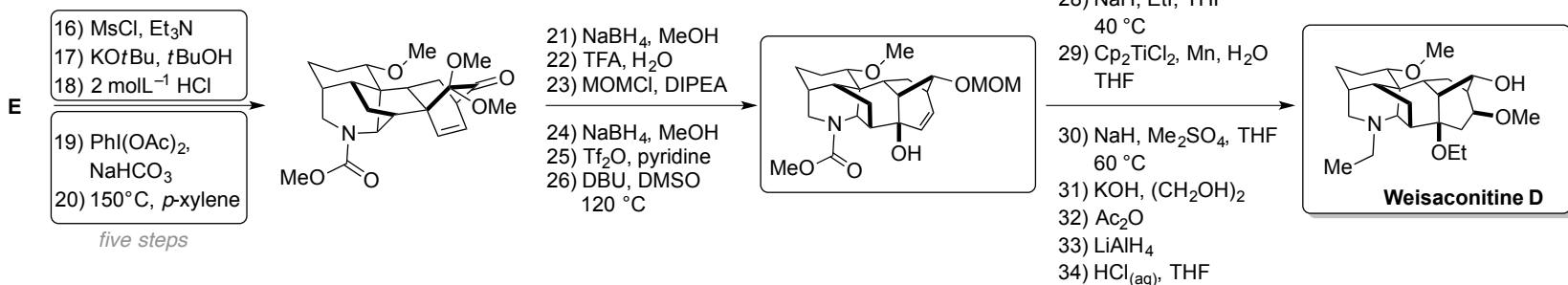


# E36: A Unified Synthesis of: Weisaconitine D, Cochlearenine, Paniculamine and *N*-Ethyl-1 $\alpha$ -hydroxy-17-veratroyldictyzzine

## Synthesis of the Common Intermediate E:

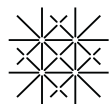


## Synthesis of Weisaconitine D:



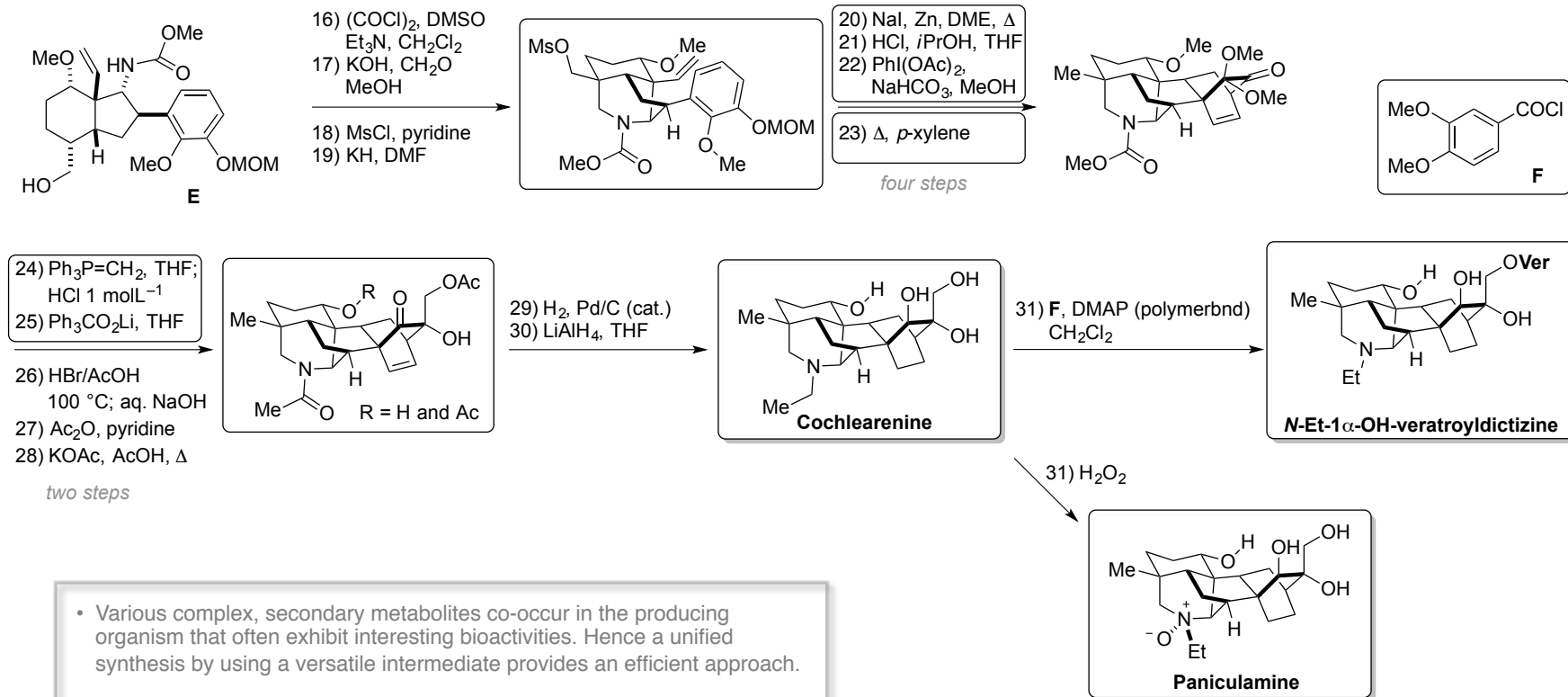
[1] K. G. M. Kou, B. X. Li, J. C. Lee, G. M. Gallego, T. P. Lebold, A. G. DiPasquale, R. Sarpong *J. Am. Chem. Soc.* **2016**, *138*, 10830.

[2] C. J. Marth, G. M. Gallego, J. C. Lee, T. P. Lebold, S. Kulyk, K. G. M. Kou, J. Qin, R. Lillien, R. Sarpong *Nature*, **2015**, *528*, 493.



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## Synthesis of Cochlearenine, Paniculamine and *N*-Et-1 $\alpha$ -OH-veratroyldictyzine:



- Various complex, secondary metabolites co-occur in the producing organism that often exhibit interesting bioactivities. Hence a unified synthesis by using a versatile intermediate provides an efficient approach.

- With this approach the research group of Sarpong could so far gain access to  $\text{C}_{18}$ ,  $\text{C}_{20}$ ,  $\text{C}_{19}$  diterpenoid alkaloids.

[1] K. G. M. Kou, B. X. Li, J. C. Lee, G. M. Gallego, T. P. Lebold, A. G. DiPasquale, R. Sarpong *J. Am. Chem. Soc.* **2016**, *138*, 10830.

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