

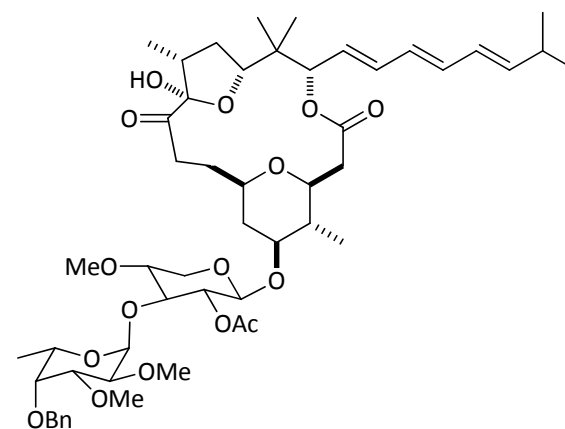


Polycavernoside A

Philip Williams

Crimmins Group Meeting

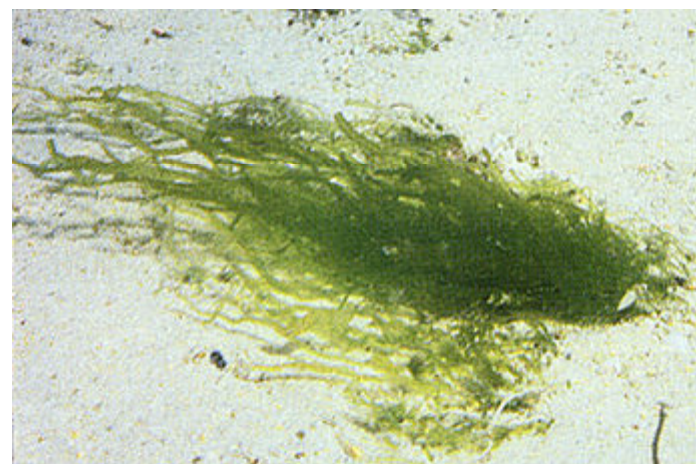
March 26, 2010



Polycavernoside A

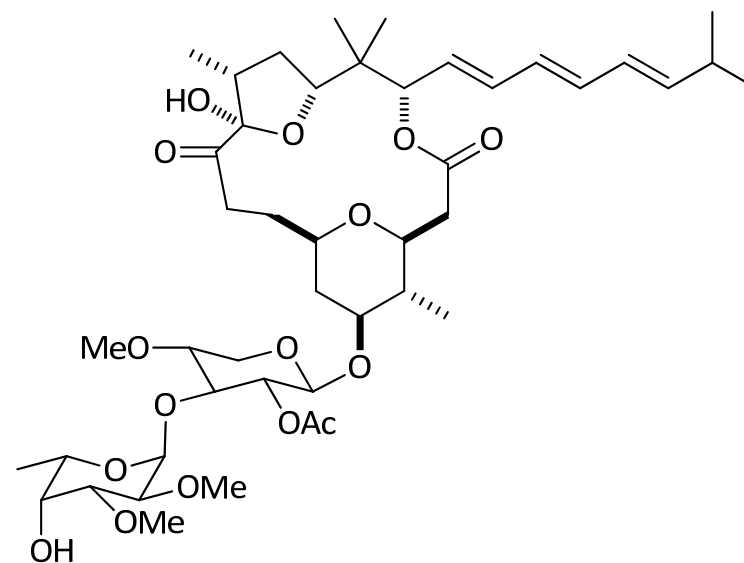


- Isolated by Yasumoto in 1993
- Edible red alga *Polycavernosa tsudai*
- Believed to be the cause of sudden human intoxication in Guam in 1991

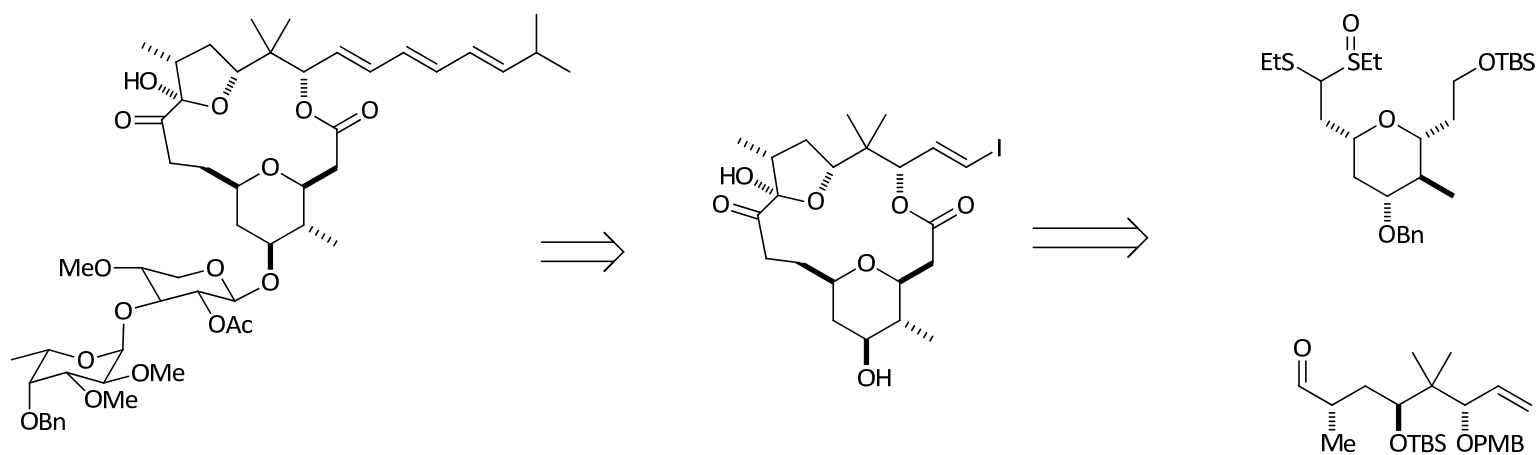


Total Syntheses

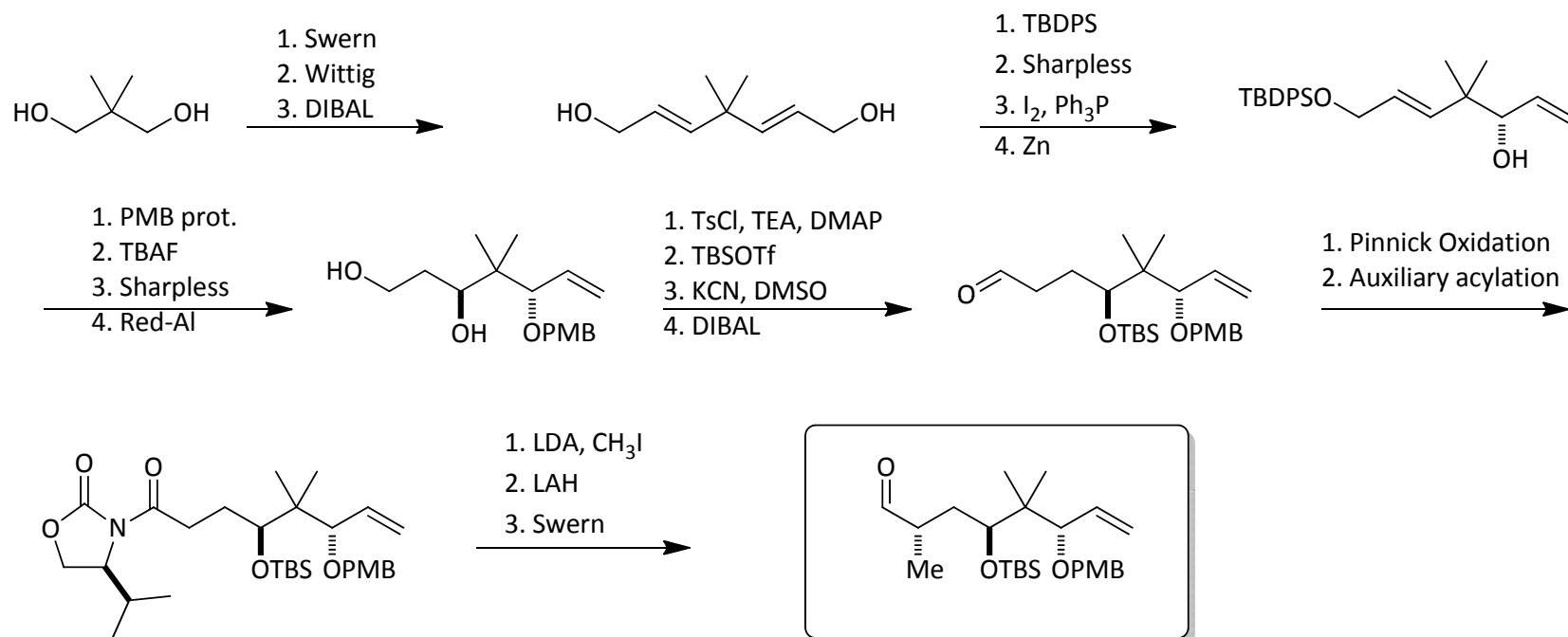
- Murai
- Paquette
- White
- Lee



Murai's Synthesis

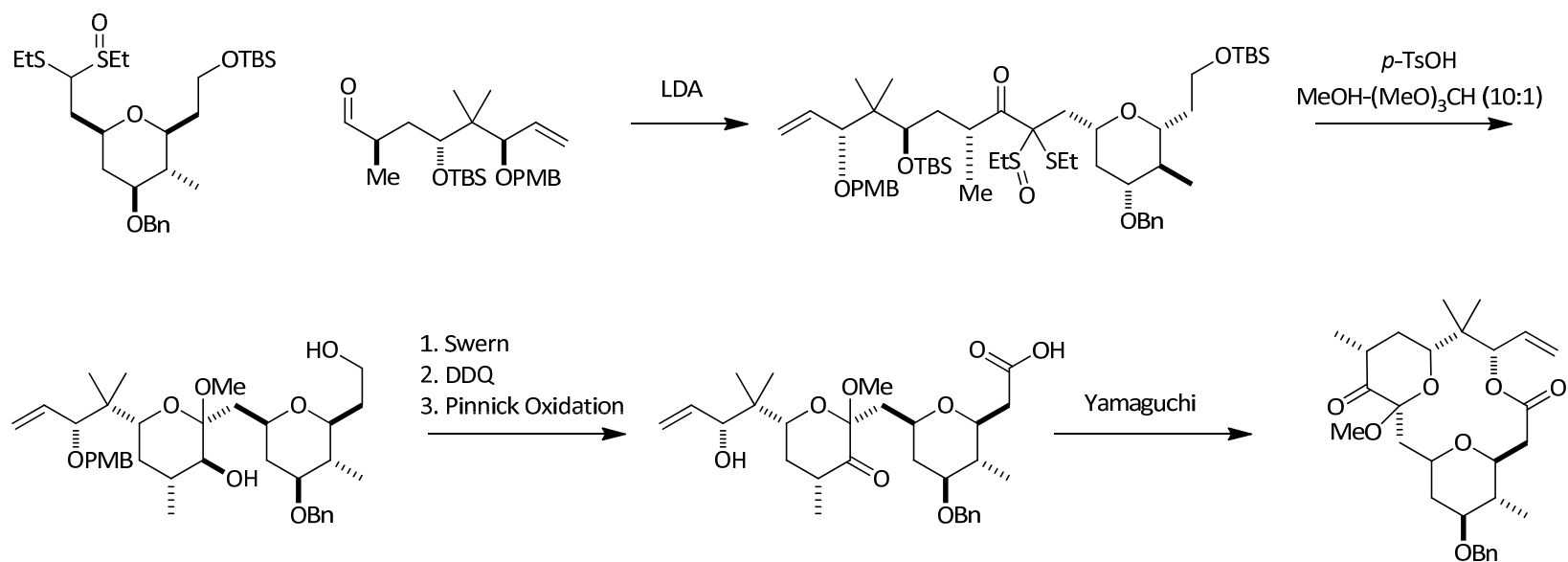


Murai's Synthesis



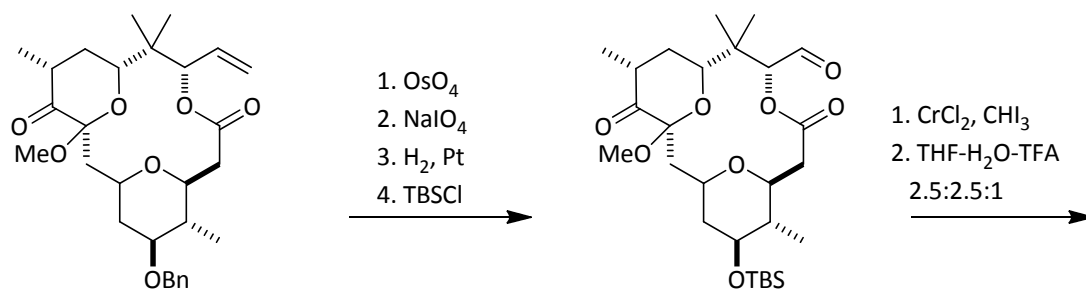


Murai's Synthesis

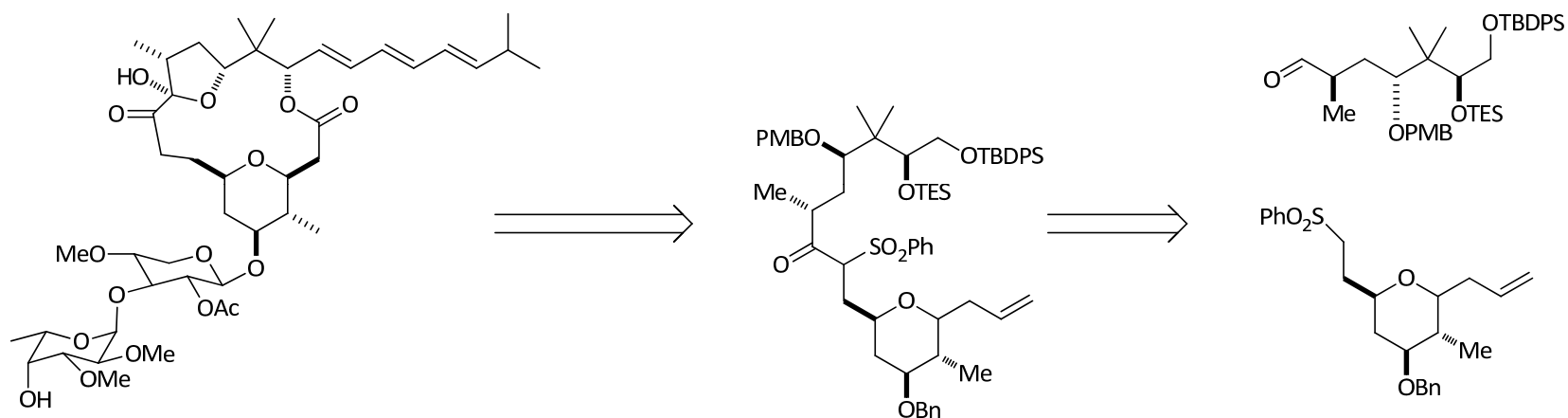




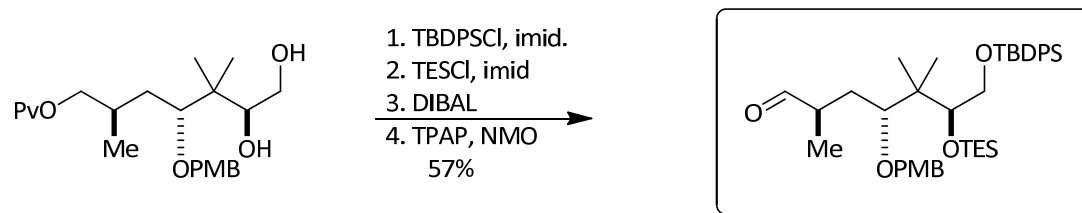
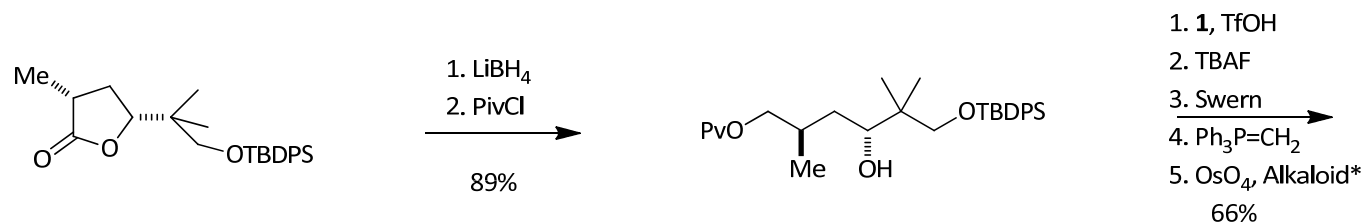
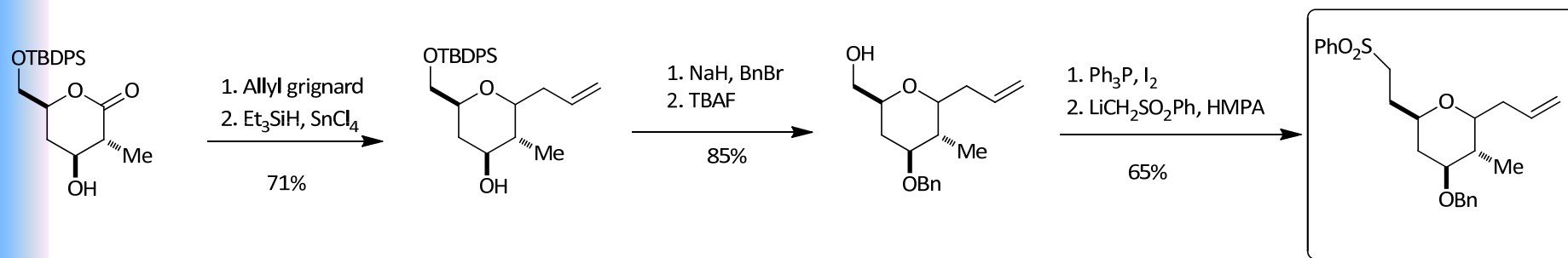
Murai's Synthesis



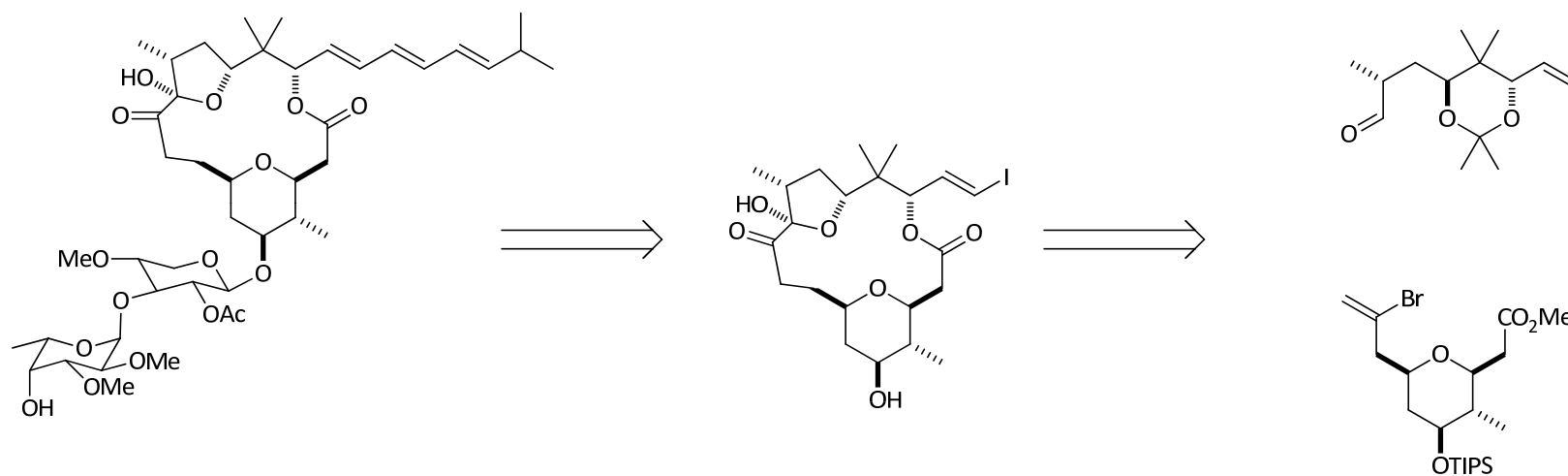
Paquette's Synthesis



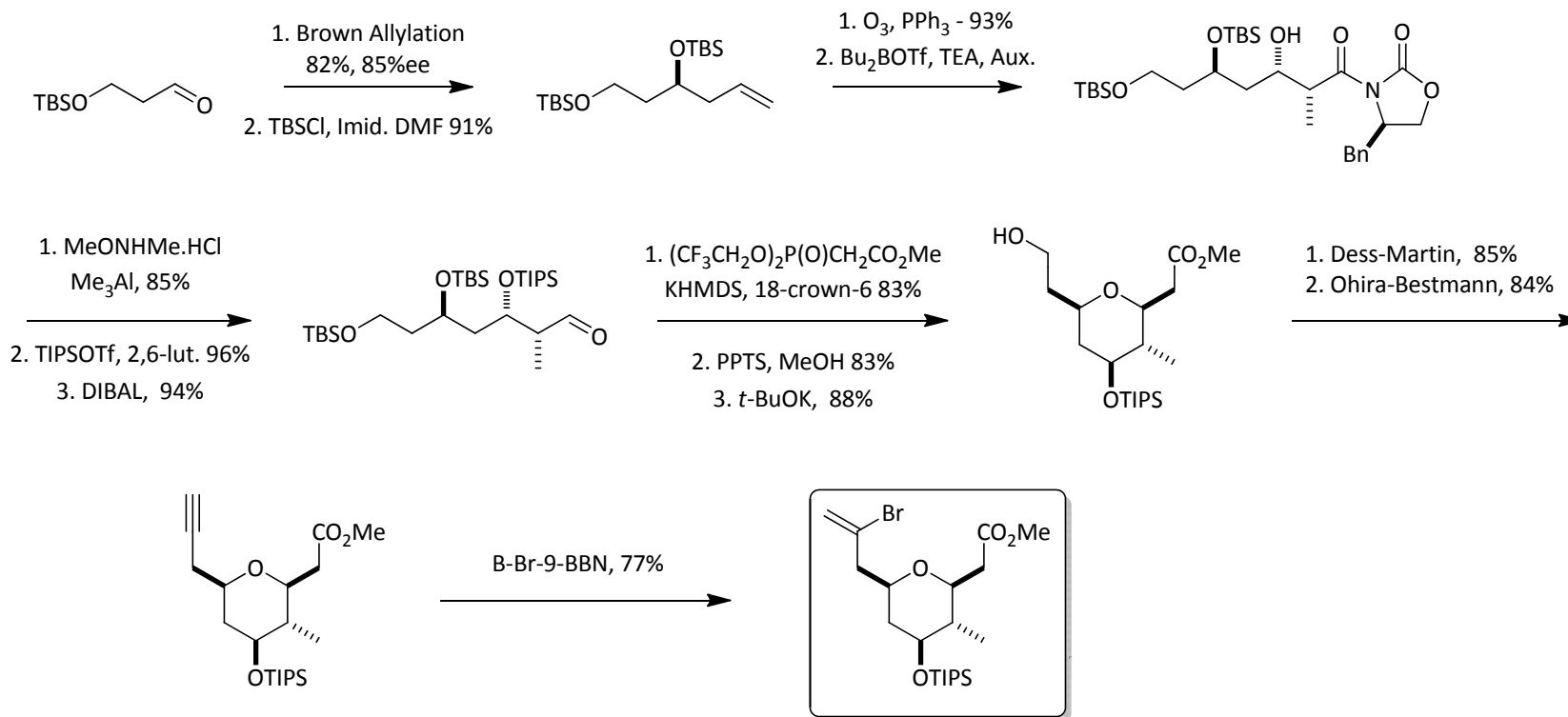
Paquette's Synthesis



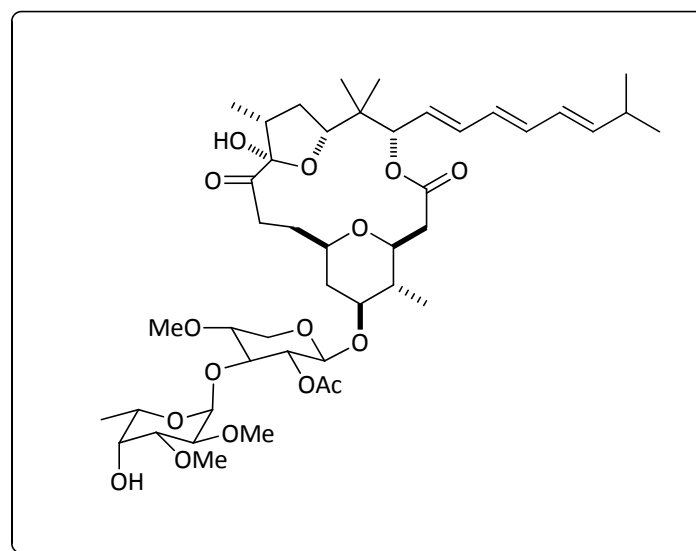
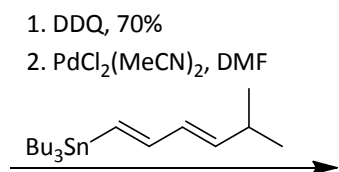
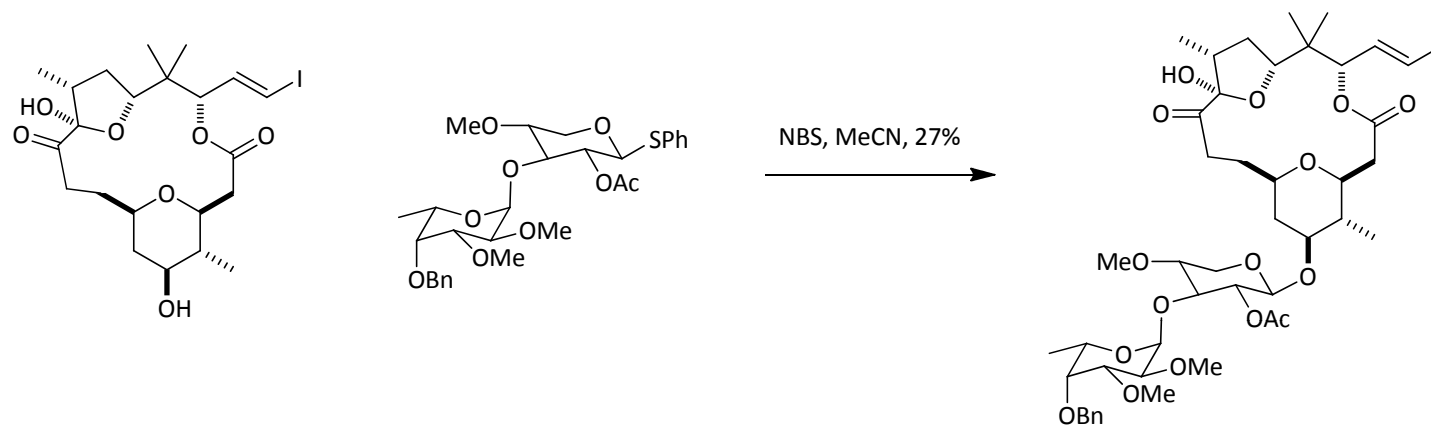
White's Synthesis



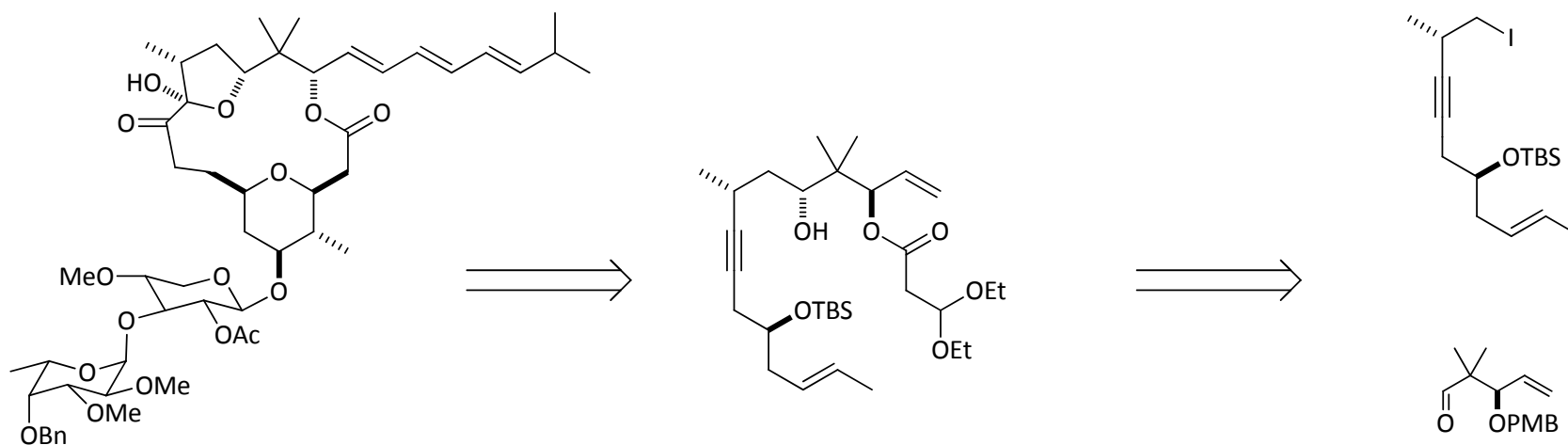
White's Synthesis



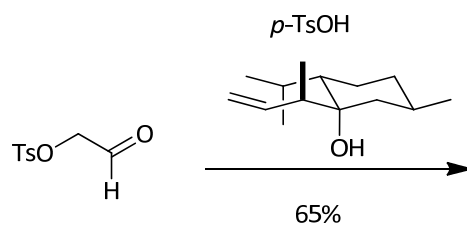
White's Synthesis



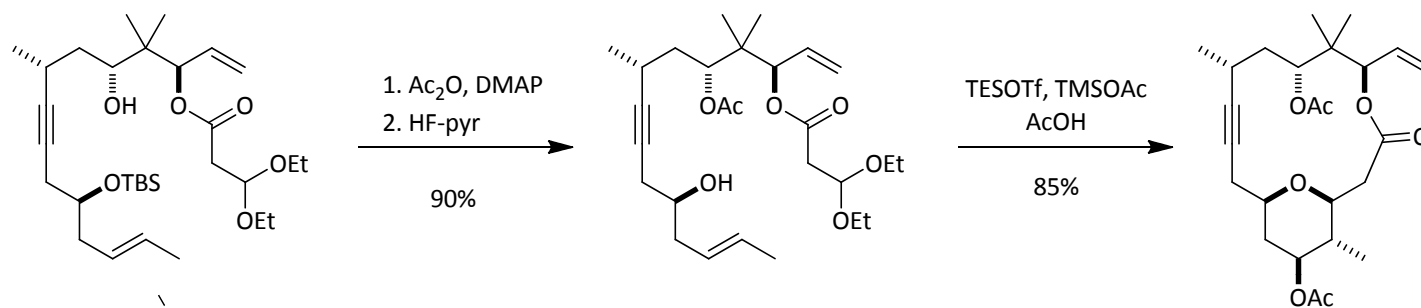
Lee's Synthesis



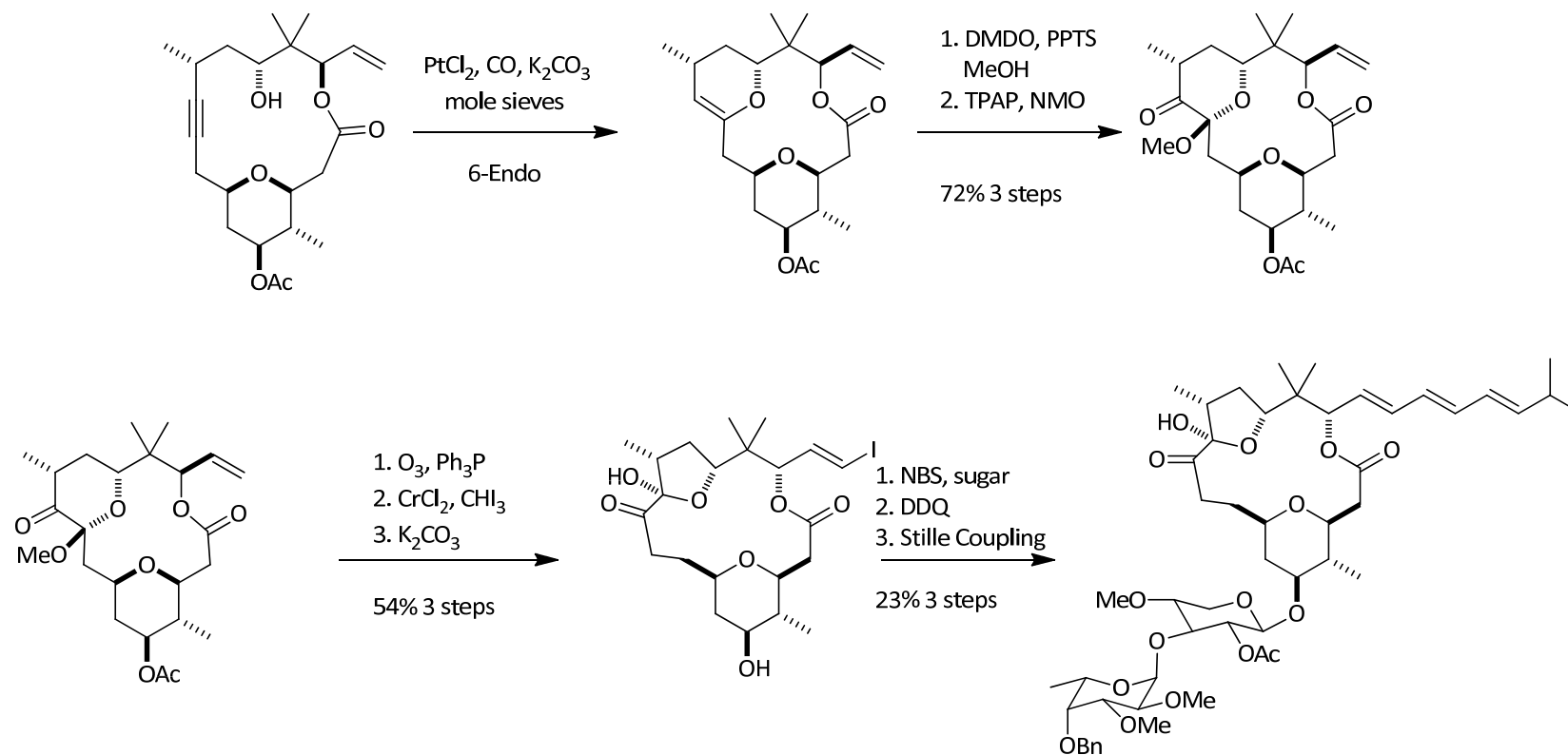
Lee's Synthesis



Lee's Synthesis



Lee's Synthesis



References



Murai

- JACS 120, 10770
- Chem Lett 1994, 2143
- Chem Lett 1994, 2147
- Chem Lett 1995, 191
- Chem Lett 1995, 855

Paquette

- JACS 121, 4542
- Tet Lett, 36(25), 4341
- JOC 63, 7389
- JACCS 122, 619

White

- JOC 70, 5449
- JACS 123, 8593

Lee

- JACS 2010 ASAP

Nicolau's Glycosidation - JACS 105, 2430

Asymmetric Crotylation – JACS 123, 9168