

## A Diels–Alder strategy towards a benzonaphthopyranoquinone

Tapia, R. A., Alegría, L., Valderrama, J. A., Cortés, M., Pautet, F., & Fillion, H. (2001). A Diels–Alder strategy towards a benzonaphthopyranoquinone. *Tetrahedron Letters*, 42(5), 887-889. <10.1016/S0040-4039(00)02150-X> Accessed 11 Jul 2021.

### Abstract

Reaction of a suitably protected aryllithium derivative with citral, and subsequent deprotection and cyclization was used to obtain dibenzopyran 5, a precursor of the tricyclic quinone 6. Diels–Alder reaction of 6 with 1,3-dimethoxy-1-trimethylsilyloxy-1,3-butadiene 7 led to benzonaphthopyranoquinone 8. The regioselectivity in the dienophilic partner is governed by the remote oxygen of the pyran ring. The dimethylether of (±) naphthgeranine A (8) is synthesized in good yield through the Diels–Alder reaction of pyranoquinone 6 and diene 7. The regioselectivity in the dienophilic partner is governed by the remote oxygen of the pyran ring..

### Keywords

Diels–Alder reaction, Quinone, Benzopyran.