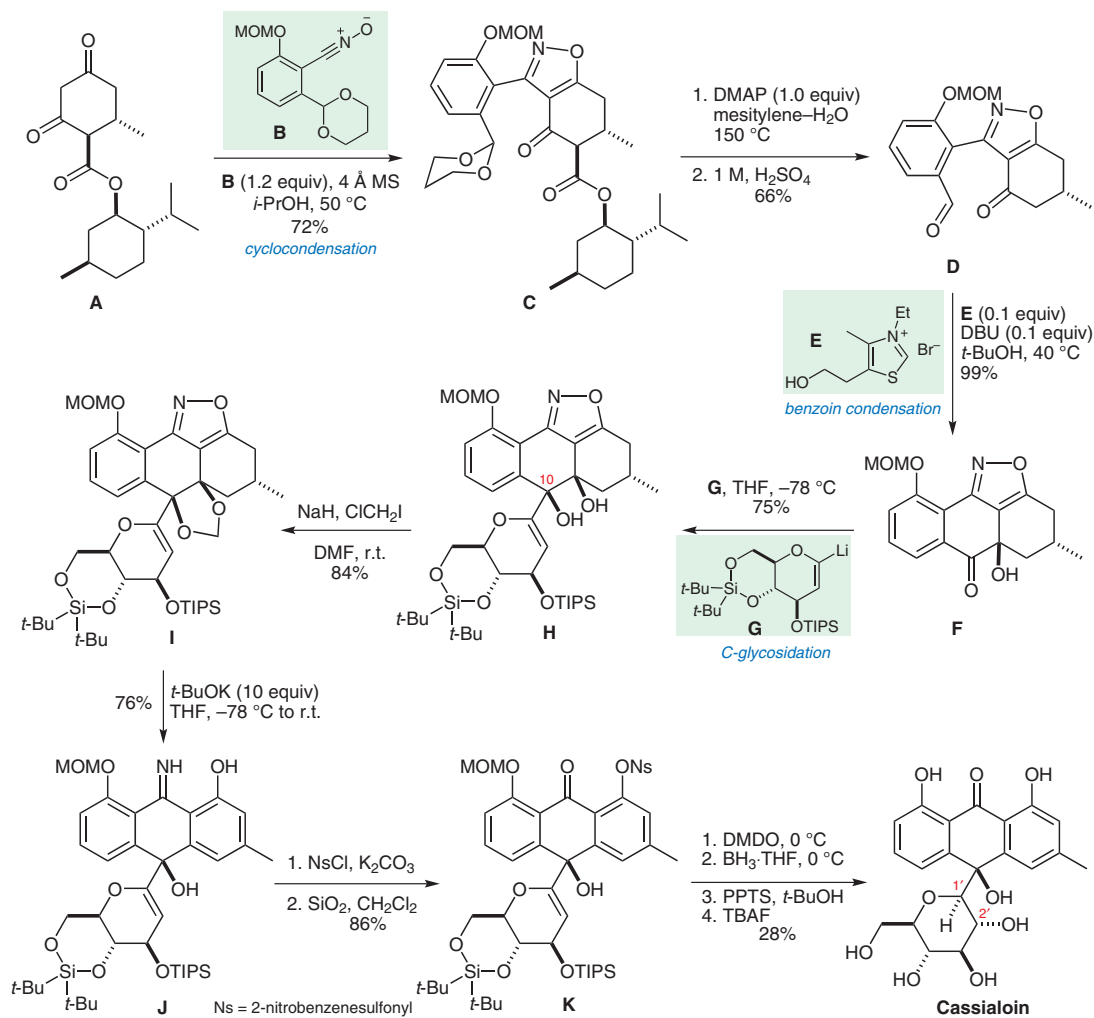


## Synthesis of Cassialoin



**Significance:** A significant development in the synthesis of cassialoin is the use of the  $\alpha$ -ketol **F** as a selectively protected stereogenic anthrone surrogate in which the diastereotopic faces are differentiated thereby allowing control of the C-glycosidation reaction (**F**+**G**→**H**) at C10.

**Comment:** A regioisomer (17%) was formed in the cyclocondensation reaction of **A** and **B**. The  $\alpha$ -ketol **F** was obtained as a single diastereoisomer. The epoxidation–reduction of glycal **K** (66%) installed the correct stereochemistry at C1' and C2'.