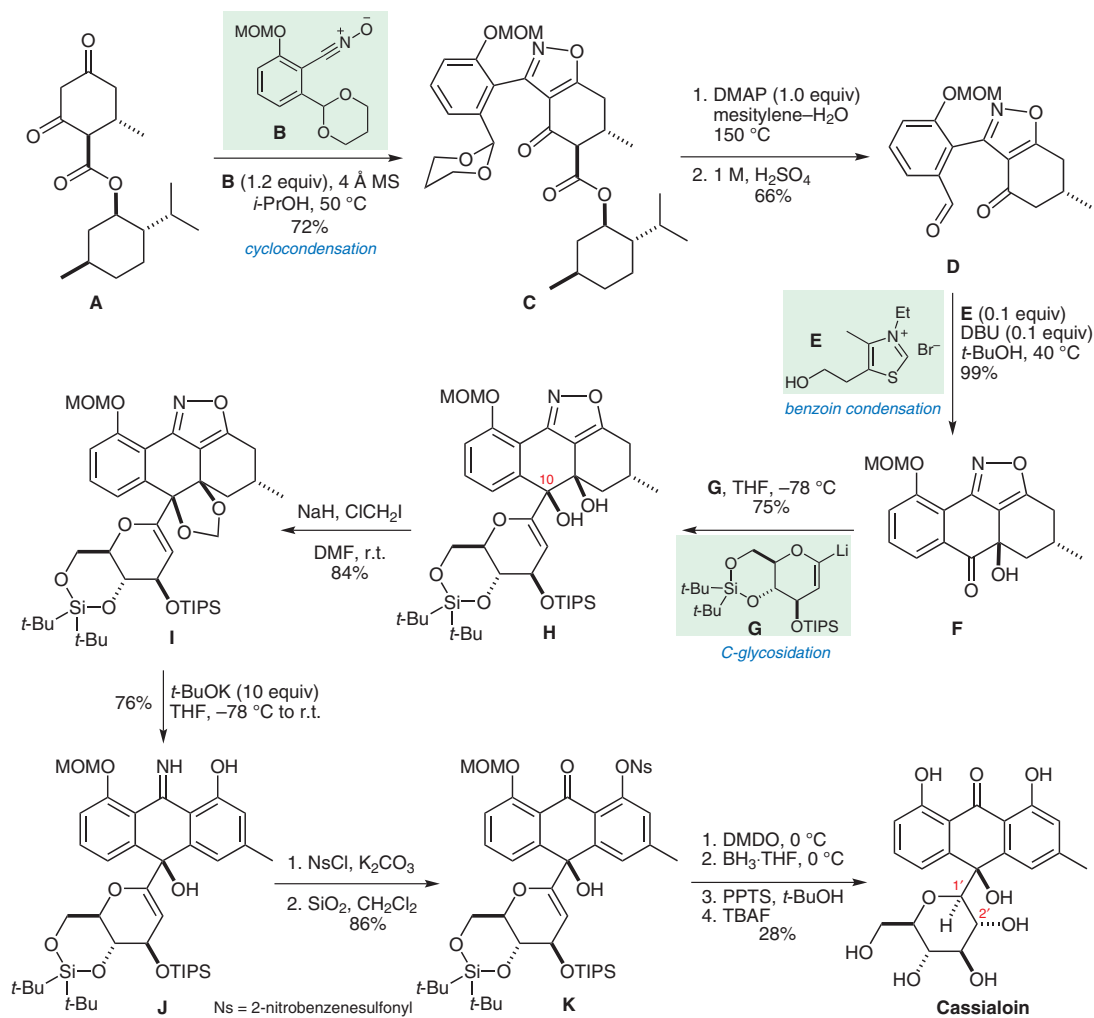


Synthesis of Cassialoin



Significance: A significant development in the synthesis of cassialoin is the use of the α -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 α -ketol **F** was obtained as a single diastereoisomer. The epoxidation–reduction of glycal **K** (66%) installed the correct stereochemistry at C1' and C2'.