**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 \( (F + G \rightarrow H) \) 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’.