

Title: Chemistry of xanthorrhizol: synthesis of several bisabolane sesquiterpenoids from xanthorrhizol

### Abstract

(-)-Xanthorrhizol (**1**) isolated from the rhizomes of *Curcuma xanthorrhiza* has been transformed to several bisabolane-type sesquiterpenoids, in a stereoselective manner. 10*R*- and 10*S*-10, 11-dihydro-10, 11-dihydroxyxanthorrhizols (**2**, **3**), (-)-curcuquinone (**4**), (-)-curcuhydroquinone (**5**), helibisabonol A (**7**) and allylic alcohol **8** have been prepared from xanthorrhizol in optically active forms. All the routes involved a Sharpless AD to introduce the stereogenic centre at C-10.