

Name: \_\_\_\_\_

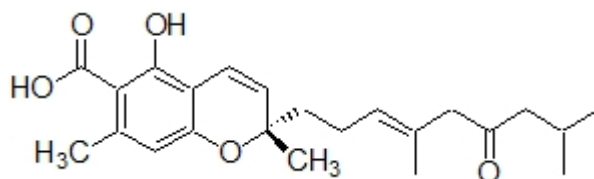
**Organic I Lecture**

**Fall 2010**

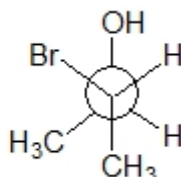
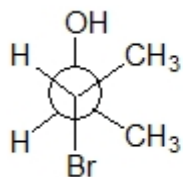
**Quiz #4**

(10 points)

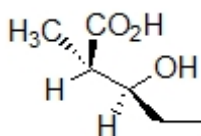
1. Anthopogochromene A is isolated from *Rhododendron anthopogonoides* and is used as an expectorant and in treating chronic bronchitis (*J. Nat. Prod.*, **2010**, 1203). State the configuration of each chiral center in the following structure. (2 points)



2. State the relationship between the two structures below as being the same structure, enantiotopic, diastereotopic or constitutional isomers. (2 points, problem 5-30e)



3. Translate the following perspective structure to a Fischer projection. (3 points)



4. Compound **A** has a specific rotation of  $-45^\circ$ . If 2.0 g of compound **A** is dissolved in 15 mL of acetone and placed in a 10 cm long polarimetry tube, calculate the observed rotation of this solution. Show all of your work for full credit. (3 points)