

## Some Chemical Transformations of Ajanolide A

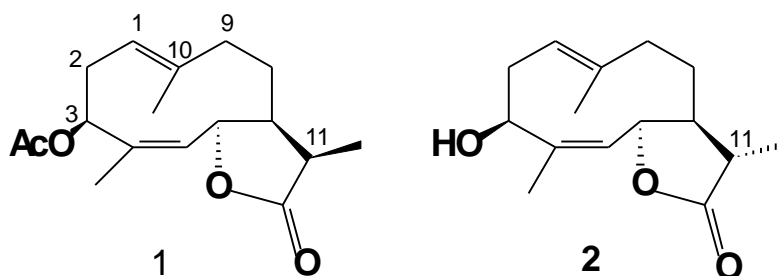
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Ajanolide A (**1**) is a new sesquiterpene lactone isolated not long ago from *Ajania fruticulosa* (Ldb.) Poljak. Some stereoselective transformations of this lactone have been studied.

Deacetylation of (**1**) (Na<sub>2</sub>CO<sub>3</sub> in aq. acetone) led to 11-epimer of 3-O-deacylajanolide A (**2**) (76%).



Epoxydation of (**1**)(AcOOH/CHCl<sub>3</sub>) is stereoselective process and it leads to (1R,10R)-epoxyajanolide A (28%). Structure and stereochemistry of both derivatives of (**1**) have been determined by X-ray diffraction analysis.

The conformation of germacranes carbon skeleton in molecules (**2**) and epoxyajanolide A may be represented as boat-chair type <sup>14</sup>D<sub>1</sub>, <sup>5</sup>D<sub>15</sub>.

(1R,10R)-Epoxyajanolide A exists in solid (crystal) state as two independent molecules. These molecules have torsional angles C2C1C10C9 and C3C4C5C6 equal to 158.2°, 2.4° and 159.1°, 0.3° correspondingly.