

# Essential Oil Constituents of *Valeriana italica* and *Valeriana tuberosa*. Stereochemical and Conformational Study of 15-Acetoxyvaleranone

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The chemical composition of the essential oils obtained by hydrodistillation of roots, stems with leaves and inflorescences of *Valeriana italica* Lam. and *Valeriana tuberosa* L. were studied by GC/MS. Seventy-three and forty-one constituents were identified from each plant, respectively. The major constituent of the oil obtained from the roots of *V. italica* was isolated and identified as 15-acetoxyvaleranone. Its stereochemistry and conformation has been studied using NMR spectroscopy and molecular modelling. The oils obtained from *V. tuberosa* completely lacked the characteristic valerane or kessane sesquiterpenes.

Running title: Essential oils of *Valeriana italica* and *V. tuberosa*