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Chemical composition of Rhododendron dauricum (Dahurian rosebay) essential oil from Pribaikal'e

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Abstract

The essential oils from eight samples of leaves of *Rhododendron dauricum* from Baikal Lake water area and Irkutsk region, Pribaikal'e, have been isolated by hydrodistillation and analyzed by a combination of GC and GC/MS. Compounds representing 71.4-99.5% of the oils were identified. Forty-eight compounds were identified according to their chromatographic retention indices and mass spectra. The major components of the oils were α -humulene (19.2-43.9%), β -caryophyllene (6.5-24.5%), caryophyllene oxide (3.9-11.3%), humulene oxide (2.2-11.7%) and bornyl acetate (2.1-9.5%). It has been found that the chemical composition of *Rh. dauricum* essential oil depends on the altitude of the growing plants and a level of environmental pollution.

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