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**Methodological approach to determine carlina oxide – a main volatile constituent of
Carlina acaulis L. essential oil**

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Abstract

In this work, a fast and low-cost voltammetric methodology for determination of carlina oxide in plant extracts was developed. The best results were obtained using a boron-doped diamond electrode (BDDE). The voltammetric measurements of carlina oxide were performed in a 0.1 mol/L solution of sulphuric acid. After 30 s of stirring the solution, differential pulse voltammograms (DPVs) were recorded from 0.5 to 1.8 V. The amplitude was 75 mV and the scan rate was 175 mV/s. Measurements were recorded in non-deaerated solutions. The background current was subtracted from each registered voltammogram; then they were cut from 0.5 to 1.5 V. The detection and quantification limits were 0.28 and 0.93 µg/L,

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