

Rapid and High Quality DNA Isolation from *Origanum onites* for RAPD and ISSR Analysis

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Z. Naturforsch. **63c**, 595–598 (2008); received December 13, 2007/February 1, 2008

Origanum onites is an economically important medicinal plant with high essential oil content. Lack of an appropriate DNA isolation procedure is a limiting factor for any molecular study of this plant. We have used a protocol for genomic DNA isolation based on a hexadecyltrimethylammonium bromide (CTAB) method described for other plant species. The method involves mortar grinding of leaf tissue, modified CTAB extraction using high salt concentrations and polyvinyl pyrrolidone, and successive isoamyl alcohol/chloroform extractions. The yield was approx. 20 µg DNA per 200 mg of initial fresh plant material. The genomic DNA obtained by this method was suitable to be used in restriction digests, inter simple sequence repeat (ISSR) and randomly amplified polymorphic DNA (RAPD) reactions. This extraction method should facilitate the molecular analysis of *Origanum* chemotypes.

Key words: CTAB DNA Extraction, *Origanum onites*, RAPD, ISSR