Nematicidal Activity of the Essential Oil of *Rhododendron anthopogonoides* Aerial Parts and its Constituent Compounds against *Meloidogyne incognita*

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Z. Naturforsch. **68 c**, 307 – 312 (2013); received June 26, 2012/June 3, 2013

Hydrodistilled essential oil from *Rhododendron anthopogonoides* Maxim. (Ericaceae) aerial parts was analysed by gas chromatography-mass spectrometry (GC-MS). A total of 42 compounds, accounting for 95.48% of the total oil, were identified. The main constituents of the essential oil were benzyl acetone (34.41%), nerolidol (10.19%), 1,4-cineole (8.41%), *b*-caryophyllene (5.63%), *c*-elemene (5.10%), and spathulenol (3.06%). Four constituents were isolated from the essential oil based on fractionation. The essential oil of *R. anthopogonoides* possessed nematicidal activity against the root knot nematode (*Meloidogyne incognita*) with an LC_{50} value of 130.11 μg/ml. The main compound of the essential oil, benzyl acetone, exhibited nematicidal activity against *M. incognita* with an LC_{50} value of 74.17 μg/ml while 1,4-cineole, nerolidol, and *b*-caryophyllene were not nematicidal at a concentration of 5 mg/ml. The essential oil of *R. anthopogonoides* and benzyl acetone show potential for their development as possible natural nematicides for the control of the root knot nematode.

Key words: Rhododendron anthopogonoides, *Meloidogyne incognita*, Nematicidal Activity