

A New Glucolimnanthin Degradation Product

**Identification and Phytotoxicity of a New Glucosinolate Breakdown Product from
Meadowfoam (*Limnanthes alba*) Seed Meal**

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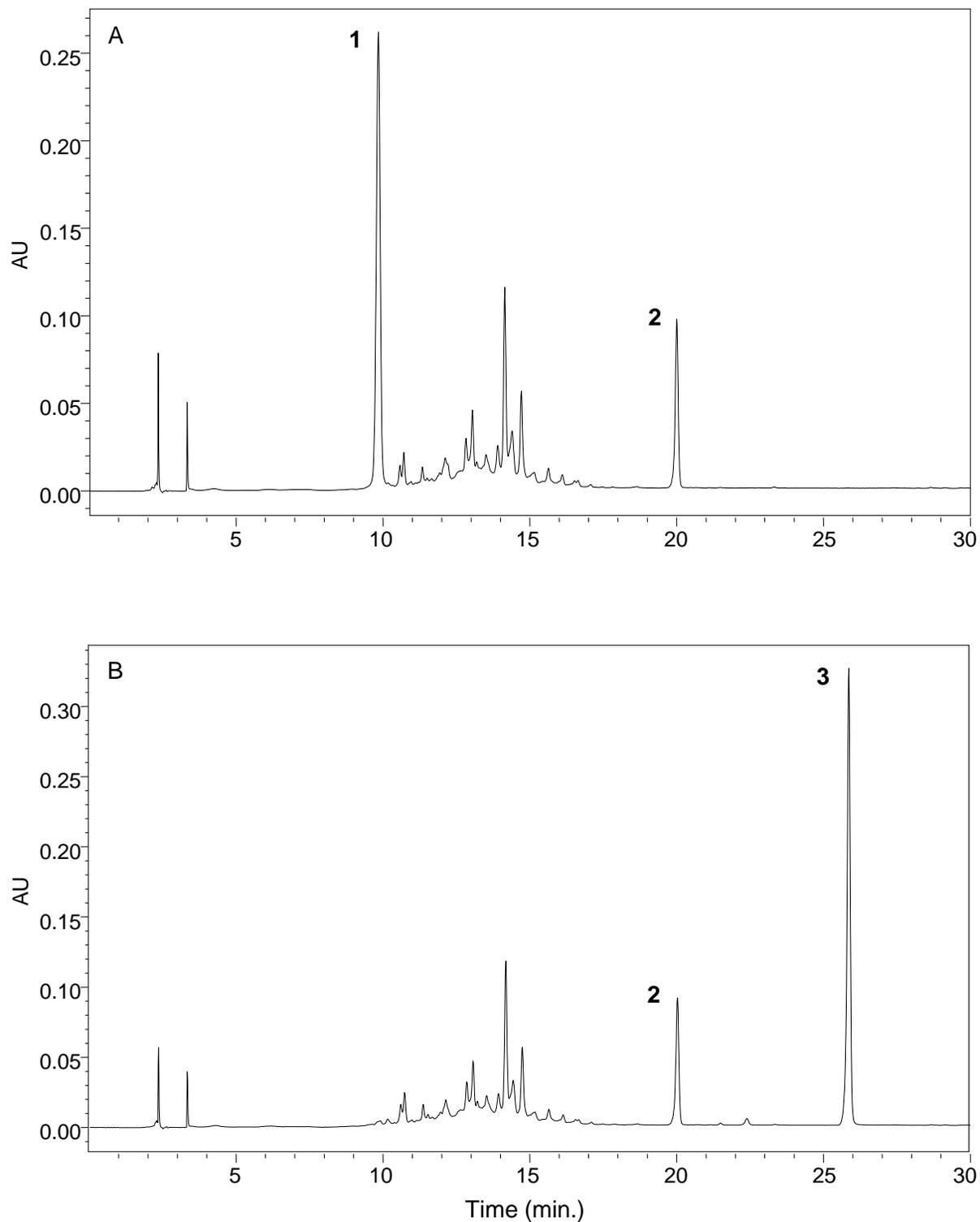


Figure S1. High performance liquid chromatography (HPLC) analysis of the composition of meadowfoam seed meal (MSM) (A), and activated MSM produced by adding 1% myrosinase-active meadowfoam seeds (B). The UV trace was recorded at 274 nm. Compounds: 1 = glucolimnanthin; 2 = nitrile; 3 = isothiocyanate.

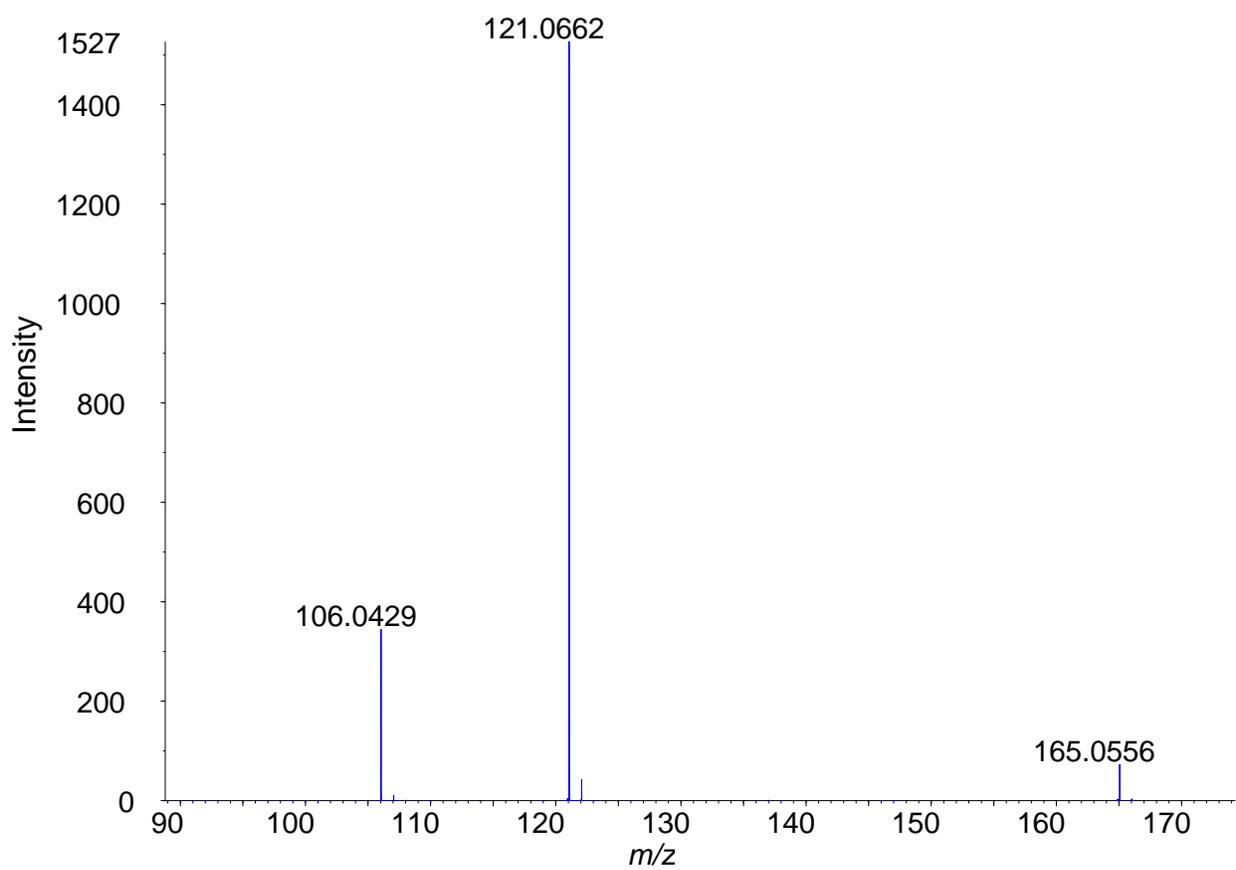


Figure S2. Product ion mass spectrum of 3-methoxyphenylacetic acid (MPAA) standard (observed m/z 165.0556, calculated for $C_9H_9O_3$: 165.0552, 2.4 ppm error).

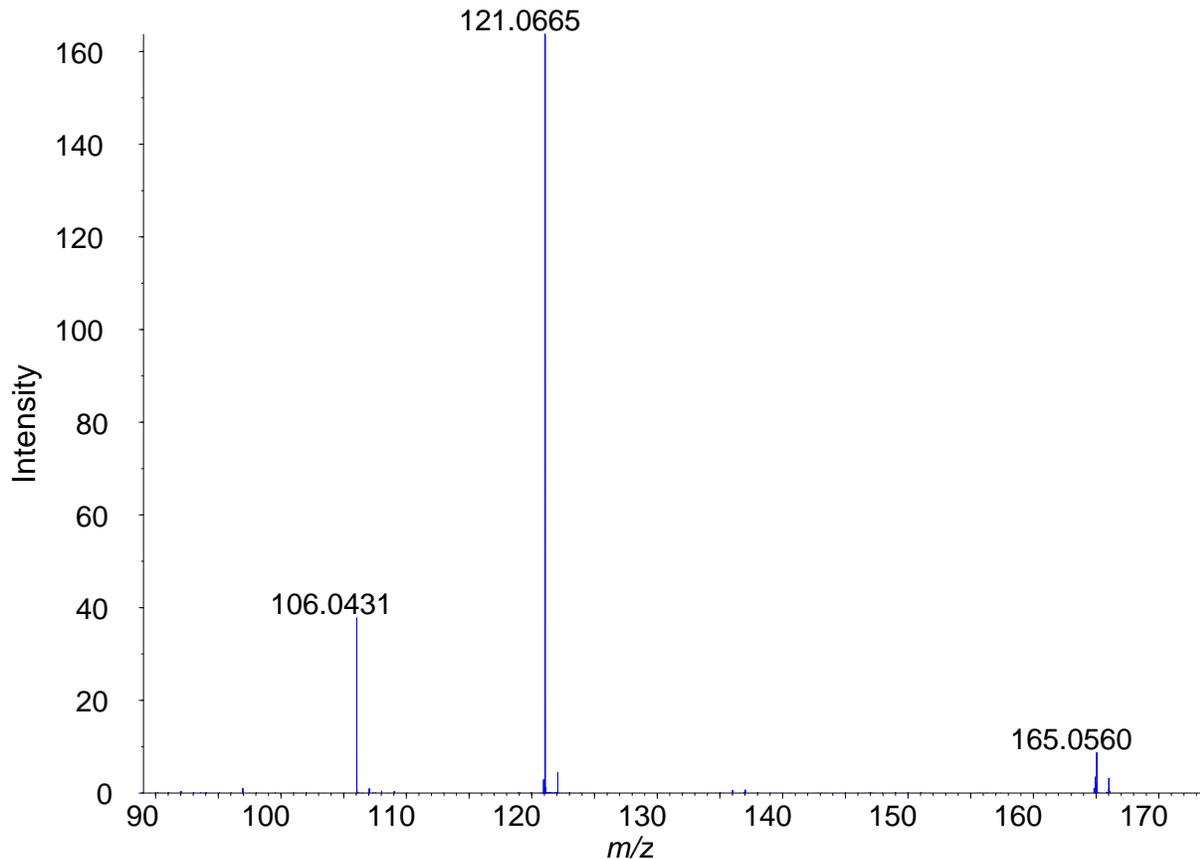


Figure S3. Product ion mass spectrum of 3-methoxyphenylacetic acid (MPAA) produced from soil incubation with nitrile (observed m/z 165.0560, calculated m/z 165.0552, 4.8 ppm error). The identification of the parent compound of MPAA was determined by preparing a 20 g soil in a 9-cm diameter Petri plate with nitrile solution added at a rate of 0.1 mg/g soil with 30% soil moisture. The extraction method for extracting glucosinolate hydrolysis compounds from the soil was performed as in the text and was followed for 12 days. Unamended soil was used as a control.