

Bioactivity-Directed Separation of an Anxiolytic Fraction from *Aethusa cynapium* L.

Shri Richa, Singh Manjeet, Sharma Anupam

Department of Pharmaceutical Sciences and Drug Research, Punjabi University, Patiala

ABSTRACT

The present study evaluated the putative anxiolytic activity of petroleum ether, chloroform, methanol and water extracts of the aerial parts of *Aethusa cynapium* using the widely accepted elevated plus-maze (EPM) model in mice. The bioactive fraction was isolated by bioactivity-directed fractionation, and two chromatographic procedures - column and flash chromatography. Fraction 3.1.3.2 derived from the methanol extract of the plant, showed significant anxiolytic activity at a dose of 50 mg/kg p.o. which was comparable to the standard drug, diazepam (2 mg/kg p.o.). This sub fraction comprised two components as seen in the TLC profile. Phytochemical screening indicated the presence of unsaturated fatty acid in Fraction 3.1.3.2. The study demonstrates that *A.cynapium* has significant anti anxiety activity. This activity may be due to fatty acids present in the bioactive fraction.

KEYWORDS

Aethusa cynapium, L . Anxiolytic effect . Elevated plus-maze model . column and flash chromatography

REFERENCES

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