

# Repellent Activity of Caraway Oil from *Carum carvi* against the Two-Spotted Spider Mite, *Tetranychus urticae*

Jeong-Sook Bae, Dong-Ku Shin and Gil-Hah Kim

Dept. Agri. Biol., Chungbuk Natl. Univ.

These studies were carried out to investigate fumigant and contact toxicity and repellent activity of caraway oil against the acaricide susceptible two-spotted spider mite, *Tetranychus urticae* in the lab conditions. Caraway oil showed 92.4% of repellent activity against adult females at concentration of 1,000 ppm. However, this oil showed low fumigant toxicity against adult females and contact toxicity against eggs and adult females. Analysis by gas chromatography-mass spectrometry led to the identification of two major compounds (carvone, limonene) from caraway oil. Limonene was 83.1% of repellent activity against adult females at concentration of 100 ppm, but carvone was no repellent activity against adult females.