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Can non-host extracts inhibit oviposition by the invasive swede midge, *Contarinia nasturtii* (Diptera: Cecidomyiidae)

This study aims to determine if egg-laying behavior of the invasive insect pest swede midge, *Contarinia nasturtii* (Diptera: Cecidomyiidae), can be impacted by the application of non-host plant essential oils to *Brassica* host plants of swede midge. I chose four essential oils from plant families that varied in phylogenetic distance from the host plant family and observed midge egg-laying behavior in two tests: a choice test and a no-choice test. For each replication of the choice test, five plants were exposed to midges in one cage, with either an essential oil or water for control as a treatment for each plant. In the no-choice test, the treatment plants were exposed to midges in separate cages. I observed larval numbers in both tests to assess essential oil efficiency. This is an ongoing project in which the findings are still under collection and examination. It is expected that an observed difference between the non-host essential oil applications and host plant controls will be present. Swede midge egg-laying decreases the marketability of brassica crop plants, and we predict that a reduction in midge egg-laying would lead to less brassica crop damage and a better marketability of brassica crops for farmers.