The Appearance of Two Non-Pest Tephritids in Michigan Orchards

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Urophora quadrifasciata

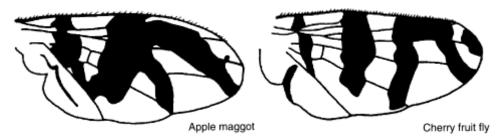


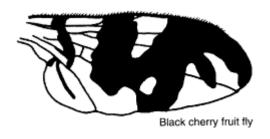
Urophora affinis

Urophora quadrifasciata and *U. affinis*, the knapweed gall flies, are small tephritid flies, which have the potential to be mistaken for cherry fruit fly in yellow sticky monitoring traps. The wing bands are different from cherry fruit fly, but *U. quadrifascata* has the characteristic break between the front and hind wing bands. The knapweed gall flies are smaller (3-4mm) than the economically important fruit flies, and the females have a long, needlelike ovipositer.

The two species, *U. quadrifascata* and *U. affinis*, were released by USDA-APHIS for biological control of spotted and diffuse knapweed in 14 midwestern and western states. *U. quadrifascata* spreads quickly and was reported in five Michigan counties (Isabella, Delta, Dickenson, and Menominee) in 1995. We found *U. quadrifascata* in yellow sticky traps and sweep net samples in 1996 and 1997 in orchards at the Clarksville Horticultural Experiment Station, Ionia County, and at the Northwest Michigan Horticultural Research Station in Leelaunau County. *U. affinis* was released in Isabella County in 1994, and has only been reported in Isabella County.

The knapweed gall flies oviposit exclusively on knapweed seed heads. They are not known to oviposit on deciduous fruit. The only economic concern that *U. quadrifascata* will cause fruit growers is if it is mistakenly identified for cherry fruit fly or apple maggot on the monitoring traps and the crop is unnecessarily treated.





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