

Western Flower Thrips (*Frankliniella occidentalis*) in Tree Fruit

March, 2016

Hosts

Many woody and herbaceous plants.

Damage

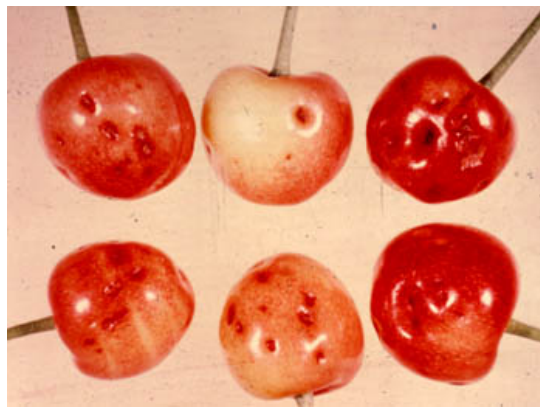
Apple - White to pink irregular areas called pansy spots develop around egg punctures in young apple fruitlets, especially of McIntosh, as well as Spartan and Newtown apples.

Cherry - Thrips laying eggs in the ovary of cherry flowers cause a dimple-like injury to form on mature fruit. Just as the fruit begins to colour the dimple appears as a bright red spot against the yellow-green background.

Nectarine - Adult feeding and egg laying on young nectarines can severely scar the fruit surfaces, rendering the fruit unmarketable.



Pansy spot on apple



Thrips dimple on cherry

Identification

Adult - Slender, tan to dark brown, 1.2 mm long, with narrow fringed wings.

Nymph - Similar to adult except wingless, smaller and yellow in colour.

Life History

Western flower thrips overwinter as adults in protected sites on the ground. In the spring, adults fly to flowers of many plant species where they feed on blossoms and insert eggs into the flower parts. Second generation adults insert eggs into young apple fruitlets during bloom and petal-fall.



Adult western flower thrips
Photo courtesy Alberta Environmental Centre

Monitoring

No practical monitoring method has been developed for B.C.; however, their presence can be detected by using a beating tray when the blossoms begin to open.

Control

Cultural - Do not mow blooming ground cover from 1 week before bloom until after petal-fall to reduce driving thrips up into apple trees.

Chemical - Apply Success 480 SC or Entrust 80W between early petal fall and husk fall for control/suppression of thrips on nectarines (maximum 3 applications per season). Allow 7-10 days between applications. Application of Success or Entrust to apples at petal fall for leafroller control will also suppress thrips and reduce pansy spot on susceptible varieties.

On cherry there is no recommended chemical control because of the danger to pollinators during bloom when thrips cause most damage. Success or Entrust applied against leafrollers during petal fall will suppress any thrips present, however not before some damage has been done.