

Stone Fruits—Biology

Cherry Bark Tortrix

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Cherry bark tortrix, *Enarmonia formosana* (Scopoli), is a tortricid new to the U.S. The first U.S. detection of *E. formosana* was reported by WSDA on March 29, 1991. The find was a larval collection from an ornamental cherry tree at Blaine, Whatcom County, Washington. Agriculture Canada reported *E. formosana* in 1990 from at least nine sites in British Columbia's Fraser Valley.

E. formosana feeds on the bark and sapwood of a variety of plants of the family Rosaceae including *Prunus* (cherry, plum, peach, apricot, nectarine and almond), *Malus* (apple), *Pyrus* (pear), *Pyracantha* (firethorn), *Sorbus* (mountain ash) and *Cydonia* (quince). Infested hosts identified in Washington to date (via larval collections) have been mature cherry and apple trees.

In 1991 WSDA and USDA, APHIS, PPQ cooperated in a CBT pheromone survey of western Washington and portions of eastern Washington. Traps were placed and monitored from May 13 to Sept. 11. Table 1 summarizes 1991 pheromone trap survey results.

Nursery Stock Inspections

An inspection of potential host plant material was conducted in Whatcom County licensed nurseries during the first week of October, 1991. A total of 11,197 host trees were inspected and found to be free of cherry bark tortrix. Inspection emphasis was placed on, but not limited to, grafted areas, pruning scars and other damaged areas. Agriculture Canada has conducted similar nursery inspections and has found no infestation of nursery stock.

Observations

In general, current CBT distribution encompasses the Puget Sound region, with highest populations in Canadian border counties. Population levels rapidly decrease in counties to the south. The catch pattern clearly indicates natural spread of the pest, with no outlying catches elsewhere in the state.

Adult moths were collected in pheromone traps from the first placement in May until traps were removed in September. Peak moth catch was in mid-August.

Preliminary field observations of host trees have corroborated the pheromone trap results. A high percentage of cherry trees are clearly infested with CBT. Many cherry trees in Whatcom County are severely stressed and show widespread dieback. It is not known what role CBT has in the situation. All infested trees observed to date have been mature ornamental and fruiting cherry and apple varieties.

Table 1. 1991 pheromone trap survey results.

County	No. of trap sites	No. of positive sites (%)	
Eastern Washington			
Asotin	2	0	
Benton	9	0	
Chelan	16	0	
Columbia	1	0	
Douglas	14	0	
Ferry	0	0	
Franklin	3	0	
Garfield	1	0	
Grant	19	0	
Kittitas	19	0	
Klickitat	24	0	
Okanogan	35	0	
Spokane	92	0	
Stevens	24	0	
Walla Walla	3	0	
Yakima	46	0	
Totals	308	0	
Western Washington			
San Juan	6	6	(100)
Whatcom	86	70	(81)
Skagit	59	17	(24)
Island	18	3	(17)
Snohomish	184	48	(26)
King	70	19	(27)
Pierce	57	2	(4)
Thurston	114	1	(<1)
Lewis	74	0	
Cowlitz	17	0	
Clark	50	0	
Totals	735	166	