

**DIAGNOSTIC CHARACTERISTICS OF QUARANTINE PESTS CONCERNING
APPLE FRUIT IMPORTED FROM CHINA**

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QUARANTINE PESTS CONCERN TO APPLE FRUIT IMPORT FROM CHINA

Adoxophyes orana (Fischer von Roslerstamm)-summer fruit tortrix moth

	
<p>Damaged Fruit</p>	<p>Damaged Fruit</p>
	
<p>Damaged Fruit</p>	<p>Larvae on the fruit</p>
	
<p>Transaction of damaged fruit</p>	<p>Adult</p>
<p>Visible Symptoms: Larvae may cause potential damage on the fruit surface and also leave holes in the fruit. Large depressions on the fruit surface before overwintering. These fruit attacks allow fungi to invade.</p>	

***Cydia funebrana* (red plum maggot)**



Symptoms on Fruits



Symptoms on Fruits



CATERPILLAR IN DAMAGED PLUM FRUIT



Adult

Visible symptoms: Fruit stalks, fruit, and leaves must be examined for eggs; for larvae, fruit should be inspected for entry holes or frass; fruit should be dissected to find larvae in the flesh of the fruit near the seed; bark, branches, and root collars should be examined for pupae.

Cydia inopinata (Manchurian fruitmoth)



Symptoms on Apple



Adult

Visible symptoms: In apples, the larvae eat out a flat chamber under the skin before penetrating to the core

Cydia molesta (Oriental fruit moth)



Damaged fruits



Larvae



Adult

Visible Symptoms: The larvae tunnel all parts of the fruit, feeding on the fleshy parts and on the seeds. Several larvae may feed in each fruit. Infested apples exude a sticky gum, pears turn yellow and apricots ripen unevenly.

Cydia pomonella (Codling moth)



Symptoms on fruits



Larvae appeared on inside of the fruit



Pupa and Adult

Visible Symptoms: Codling moth caterpillars tunnel to the fruit's core; it may be rendered inedible. The caterpillar usually leaves before the damage is discovered as there is generally no obvious sign of its presence on the outside of the fruit.

Pandemis cerasana (Common twist moth)



Symptoms on Fruits



Larvae

Adult



Life Cycle

Visible Symptoms: Gnawing of shoots and flower-buds by larvae of the winter generation. From flowers to swelling fruits: gnawing on the young fruits by more developed larvae of the winter generation. In spring/summer: gnawing of leaves on the apex shoots; round holes of 5-10 mm in diameter on apple fruits and superficial gnawing ('embroidery') on pear fruits by larvae of the first generation. In early autumn: small gnawing of leaves and fruits by young larvae of the final generation

***Pandemis heparana* (apple brown tortrix)**



Symptoms on Apple



Symptoms on Apple



Flat mass of eggs, overlapping like fish



Pupa, larva and fine webbing



Larvae on stem



Adult

Visible Symptoms: This insect is very harmful in agriculture. Not because of the damage caused in spring to fresh leaves, but because the young caterpillars often nibble on growing fruit, resulting in inhibited growth, fungus infections or making the fruit extremely unattractive.

***Peridroma saucia* (Pearly underwing moth)**



Symptoms on fruits



Larvae on the fruit



Adult on the fruit



Larvae



Adult

Visible Symptoms: Felled young plants cut off at the base or near the ground level are characteristic of cutworms. Much damage is done to young row crops. Larvae are inactive, often curled under surface debris or loose dirt during the day and feed at night. Adults are inactive during the day and remain under the foliage of plants, in the shade at the base of plants or under loose clods.