Pale Winged Grey

_Iridopsis ephyraria_ (Wlk.)

The Pale Winged Grey is a native insect found from Nova Scotia to Alberta. The moth is common within its range and is found throughout Nova Scotia. It is a general feeder on a wide number of host plants, and it has never been reported to have caused, or considered to be capable of causing, damage to the forest. In 2002, heavy defoliation was observed from this insect on eastern hemlock in Kejimkujik National Park.

Hosts

An incomplete list is as follows: Manitoba maple, willow, ash, choke-cherry, caragana, wire birch, sugar maple, rock elm, American elm, burr oak, white elm, gooseberry, cranberry, balsam fir, paper birch, wild cherry, willow, apple, pear, sugar maple, currents, and eastern hemlock. There is one reference from Craighead (1950) listing it as being a major host on eastern hemlock.

History of Outbreaks

None reported.

Life History

There is one generation per year. It overwinters in the egg stage on the bark of trees. The eggs are approximately 0.68 mm long, elongate oval with a truncated end. When first laid, the eggs are greenish but later turn to a rusty colour. After hatching in June, the young larvae have a dark grey body with a rusty colored head. This contrasts with the rear tip of the larvae which tends to be yellowish. In the later larval stages, they become grey-brown to light-brown with very fine, ill defined markings on the body. There is a black spot on the side of the larvae just to the front of the middle of the body, often proceeded by a small white patch. There are also four small black spots along the posterior half of the body. In July, the mature 22 - 26 mm long larvae drops to the ground and pupates. The pupa ranges from 10 to 11 mm long and 3 to 4 mm wide and is brown. They can be found just under the leaf litter to a soil depth of 10 centimeters, depending on soil compaction. The nocturnal adult moth emerges 13-20 days later to mate and lay eggs, and they are active during July until the middle of August. The female moth lays her eggs directly on the bark and not the foliage. The color of the adults makes them very hard to see when resting on tree trunks, blending in well with the moss and lichen.

Problem

This insect has only recently been observed causing damage to eastern hemlock. In the first year of an outbreak, the larvae feed on the understory trees. They eventually move up into the crowns of mature trees over the next few years as the understory trees are stripped of their needles. When populations are high, they can completely defoliate and kill a tree within two years.

Damage Symptoms

Missing or red foliage (needles), especially on the understory trees or lower branches of larger trees. Larval feeding during the early part of the season is on the new shoots, while later stages consume older needles.

Control

There are no registered control products for this pest at this time.