Spotted Fireworm

This insect is one of the most important pests of cranberries in New Jersey. It becomes a problem in “weedy” beds because female moths lay their eggs predominantly on weeds. Keeping beds clean from weeds will keep this insect under control. Damage by this insect causes a characteristic browning of uprights.

There are two generations a year. Larvae overwinter on the bog floor and continue to develop in April-May. Adults appear in early-June. Eggs are laid late in June. Larvae from this generation will complete development and moths will emerge in early August and lay eggs. Eggs from the second generation will hatch in mid-August. Larvae will feed on berries in the second generation (see picture) and overwinter.

Growers need to monitor for the presence of spotted fireworm egg masses on weeds. Egg masses of spotted fireworm can be easily detected on the upper surfaces of weed leaves (red maple, green brier, leatherleaf, loosestrife, red root, etc) on the beds and dams. Managing weeds around and in the bog can prevent spotted fireworm infestations. If eggs are not observed, then the second generation larvae should not be a problem. Larvae feed on foliage as well as fruit. Most effective control is achieved when larvae are in early stages of development, and not tightly enclosed in leaves or entered the berries. There is no economic threshold based on number of egg masses, but beds with larval populations above an average of 4 medium-sized larvae per 25 sweeps may require insecticide treatment. If spotted fireworm populations are above this threshold, you may apply the insect growth regulator (IGR) Intrepid during bloom to target the early-instar larvae. IGRs are safe to bees. This application will also control other lepidopteran pests such as Sparganothis fruitworm. An additional benefit of using IGRs is that they are soft to the pest’s natural enemies. Eggs are heavily parasitized by Trichogramma spp. Parasitized eggs are black compared to the yellow-orange color of unparasitized eggs.