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SOUTHWEST NEW YORK FIELD CROP CHRONICLE

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Consider Planting Winter Wheat After the Hessian Fly-Free Date



Prepared by Ken Wise, New York State Integrated Pest Management Program

As fall approaches, growers should consider the recommended timing for planting winter wheat. For years, the standard recommendation for profitable wheat production in New York has been to plant wheat after the Hessian fly-free date. This recommendation is based on the fact that Hessian fly adults would no longer be alive as there are no remedial measures available to save an infested crop.

Hessian fly, *Mayetiola destructor*, is a species of fly that is a significant pest of cereal crops including wheat, barley and rye. Hessian flies emerge in late summer, mate, and then lay eggs (A) in different types of grasses – among them wheat. The adult life span is extremely short, perhaps only a week, during which time they do not even feed. After this short time span, adults die off.



The larvae (B) of this small insect feed between the stem and leaf sheath near the base of the plant in newly established wheat in the fall and again in the spring. Damage during the fall causes stunting

of the new plants; the spring and early summer damage results in unfilled heads and fallen straw. Look for the small white maggots and brown puparia (the resting stage, commonly called "flax seeds", for their resemblance to the flat spindle-shaped seeds of flax) deep within the sheaths of the lower leaves in the weeks just before wheat harvest (C).

The fly-free date is set at a time when it is expected that the adults have died and are no longer around the area. As a result, damage caused by this insect will likely be much less if wheat is planted after the specific fly-free date in your area. Note the dates shown on the map are adjusted for altitude (i.e. higher elevations = earlier Hessian fly-free dates). The recommendation is to plant wheat only after the fly-free date for your area but as soon after that date as possible. In Southwest NY, the fly-free date ranges from August 29th - October 6th, depending on county and elevation. In general, September 15th has been a good starting point in Western NY.





New York map of Hessian fly-free date by county and elevation.

Hessian fly eggs (A), larvae (B), pupa (C)

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