

# Keep hornworms from curing barn

*Hornworms must be controlled in the field before harvest*  
By Lee Townsend and Bob Pearce

Several times in the past two years, tobacco growers have called wanting to know what they can do about hornworms on their harvested tobacco hanging in the barn. Unfortunately, the answer is not much.

Hornworms that are present when tobacco is cut can be transported to the barn where they will continue to feed for one or two weeks until the plant yellows. However, hornworm problems must be handled in the field, since there are no registered or effective treatments for them once tobacco is hung in the barn.

Tobacco hornworm moths fly during much of August and early September, attaching single eggs to the undersides of tobacco leaves in the upper one-third of the plant. The long flight period means late-season infestations can occur even if the crop was sprayed with an insecticide at topping. The residual effect from these

applications will last for about five to seven days, which leaves plenty of time for late-season moths to lay eggs that will lead to infestations.

Ideally, tobacco should be checked weekly from topping until harvest to determine if hornworm numbers justify treatment. If this is not practical, then plants should be checked about a week before harvest. This should allow time for a “cleanup” spray and the harvest interval to pass before tobacco is cut and housed.

A good assessment of hornworms can be made by examining groups of 20 plants at randomly selected locations over a field. Use a minimum of five locations per field — more areas are better in large fields. If five or more hornworms are found per 50 plants, then a spray should be applied before harvest.

Late in the growing season, many of



Hornworms on harvested tobacco may continue to feed on leaves in the barn until the tobacco has turned yellow; then the worms typically drop to the barn floor.



Hornworms with attached wasp cocoons are no longer feeding.

the hornworms may have small, white, football-shaped objects on their backs. These are cocoons of a tiny wasp that develops inside the hornworm and kills it. Hornworms with these cocoons should not be included in your counts because they no longer are feeding.

The table lists insecticides labeled for hornworm control on tobacco with harvest intervals of three days or fewer. Even though some of these products may be used on the day of harvest, the re-entry intervals must be observed.

## Harvest and re-entry intervals for hornworm insecticide applications

Hornworm insecticides	Rate/acre	Harvest interval (days)	Re-entry interval (hours)
Acephate 75 SP Orthene 75 SP Orthene 97	$\frac{2}{3}$ lb. (HW) to 1 lb. (BW) $\frac{2}{3}$ lb. (HW) to 1 lb. (BW) $\frac{1}{2}$ lb. (HW) $\frac{3}{4}$ lb. (BW)	3	24
Agree WG (3.8% <i>Bt aizawai</i> )	1 to 2 lbs.	0	4
Biobit HP or F (6.4% <i>Bt kurstaki</i> )	$\frac{1}{2}$ to 1 lb. 1 to 4 parts	0	4
Dipel DF Dipel ES	$\frac{1}{2}$ to 1 lb. $\frac{1}{2}$ to 1 part	0	4
Javelin WG	$\frac{1}{8}$ to 1 $\frac{1}{4}$ lbs.	0	4
Lepinox WDG	1 to 2 lbs.	0	12
Sevin 80S	1 $\frac{1}{4}$ lbs.	0	12
Tracer 4SC	1.4 to 2.9 fl. oz.	3	4
XenTari DF	$\frac{1}{2}$ to 2 lbs.	0	4

HW= hornworm; BW=budworm