Early Plant Topping

Topping tobacco in the button stage increases yield and quality. *Early topping stimulates earlier root development, which increases fertilizer efficiency, drought tolerance, and alkaloid production.* Early topping also reduces the risk of windstorm plant lodging.

Contact Sucker Control Products

Contact (fatty alcohols) sucker control products kill small tender sucker tissue by touching (burning) them.

The 1st contact application is suggested when 50% of plants have a visible button. If a C<sub>8</sub>-C<sub>10</sub> contact is used, a 4 percent solution is suggested. This translates to 2 gallons of product in 48 gallons of water. C<sub>8</sub>-C<sub>10</sub> contact products include Off-Shoot T, Fair 85, Kleen-Tac, and Sucker Plucker. If a C<sub>10</sub> contact is used, a 3 percent solution is suggested. This translates to 1.5 gallons of product in 48.5 gallons of water. C<sub>10</sub> contact products include Antak, Fair-Tac, and Royaltac.

Three-five days after the first application, a 2nd contact application should be made. If a C<sub>8</sub>-C<sub>10</sub> contact is used, a 5 percent solution is suggested. This translates to 2.5 gallons of product in 47.5 gallons of water. If a C<sub>10</sub> contact is used, a 3 percent solution is suggested. This translates to 1.5 gallons of product in 48.5 gallons of water.

For fields experiencing early-season “sand-blasting”, a 3rd contact application may be necessary 3-5 days after the 2nd application. For the 3rd contact application, use the same solution concentration suggested for the 2nd contact application.

All contact applications should be made using 50 gallons of spray volume per acre, a three-nozzle arrangement of TG3-TG5-TG3, 2.5-3.0 mph, and 20-25 psi. If you have uniform row widths and good sprayer equipment, you may consider a three-nozzle arrangement of TG6-TG8-TG6 for faster application speeds.

Local-Systemic & Systemic Sucker Control Products

Once plant upper leaf development is adequate, focus shifts toward local-systemic and systemic sucker control products. Local systemic and systemic sucker control products stop cell division.

Flumetralin (Prime+, Flupro) is a local systemic, meaning it must wet the target (sucker) for cell division to stop. Knowing this, flumetralin is applied like a contact. *Flumetralin will provide season-long control for all small suckers*
it wets. Because it is not absorbed and moved through the plant, flumetralin performs better than MH in dry weather. The recommended rate is two quarts per acre. The rainfree period is 2 hours. Do not reapply flumetralin if washoff occurs.

MH, introduced in the early 1950s, is a true systemic. MH is absorbed primarily by upper plant leaves and “moved” to suckers. Good absorption and systemic movement/activity depends on good crop growing conditions. At recommended rates, MH tends to “give out” 6-7 weeks after application. MH should not be applied within 7 days of harvest to minimize MH residues.

Considering the above information, please note these points.

1. If crop growing conditions are dry at the time for systemic application, apply flumetralin alone. Once conditions improve, apply MH at the recommended rate.
2. If crop growing conditions are good at the time for systemic application, apply a flumetralin + MH tankmix using a contact application setup. These products compliment each other, resulting in improved sucker control.

**MH Rainfree Period**

Only 1 MH application is permitted unless the first application is washed off by rain. If significant rainfall occurs soon after MH application, please consider the following guidelines.

Research indicates reapplication of the full MH rate is not needed unless a substantial rain occurs within 4 hours after the first application. Only a ½ rate of MH is needed if rain occurs between 4 and 10 hours after the first application. MH reapplication is not needed if rain occurs more than 10 hours after the first application.

**Hornworms**

A foliar insecticide spray is justified when 1 or more hornworms larger than 1 inch (without parasitic cocoons) are found per 10 plants.

At current tobacco growth stage and beyond, the following products are recommended and rated best for hornworm control. Please note the worker reentry interval and the preharvest interval for each product.

**DiPel**
- 4 hour worker reentry interval
- 0 day preharvest interval

**Lannate**
- 48 hour worker reentry interval
- 5 day preharvest interval

**Orthene**
- 24 hour worker reentry interval
- 3 day preharvest interval

**Tracer**
- 4 hour worker reentry interval
- 3 day preharvest interval

In on-farm tests, Orthene and Tracer provided the longest-lasting control of hornworms. DiPel and Lannate provided control for a shorter period.

Disclaimer: The use of brand names and any mention or listing of commercial products or services in this publication does not imply endorsement by North Carolina State University nor discrimination against similar products or services not mentioned.

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