



BEST TIME TO START SPRAYING CONTACT SUCKER CONTROL CHEMICALS

by: Dr. W. K. Collins

If a half-dozen people are asked when the best time is to start spraying your contact sucker control chemical, you are likely to receive a range of answers. Thus timing depends on one's understanding of what is desired with your sucker control and topping program.

Best Time to Spray

The best time to start spraying your contact sucker control chemical is when the plants have the number of leaves you intend to harvest. This time is often before any floral parts show. An indication that spraying was at the best time is when about 5% of the plants are chemically topped.

Spraying should begin when plants have the number of leaves expected to be harvested. The first spraying should be done early with sufficient rundown on the

stalks, wetting the sucker buds which maybe just a very small "bump" of growth that is hardly visible but if not killed will become a larger sucker. Spraying early kills tiny sucker growth that is most easily killed at this stage.

Repeat applications of your sucker control chemical should be made every 3-5 days until the first and second sucker in as many leaf axils as possible are killed by dehydration of the tiny sucker "bumps." Some growers apply a contact as many as six times and remove by hand the few missed suckers in order to have MH-free tobacco denied by most buyers.

The early applications of the predominantly used alcohol-based chemical known as C8C10 should be applied in a 4% concentration. The solution mixture should be at the rate of two gallons of product and 48 gallons of water. Other applications should be at 5% strength which is at the mix rate of 2.5 gallons of product in 47.5 gallons of water. When the chemical is mixed in more water, the solution is too weak for good sucker control. Usually there is no control of the secondary suckers which will grow rapidly and become a problem.

Weak strength solutions are probably the main reason for late season sucker growth. Weak solutions (too low concentration) kill only one of the two tiny suckers in every leaf axil. Secondary suckers are missed and grow quickly and become too big to be controlled chemically and have to be pulled by hand. The smaller the suckers are the better they are controlled with your contact chemical.

Enough of the correct solution should be sprayed to get rundown all the way to the soil line. The soil line at the base of the plant should be slightly wetted. Look for this. Usually it takes 50 gallons of spray solution per acre to obtain the proper rundown essential for the control of suckers in the lower leaf axils.

Pump Pressure

It is a must to use low pump pressure (20 PSI) when applying contact sucker control chemicals. High pump pressure forces the chemical into the leaves and causes leaf burn, especially if the temperature is high. Plants already lose water by evapotransferation and the contact solution increases this evaporation faster than the plant can replace the water from the soil. This is why you should never apply contact solutions to wilted plants. It is best to apply contact solutions before noon. Do not apply contacts to wet plants because the water on the plants dilutes the strength of the solution, resulting in poor sucker control, especially the secondary suckers.

All sucker control chemicals available regardless of chemical should be sprayed with low pump pressure (20 PSI). Low pump pressure with MH application has been shown to reduce MH residues.

Keep Mixed

Contact sucker control chemicals when mixed with water must be agitated to keep the chemical and water from separating if left standing. The chemical is lighter than water and will float to the top in the spray tank if not constantly mixed. Leave the agitator on!

When separation occurs and the "solution" sprayed, some rows of tobacco will have no or poor sucker control. As the tank of "solution" is sprayed and the stronger solution is reached, there is likely to be great sucker control with injured leaves.

Topping

Topping should be done as soon as possible. Early topping directs all of the plant growth to leaf development rather that floral growth that reduces yield.

On a per-acre basis, tobacco yields are 20-25 pounds per acre per day less than possible so long as the floral parts drain the plants. High yields are essential to maximize yields and profits.

Time of topping influences yield per acre so much because every plant in the field is influenced. Topping is a practice that involves all of the plants - no exception!

Early topping is a practice that many growers could use to increase yields and profits. Many growers could plant 10% less tobacco, top early and have the same yield and more importantly have more profits. Many costs are related to the acres planted regardless of yield.

Floral parts on plants occur on every plant every year and maybe considered the most universal pest in tobacco fields. Floral parts most surely reduce yields as other pests do; however, not every field has insects, black shank, Granville wilt, water damage, etc., but every plant has a top.