## OLD FASHIONED WEED CONTROL

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The intent of this paper is to give an overview of a complete program of weed control. There is no intent to make statements of scientific fact, proven or otherwise.

One of the biggest pest control problems for the nurseries is weeds. Weed control must be properly addressed if quality plant material is going to be produced.

Post-plant weed control is then the primary concern. It should be noted that what is done to a field before the nursery crop is planted can pay big dividends after the crop is in.

I will discuss both pre- and post-plant weed control and how they work together for good weed control. Also, I hope to convey the need for means other than chemicals for a complete control program.

While post plant weed control is the major concern, what we do to the nursery fields, pre-plant is also very important. Good cultural practices on unplanted nursery fields will do much toward long term weed control. A program of cover cropping, along with the use of post emergence weed control chemicals and cultivation will control weed seed populations and reduce the need for extensive use of chemicals once the fields are planted to nursery crops.

The use of cover crops can also help the tilth and fertility of the soil, cutting down the need for as much chemical fertilizers to increase plant growth. This pre-plant program will also help to keep the top soil in the fields during fallow times.

No matter how good a job of weed control is done pre-plant to a field, weed control after the nursery crop is planted will be a full time concern. Weed control is especially important during the first two growing seasons as the plants are becoming established.

I have found that a successful weed control program should include both chemicals and mechanical cultivation. Dormant season application of pre-emergent chemicals along with the use of some post-emergent chemicals and a good cultivation program will lead to the successful control of most weed problems. It should be noted that the mechanical program should include hoeing. Hoeing helps to clean out around each plant, allowing more sunlight to the leaves and moisture to reach the root system, especially when the plants are young. Hoeing is a good way to totally clean up a field of weeds that the chemicals did not control. Cultivation should not be overlooked as an important part of a good weed control program. It is good for the plant material and good for the soil.

We have found that hoeing has eliminated the need for the use of pre-emergent herbicides during the growing season!

Along with the establishment of a weed control program is the control of costs. Chemicals are expensive and, if not used properly, can also be damaging to the environment and plants. While the use of mechanical weed control will cut down on the use of chemicals and their cost, there are costs involved with hoeing and cultivation. The costs of fuel and repairs as well as labor costs need to be considered.

I feel that a well thought out weed control program for the nursery will include the use of both chemical and mechanical means of weed control and that they can be used together in a cost-effective manner. The long term results of such a program will result in better quality plant material. Also, we can all feel better about how we as nurserymen are effecting our environment.

A planned program of timely use of herbicides and cultivation practices as well as pre-plant weed control will result in a very satisfactory weed control program.