Weed Control

Initial Weed Control in the Container Is more important for containers going to a fabric floor.

Potted liners bring weed seed usually, even if the weeds are pulled and removed. Research even proved that used containers after a washing still have seed stuck to their inside walls. Don't allow weeds to produce seed in the area; mow perimeters and grassed waterways frequently.

The use of a shaker can to apply a granular pre-emergence herbicide to individual containers immediately after being potted or at any other time is not recommended by the herbicide manufacturers or the authors; though frequently practiced. Besides, some of the granules might be loss when moving the containers to the production area. A shaker can, cannot be calibrated. Too little is ineffective and too much may be harmful to a freshly potted root system.

Apply the pre-emergence herbicide after at least 1 good watering to settle the media. It would be good to erect an overhead irrigation boom to drive the trailers under for that initial soaking on their way to the production area. It is more economical to apply the pre-emergence herbicide while the containers are bunched together with a cyclone spreader. A high percentage of the granular product lands between the pots and is wasted when applied after the containers are spaced in the production area. While weed control is desired between the pots in the production area, sprayable pre-emergence herbicides are more economical.

Usually the only time PNP containers sit side by side is on the wagon, on their way to the production area to be placed into their socket pots. Application here is difficult unless the wagon is pulled between two loading docks or 2 other wagons at the same height, allowing a worker to apply a granular product with a cyclone applicator while walking on two sides of the wagon.

Granular herbicides must be applied when the air is very still and preferably from at least 2 directions. Foliage of shrubs act as an umbrella and make total coverage of the media surface difficult. Reduce the amount applied per pass and make multiple passes to achieve the total amount desired by placing calibration trays in the area. These plastic, square foot trays have different size dimples in each corner, denoting a rate per acre when full. The dealer can provide these free trays. Different brands have different trays with different size dimples because of a difference in bulk density.

The employee applying the herbicide and all labor handling those containers until they are placed in their sockets is required to wear the Personal Protective Equipment (PPE) prescribed on the product label. It could be a long sleeve shirt, long pants, waterproof gloves, shoes and socks, and protective eyewear.

Weed Control in the Containers with a Fabric Floor after the initial Treatment

The use of a shaker can to apply a granular pre-emergence herbicide to individual containers is not recommended by the manufacturers or the authors due to lack of calibration. A cyclone spreader would apply 90 percent of the granules to the fabric. It is anticipated that the spacing will be too narrow for any machinery.

The choices are hand-pulling or to calibrate a backpack sprayer and do the best job possible with a pre-emergence herbicide tank mix. Walk beside each row of PNP and spray the entire container surface or half with each trip. It will be more accurate to spray a continuous band rather than just the media surface. Water lines and branches will present a safety hazard and slow the worker. Don"t attempt to apply the highest rates because of the difficultly to maintain a constant speed and pressure.

Weed Control for Bare Soil and Grassed Middles

After the plants are in place, the rows and container media surface can be kept weed free by band spraying a pre-emergence herbicide tank mix. Walk beside each row of PNP and spray the entire container surface or half with each trip, depending on container size and interference of foliage. Spray a continuous band down the rows, between the pots as well as across the surface of the media. Bare soil middles must also be sprayed. Spray every 3 months during the growing season. The escapes must be hand pulled from the containers, hoed or spot sprayed with extreme care with glyphosate.

An Enviromist could be used to safely apply glyphosate next to the containers and possibly the middles of a bare soil floor, if the rows are sufficiently wide enough. A riding lawn mower pulling a small trailer with a 15 or 25 gal tank with an electric pump can be calibrated to apply a pre-emergence herbicide tank mix. A 4-wheeler can be used, but it must be capable of maintaining a constant speed in order to be calibrated. One to 3 additional nozzles will be required in order to maintain bare middles. These may be added on the front bumper or behind the tank. This is if the middles are too narrow for a tractor or a tractor is not available.

Space may force that the herbicides be applied with a back-pack sprayer. While a back-pack sprayer cannot maintain a constant speed or pressure as accurately as a machine; it can be calibrated with the knowledge that the walking speed and tank pressure, even with a conscientious employee will vary hour by hour. Realizing the limitations, select a medium labeled rate.

PNP has inherited all of the typical field **and** container weed species to be dealt with. Barricade, Devrinol, Gallery, Pendulum, Pennant Magnum, Ronstar WP, and Surflan are sprayable pre-emergence herbicides, labeled for use in containers and field. Unfortunately, their list of labeled species in containers is short and needs to be expanded.

A tank mix of Barricade and Gallery, for example, should provide excellent weed control for 60-90 days depending on rate and amount of rain and irrigation. Here is one possible scenario to get a novice started: Begin with 1.5 lb Barricade plus 0.5 lb Gallery per acre and adjust from there. Spray Feb 15; May 1; July 15; Oct 1.

If 1 banding nozzle is used to spray over the containers on one side, then the vehicle must drive each middle twice, requiring that only half of the middle be sprayed with each pass. But, since the rows are fairly straight, consider spraying both sides and the entire middle with one pass. This will reduce time and fuel by half.

Most drivers prefer the nozzles mounted in the front so the plants, the middles, any obstructions and the spray pattern can be observed safely without having to constantly turn around in the seat.