Crop Production Guide Series

Postharvest Weed Control

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Postharvest weed control is an excellent start to manage perennial weeds next growing season for all field row crops. Postharvest weed control starts immediately after harvest. One potential difference between preharvest and postharvest weed control is that weeds may have been desiccated with harvest aids (e.g. paraquat) or exposed to a freeze that often kills the tops of perennials. In general, a systemic herbicide applied two weeks before frost or chemical desiccation will have time to readily translocate below ground and cause damage to vegetative structures such as tubers, roots, and rhizomes.

Applications made after harvest aids or a hard frost will be less effective because of decreased herbicide absorption and translocation by plant parts that were desiccated. Thus substantial regrowth must occur before any applications are made. Herbicide selection is critical since some herbicides have lengthy activity in the soil and may influence the emergence, growth, and development of next year’s crop if applied too close to planting.

There are several good postharvest options, all of which are based on systemic (mobile) herbicides.

Glyphosate (4 lb per gallon), at 1 to 2 qts. per acre, has good activity on silverleaf nightshade (whiteweed) in the fall of the year. Under adequate moisture and good growing conditions, glyphosate at 1 to 5 qts. has good activity on bermudagrass and field bindweed. Glyphosate is not very effective on woollyleaf bursage (lakeweed) in the fall and is always weak on Texas blueweed. Fall treatments of glyphosate must be applied before a killing frost. Allow 7 or more days after application before tillage. Glyphosate may be tank mixed with 2,4-D, Clarity, or Aim to increase activity and broaden the weed spectrum controlled. Since glyphosate has no soil activity, there are no plant back restrictions or concerns about interfering with next years crop. However, there is a 12-hour restricted-entry interval (REI).
2,4-D may be applied at 2 to 6 pts. per acre in the fall of the year to control a variety of perennial broadleaf weeds including Texas blueweed, lakeweed, and whiteweed. 2,4-D may be applied alone or in combination with several herbicides including glyphosate. A second application may be needed 3 to 4 weeks after the initial treatment. The use of 2,4-D may assist in controlling weeds such as prickly lettuce, marestail (horseweed), Russian thistle, cutleaf evening primrose, and kochia because glyphosate is not as effective on these weeds. 2,4-D may also be applied in the spring, but the potential does exist to harm spring-seeded crops like cotton. Several of the 2,4-D labels have a 30-day plant back restriction before cotton can be planted, a 7-day restriction before grazing, and a 48-hour REI. Consult your 2,4-D label for each product’s specific restrictions.

Clarity may be applied postharvest in the fall and spring; however, in regions that receive less than 25 inches of annual rainfall, do not apply Clarity preplant to cotton. There is a 180 day recrop interval to cotton, so a May 15 planting date means that Clarity should not be applied after November 15. Clarity has very good activity on several of our difficult to control perennial weeds including lakeweed, bindweed, and Texas blueweed. This herbicide is effective due to both its foliar and soil activity. In the fall, Clarity may be applied alone at 1 to 2 qts. per acre or as low as 8 oz. when used in combination with other herbicides. Do not cultivate within 7 days after application. There is a 24-hour REI after a Clarity application.