



THE WEED PATCH

Winter Weed Control Programs for Sugarcane

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Hopefully at this point fields are drained and preparations are underway for the coming growing season. It is hard to believe that another year has come and gone. In traveling through the sugarcane area I have seen fields that are very clean and others with a mat of green vegetation completely covering the rows. Generally the winter weeds present in fields will include some combination of the following: buttercups, chickweeds, clovers/medics, common dandelion, cressleaf groundsel (yellow top), curly dock, cutleaf eveningprimrose, geranium, henbit, maretail, purslane speedwell, shepherdspurse, smallflower bittercress, sowthistle, swine cress, Virginia pepperweed, geranium, annual bluegrass, rescuegrass, ryegrass, and timothygrass. For simplicity sake these weeds are referred to as either winter grasses or winter broadleaf weeds.

Winter weeds if not removed from fields can slow warming and drying of sugarcane beds, interfere with tillage operations, and hinder emergence and early season growth of sugarcane. In grower meetings this year I have focused on ways to reduce weed control input costs. There should be a value received for every herbicide or spray additive used in your operation, otherwise money was wasted. One way to get the most for your dollar is to carefully plan your winter weed control program based on the weeds present, their size, and the herbicide and rate needed for control. It may be that herbicide needs vary from field to field and although changing herbicides and rates may require extra effort, a cost savings could be realized.

When it comes to winter weed control programs some growers prefer to broadcast herbicides in January or February to eliminate winter weeds. In March sugarcane is then off-banded and herbicides with residual activity are banded. This plan allows for a clean row top and good soil contact of banded herbicides. Assuming that herbicides will provide control for around eight weeks, residual weed control can be expected until layby. Other growers prefer to apply a mixture of several herbicides, some to control winter weeds and others to provide residual control. In most cases because of cost, the herbicide mixture is applied on a band in February or March. This approach would assure good control of weeds on the row tops but not in the row middles. If winter weed pressure is heavy the residual herbicides may not be evenly applied to the soil resulting in erratic residual control. Also, if the mixture is applied in February the residual activity of herbicides may not last until layby. Selection of a program should be based on what best fits into your program.

The important point is that the weeds and their size will affect herbicide selection and rate. Smaller weeds are easier to control than larger weeds. When the winter grasses ryegrass, rescuegrass, timothygrass, and annual bluegrass are at a population level that will affect sugarcane growth, Gramoxone Inteon should be used. If only annual bluegrass is present Direx, DuPont K-4, Sencor/Metri DF, or Sinbar plus a non-ionic surfactant or crop oil concentrate can be effective. When only winter broadleaf weeds are present, Weedmaster/Brash/Kambamaster, 2,4-D, or Clarity/Vision should be used. Gramoxone Inteon *can be* applied with Weedmaster, 2,4-D, or Clarity/Vision when both winter grasses and broadleaves are present. In situations with a light population of small broadleaf winter weeds application of Aatrex/Atrazine, Direx/Karmex, DuPont K-4, Sencor/Metri DF, or Valor (winter killed sugarcane only) plus a non-ionic surfactant or crop oil concentrate can provide control depending on rate applied.

Below is a table with information on herbicides used to control winter weeds. Pay particular attention to information on weed size and how it affects the rate needed for control.

Herbicide	Broadcast Rate/A	Comments
Gramoxone Inteon 2L	1.9 – 3.75 pt	Controls grasses and small winter broadleaf weeds but is not effective on clover, medics, and vetch. Burndown can be improved when applied with Aatrex/Atrazine or Direx/Karmex. Apply when weeds are 1 to 6 inches tall and use a higher rate for larger weeds. Apply in at least 10 gallons water per acre and include nonionic surfactant at 1 to 2 qt/100 gal or crop oil concentrate at 2 to 4 qt/100. Can be safely applied to sugarcane with no more than 4 leaves.
Weedmaster, others 3.87L	1.0 – 2.0 pt	Controls only broadleaf weeds and is very effective on clovers, medics, and vetch. If weeds are 4 inches or less use 1 pt, if weeds are 4 to 8 inches use 1.5 pt, and if flowering use 2 pt. For weeds other than clovers or vetches 1.5 pt should be sufficient. Addition of surfactants may increase effectiveness. Apply when air temperature is above 65° F.
2,4-D 3.8L (amine salt formulation)	1.0 – 3.0 pt	Controls only broadleaf weeds and is not effective on clovers, medics, and vetch. If weeds are 2 to 3 inches use 1 to 2 pt. A higher rate should be used when weeds are large. Addition of surfactants may increase effectiveness. Apply when air temperature is above 65° F.
Clarity/Vision 4L	0.5 – 1.0 pt	Controls only broadleaf weeds. The higher rate should be used when weeds are large and clover or vetch is present. Nonionic surfactant or crop oil concentrate <i>should be</i> added. Apply when air temperature is above 65° F.

Hopefully this article has provided you with a starting point to help plan your weed control program. A meeting with your county agent, consultant, or crop advisor may help to develop or to fine tune a weed control program specific to your needs.

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