

## Weed Management Update in Small Fruit

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One question that I have frequently received this year, just like last year, concerns the availability of Surflan (common name oryzalin). Surflan is a commonly-applied preemergence herbicide for control of annual grasses like crabgrass and foxtail, along with certain annual broadleaf weeds like chickweed, pigweed, and lambsquarters. It has been labeled for a long time in grapes, caneberries, and blueberries. Surflan is sold by Dow AgroSciences. Due to the limited supply, most people have been unable to obtain this formulation. There are several ways to address this issue.

When chemicals go off patent, other companies can develop their own formulations of these chemicals. One alternative to Surflan can be found at the website [www.farmsaver.com](http://www.farmsaver.com). This company is selling this herbicide under its common name of Oryzalin. The formulation is a 4 A.S., containing 41% oryzalin. The labeling for Oryzalin 4 A.S. appears to be very similar to that for Surflan, as the label lists a range of tree and small fruit that can be treated. I am currently evaluating this formulation in my fruit trials this year.

Alternatively, one could look at other herbicides to replace Surflan. One option would be Prowl (pendimethalin). Prowl is sold by BASF. This herbicide is from the same chemical class as Surflan and has a very similar weed control spectrum. Prowl can be applied to nonbearing grapes, as well as certain nonbearing tree fruit species. The lack of a bearing label for grapes limits its use. Prowl is applied only to dormant grapes. It should not be applied overtop plants since it can injure developing leaves. Prowl can be applied to newly-transplanted grapes.

Solicam (norflurazon) is another alternative to Surflan and is sold by Syngenta. It can be applied to grapes, blueberries, blackberries and raspberries. Blueberries must be established at least 6 months, blackberries and raspberries must be established at least 12 months, while grapes cannot be treated until 2 years after planting. Blackberries and raspberries need to be dormant when applications are made. Solicam inhibits pigment synthesis in plants. Injury symptoms include temporary bleaching of leaves, especially midveins. Injury is more likely to occur in sandy compared to clay soils. Therefore, lower rates are used in sandy soils. Preharvest intervals are 60 days for these crops. Solicam controls annual grasses and certain annual broadleaf weeds, and will suppress certain perennials such as yellow nutsedge, bermudagrass, orchardgrass, and tall fescue. Rainfall or irrigation soon after application will move the chemical into the zone of weed germination, improving control.

Devrinol (napropamide) is another alternative to Surflan. It is sold by United Phosphorus. Devrinol controls annual grasses and certain small-seeded annual broadleaf weeds. It can be applied to newly-planted and established blueberries, caneberries, and grapes. The preharvest interval is 35 days for most fruit crops. Devrinol ideally should be incorporated by rain or irrigation within 24 hours, especially under warmer weather.

The chemicals mentioned above, Surflan, Prowl, Solicam, and Devrinol, all tend to be less effective on broadleaf weeds than on annual grasses. Therefore, an herbicide that is effective on annual broadleaf weeds, like Princep (simazine), Karmex (diuron), or Goal (oxyfluorfen) can be added to these grass herbicides for broader-spectrum weed control in certain situations. Follow all label instructions when making these tank mixes.

Choice of a Surflan alternative should be based on weed spectrum, crop species, and age of the planting. The Pest Management Guide for Horticultural Crops, along with herbicide labels, can be used to compare these available products.

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