

# 2009 Small Fruit Weed Management Update

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The update contains label changes for herbicides in small fruits to supplement what has already been published in the New England Small Fruit Pest Management Guide. In all cases, please obtain a copy of the complete label to obtain additional information on rates, timings, weed species controlled, and precautions to improve both crop and applicator safety.

A brief summary of each of the herbicides that is mentioned below:

Chateau (flumioxazin) provides preemergence and limited postemergence control of many broadleaf species. It is similar in activity to other residual broadleaf herbicides in small fruits such as Sinbar (terbacil), Princep (simazine), Karmex (diuron), Casoron (dichlobenil), and Velpar (hexazinone). It will not control grasses so a residual grass herbicide is still recommended.

Prowl H2O (pendimethlin) is a residual herbicide that controls many grass species and also has activity on a limited number of broadleaf species. It has similar activity to Dacthal (DCPA), Devrinol (napropamide), Surflan (oryzalin), and Solicam (norflurazon).

Rage (carfentrazone) provides postemergence burndown control of many weed species. It does not provide any residual activity. As a burndown, it is similar in activity to Gramoxone (paraquat) and Scythe (pelargonic acid).

Callisto (mesotrione) provides preemergence and postemergence activity of many broadleaf species. The spectrum of weeds controlled is not as good as with some other residual broadleaf herbicides but its postemergence activity is excellent. There is limited control both preemergence and postemergence of some annual grasses. Use of a residual grass herbicide is still recommended.

## Strawberries

Chateau (flumioxazin) is registered in strawberries. In DORMANT strawberries, the rate is 3 oz/acre. Chateau will provide preemergence control of many broadleaf weed species. If small broadleaf weeds are emerged, also apply a crop oil concentrate at 1% or a non-ionic surfactant at ¼% by volume. Chateau will control emerged chickweed, field pansy, and oxalis if sufficient contact is made with the weeds. 2,4-D may still be required to control other emerged weeds. A residual grass herbicide such as Devrinol (napropamide) or Dacthal (DCPA) is still needed. Chateau can also be applied with a hood or shield to row middles of non-dormant strawberries prior to fruit set. This includes strawberries grown on both matted row and plasticulture systems. DO NOT allow Chateau to come into contact with the strawberry fruit or foliage.

Prowl H2O (pendimethalin) is registered in strawberries. Uniformly apply Prowl at a rate of 1.5 to 3 pints per acre to the soil surface PRE TRANSPLANT. Once the strawberries are established, an application may be made up to 35 days prior to harvest BETWEEN crops rows. DO NOT spray over strawberry plants. Application may cause stunting of daughter plants. Prowl provides excellent control of many annual grasses and several broadleaf species. See the label for a complete list of weeds.

## Grapes

Chateau (flumioxazin) is registered in grapes. In grapes it is registered for both preemergence and postemergence control of weeds. If grapes are between 2 and 3 years old, the rate is 6 oz/acre. If grapes are at least 3 years old, the rate is 12 oz/application and 24 oz/year. It can be applied in the Spring as an alternative to either Sinbar (terbacil) or Princep (simazine). For postemergence control, use a crop oil concentrate at 1% or a non-ionic surfactant at ¼% by volume. A residual grass herbicide is still needed.

Rage (carfentrazone) is registered in grape. Apply at a rate of 12 to 40 ounces/acre to control emerged grass and broadleaf weeds. A non-ionic surfactant or crop oil concentrate should be used to improve the activity of Rage. See the label for rate suggestions. Rage will not provide residual control of weeds. All applications in grapes must be made with a hooded sprayer to avoid crop contact. Sufficient water must be used to provide complete coverage of weed foliage to obtain control. Contact with green bark, foliage, or fruit will cause crop injury and spotting. Rage can also be used at a rate of 3 to 4 oz/acre to suppress the vegetation growing in the row middles. This application must also be made with a hooded sprayer. Do not apply more than 40 oz/acre per application. Do not apply more than 242 oz/acre per season. Do not apply within 14 days of harvest. See the label for tank mix suggestions with other herbicides that will provide residual weed control.

## Blueberry

Chateau (flumioxazin) is registered in highbush blueberry. In blueberry, it is registered for both preemergence and postemergence control of weeds. For preemergence control, apply to weed free soil at a rate of 6 to 12 oz/acre. Moisture is necessary after application to activate the herbicide. If emerged weeds are present, the residual activity of Chateau will be reduced since weed foliage will intercept some of the herbicide. A residual grass herbicide is still needed. For postemergence control of certain weed species, apply Chateau at 6 to 12 ounces per broadcast acre. For postemergence control, use a crop oil concentrate at 1% by volume or a non-ionic surfactant at ¼% by volume. For broader control of emerged weeds, check the label for tank mix applications with glyphosate or paraquat.

Rage (carfentrazone) is registered in highbush and lowbush blueberry. The label also covers currant, elderberry, gooseberry, and huckleberry. Apply at a rate of 20 to 40 ounces/acre to control emerged grass and broadleaf weeds. A non-ionic surfactant or crop oil concentrate should be used to improve the activity of Rage. See the label for rate suggestions. Rage will not provide residual control of weeds. A dormant application can be made using a directed spray to the base of the crop. Once the crop breaks dormancy, all applications must be made with a hooded sprayer to avoid crop contact. Sufficient water must be used to provide complete coverage of weed foliage to obtain control. Contact with green bark, foliage, or fruit will cause crop injury and spotting. Rage can also be used at a rate of 3 to 4 oz/acre to suppress the vegetation growing in the row middles. This application must also be made with a hooded sprayer. Do not apply more than 40 oz/acre per application. Do not apply more than 80 oz/acre per season using a hooded sprayer. The total of all applications per acre per season must not exceed 120

oz/acre. Do not apply within 14 days of harvest. See the label for tank mix suggestions with other herbicides that will provide residual weed control.

Callisto (mesotrione) is registered for use in highbush and lowbush blueberry. The label also covers lingonberry. In highbush blueberry and lingonberry, apply as a directed spray to the base of the plants prior to bloom. In lowbush blueberry, applications can only be made during the dormant year. Apply at a rate of either 3 or 6 oz/ acre. If 3 oz is used, a second application can be made no closer than 14 days apart. Use of a crop oil concentrate at 1% by volume will improve postmergence activity. Callisto will provide premergence and postmergence control of many broadleaf weed species. See the label for a complete list.

#### Caneberry

Rage (carfentrazone) is registered in caneberries. The label covers but is not limited to blackberry, boysenberry, black raspberry, and red raspberry. Apply at a rate of 10 to 32 ounces/acre to control emerged grass and broadleaf weeds. A non-ionic surfactant or crop oil concentrate should be used to improve the activity of Rage. See the label for rate suggestions. Rage will not provide residual control of weeds. Applications can be made either as a directed spray to the base of the crop or with a hooded sprayer to avoid crop contact. In all cases, sufficient water must be used to provide complete coverage of weed foliage to obtain control. Contact with canes, foliage, or fruit will cause crop injury and spotting. Rage can also be used at a rate of 3 to 4 oz/acre to suppress the vegetation growing in the row middles. This application must also be made with a hooded sprayer. Do not apply more than 40 oz/acre per application. The total of all applications per acre per season must not exceed 272 oz/acre. Do not apply within 14 days of harvest. See the label for tank mix suggestions with other herbicides that will provide residual weed control.