



## FACT SHEET

### Casoron Use in Berry Crops

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Casoron, or its active ingredient diclobenil, is an invaluable broad-spectrum granular herbicide registered for use on several berry crops including raspberries, highbush blueberries, cranberries, grapes and saskatoons.

Most weeds are susceptible to Casoron including perennials, vetch and horsetail. Although it is a granular herbicide it acts by means of a vapour phase in the top soil profile. As roots and shoots encounter this barrier they are killed or injured. Crop injury is avoided by physical separation between the dichlobenil vapour layer in the top 5 cm of soil and the established crop roots below this level.

Casoron is typically applied before the emergence of weeds in either fall or early spring when plants are fully dormant. Activity persists for 2 – 6 months although repeated use may lead to residues persisting for longer than one year. It is volatile and as such should be applied when air temperatures are below 10 °C, when soil is moist, but before it is frozen or snow covered. This usually corresponds to a period between November 15 and December 15, although occasionally good conditions may occur in March. If Casoron is applied when soil or air is warm, much can be lost through volatilization, the resulting vapours potentially injurious to new crop growth.

When using Casoron recognize that the recommended rate refers to the actual area being treated with the herbicide. This often coincides with a band under the plants with row middles being cultivated or planted to sod.

A range of rates is recommended on the label with the higher rate targeting perennial weed control and higher organic matter soils. Uniform application of the granules is important.

In Nova Scotia, Casoron costs between \$415-850 per treated acre, depending on the crop. This sounds expensive but remember that this is for the actual treated area and that in raspberries, highbush blueberries, grapes and saskatoons, it is usually banded down the rows and not applied to row middles. Thus, in practice only 20-30% of the actual land is covered for these crops, thereby reducing the cost to about \$85-255/acre (plus application).

#### **Raspberries**

Casoron 4G is registered for late fall applications (before freeze-up) to established plantings at a rate of 175 kg/ha. Spring applications should be avoided as raspberry shoots growing through the herbicide layer can be seriously injured.

#### **Highbush blueberries**

Casoron 4G is registered for late fall and early spring applications in highbush blueberries at a rate of 175-225 kg/ha. Volatilization injury has been observed with temperatures above 10 – 15 °C and the high rate should not be used more often than every other year. Also, Casoron should not be used in plantings younger than 3 years or on light sandy soils. Note: Early spring applications are generally discouraged in Nova Scotia as new canes growing through the herbicide layer have been seriously injured on occasion.

#### **Grapes**

Apply Casoron 4G @ 110 to 225 kg/ha to dormant healthy vines which have been established for at least 2 full years. An application range from 110 to 175 kg/ha is effective on most annual weeds and is recommended for late fall or early spring applications before weeds germinate. A rate of 175 to 225 kg/ha is required for control of quackgrass, thistle, bindweed and other perennial weeds and should be applied in late fall only. Also, the high rate should not be used more often than every other year.

## **Saskatoons**

Casoron 4G is registered for use on Saskatoon orchards that have been established for 1 or more years and should be applied in late fall before freeze-up at a rate of 110-175 kg per ha. It should not be applied within nine months of harvest, which precludes a spring application.

## **Cranberry**

Casoron 4G is registered for an application rate of 110 kg/ha on cranberries but this rate is most appropriate for cranberry beds built on peat and experienced growers use much lower rates on upland sites. Apply early in the spring while perennial weeds are still dormant and annual weeds have not started to germinate. Also, ensure that Casoron is applied before cranberry plants have bloomed and while plants are dry. Do not use on beds less than 2 years old, or on beds that are stressed or weak. Also, do not use on newly sanded beds or on beds recently mowed for vines. Repeated use over the years may result in reduced cranberry root growth. Casoron provides residual weed control and resists leaching.

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