

GRAPES 2021

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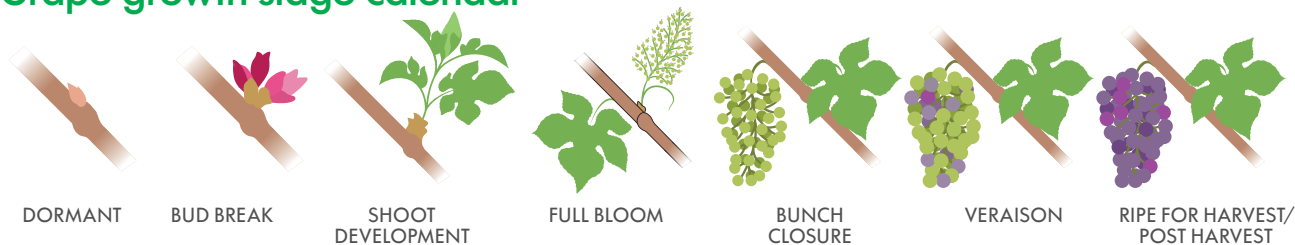
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Grape growth stage calendar



Chateau					Chateau
	Intuity Parasol WG	Intuity Parasol WG	Intuity Parasol WG	Intuity Parasol WG	Intuity Parasol WG
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Chateau® WDG herbicide is a PPO inhibitor that works as a barrier on the soil surface providing season-long residual control of tough broadleaf and grass weeds.

Chateau® WDG

Benefits

- Long-lasting residual, pre-emergent broadleaf weed control with bonus grass suppression
- Chateau stays where it is sprayed and will not leach or volatilize
- Group 14 herbicide (PPO inhibitor) works differently than many other commonly used herbicides, helping to manage resistance
- The herbicide barrier cannot be disturbed after moisture activation
- Offers flexible application timing

Registered crops

- | | |
|---|--------------------------------|
| • Asparagus | • Garlic |
| • Blueberry (highbush and lowbush) | • Grape |
| • Broccoli | • Hops |
| • Caneberry | • Nut trees |
| • Celery | • Pome fruit |
| • Dry bulb onion | • Potato (Western Canada only) |
| • Established mint (peppermint and spearmint) | • Stone fruit |
| • Field pepper | • Strawberry |
| | • Sweet potato |

General usage information

- Moisture is necessary to activate Chateau in soil for weed control (½ inch of rain or irrigation)
- This product will not control emerged weeds
- Significant crop injury may occur from applications made to poorly drained soils and/or applications made under cool, wet conditions
- Do not apply to farm alleys or roads where traffic may result in treated dust settling onto crops or other desirable vegetation
- Application to non-dormant crops or when soils are flooded after application may result in non-acceptable crop injury, including yield loss
- Use appropriate water volumes to ensure good coverage
- Apply prior to weed emergence
- Undesirable crop injury may occur if Chateau comes in contact with fruit or foliage
- DO NOT tank-mix with Dual II Magnum®



Technical information

HERBICIDE GROUP

- > Group 14

ACTIVE INGREDIENTS

- > flumioxazin 51.1%

PACKAGING

- > 4 x 1.13 kg case

RAINFAST

- > Requires ½ inch of rain or irrigation for activation

PCP

- > 29231

Specific crop usage information

WEEDS CONTROLLED/
SUPPRESSED

RATE

PHI APPLICATION INFORMATION

APPLE, GRAPE, NUT TREES, PEAR

<p>Canada fleabane Common lamb's-quarters Common ragweed Dandelion Eastern black nightshade Green foxtail Green pigweed Hairy nightshade Kochia Redroot pigweed</p>	<p>280 g/ha (113.3 g/ac.) on coarse- textured soils with <5% OM 420 g/ha (170 g/ac.) on medium- textured soils with <5% OM</p>	<p>GENERAL USAGE INFORMATION Chateau should be tank-mixed with glyphosate, present as isopropyl amine or potassium salt, for control of emerged weeds. Refer to the respective tank-mix partner label for rates, additional recommendations, restrictions and precautions. Follow the most restrictive label limitations and precautions of the tank-mix product(s) being used. Only apply to healthy, established trees. Do not apply when plants are under stress from insects, diseases, animals or winter injury, planting shock or any other stresses. Chateau should be applied as a uniform broadcast application to the orchard floor or as a uniform band directed at the base of the trunk Do not make more than 2 applications in a growing season Do not make a sequential application within 30 days of the first application Avoid direct or indirect spray contact to foliage and green bark (including non-barked vines; with the exception of undesirable suckers) Do not apply within 100 m of non-dormant pears</p>
		<p>60 APPLICATION TO POME FRUIT (APPLE AND PEAR) Do not apply to apple or pear trees established less than 1 year, unless protected from spray contact by non-porous wraps, grow tubes or waxed container For apples, do not apply after budbreak unless using hooded or shielded application equipment and applicator can ensure the spray drift will not contact the crop fruit or foliage All applications to pears, or within 100 metres of pears, must be made after final harvest in the fall or 2 months before budbreak in the spring Apply to dormant pears only</p>
		<p>60 APPLICATION TO GRAPES Do not apply to grapes established less than 2 years Do not apply to grapes that are not trellised or staked unless they are free standing New plantings of "own-rooted varieties", such as Concord, should be planted so that all roots are a minimum of 20 cm below the soil surface to be treated. In some situations, this may require hilling soil around newly planted vines so that the settled depth of the hill will be 10-12.5 cm above the vineyard floor. APPLICATION TO JUICE, RAISIN AND WINE GRAPES Do not apply during the period after budbreak through final harvest, unless using shielded application equipment and applicator can ensure the spray drift will not contact the crop fruit or foliage. Shielded applications during this time period should not be made with glyphosate, or products containing glyphosate. APPLICATION TO TABLE GRAPES Chateau may be applied during the period following final harvest in the fall Do not apply after budbreak in the spring</p>

Credit® LV is a patented low viscosity glyphosate formulation containing Dual-Salt Technology™. Its high-load formulation (540 g/L) provides fast and complete control of troublesome weeds.

Credit® LV

Benefits

- The patented Dual-Salt technology combines both potassium and IPA salts that allow for easier mixing and improved weed control.
- The low viscosity formulation flows and transfers easier in cooler conditions
- Provides broad-spectrum weed control through systemic activity
- More active ingredient in less volume – concentrated product means handling less
- Works quickly and mixes easily to make your job easier
- Excellent compatibility with tank-mixes

Registered crops

- | | |
|------------------------------------|--------------|
| • Apple | • Grape |
| • Apricot | • Peach |
| • Asparagus | • Pear |
| • Blueberry (highbush and lowbush) | • Plum |
| • Cherry | • Strawberry |
| • Cranberry | • Sugar beet |
| • Ginseng | |

General usage information

- Credit LV is a non-selective herbicide that will kill or injure plants if it comes in contact with green tissue
- Allow at least 1 day after application before tillage
- Extreme care must be exercised to avoid the herbicide coming in contact or drifting onto foliage, suckers or fruit



Technical information

HERBICIDE GROUP

- > Group 9

ACTIVE INGREDIENTS

- > glyphosate 540 g/L

RAINFAST

- > Do not apply if rainfall is in forecast during application
- > No surfactant required

PACKAGING

- > 2 x 10 L case
- > 500 L tote
- > Bulk

PCP

- > 33849

Specific weed control information

WEEDS CONTROLLED/SUPPRESSED				RATE
Green foxtail Lady's-thumb	Stinkweed Volunteer barley	Volunteer canola Volunteer wheat	Wild mustard Wild oats	0.5 L/ha (0.2 L/ac.)
Flixweed	Kochia	Wild oats		0.67 L/ha (0.27 L/ac.)
Canada fleabane Cleavers Common ragweed Downy brome	Flixweed Giant foxtail Hemp-nettle Lamb's-quarters	Narrow-leaved hawk's-beard Persian darnel Redroot pigweed	Russian thistle Volunteer flax Wild buckwheat	0.83-1.27 L/ha (0.34-0.51 L/ac.)
Annual bluegrass Annual sow-thistle	Crabgrass Kochia	Narrow-leaved vetch Prickly lettuce	Shepherd's purse	1.5 L/ha (0.61 L/ac.)

Specific crop usage information

RATE PHI APPLICATION INFORMATION

GRAPE

1.5-8 L/ha (0.61-3.2 L/ac.)	14	Remove all suckers prior to spraying (except for Concords) Suckering should be completed 2 weeks prior to application Do not apply to vines that are less than 3 years established Maximum 3 applications per year
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Intuity™ fungicide provides exceptional control of tough soft fruit diseases such as botrytis, powdery mildew and gray mold.

Intuity™

Benefits

- Strong preventative activity
- May be applied through irrigation equipment
- Low PHI

Registered crops

- Bilberry
- Blueberry (lowbush)
- Cloudberry
- Grape
- Lingonberry
- Muntries
- Partridgeberry
- Strawberry

General usage information

- Begin applications prior to infection
- Under high disease pressure use higher rates and shorter intervals
- Intuity should be used as part of a rotation in a resistance management program alternating with fungicides from other groups targeting the same pathogen



Technical information

CHEMICAL CLASS

> Group II

ACTIVE INGREDIENTS

> mandestrobin 43.4%

PACKAGING

> 4 x 1.77 L case

RAINFAST

> 2 hours

PCP

> 32288

Specific crop usage information

DISEASE CONTROLLED RATE PHI APPLICATION INFORMATION

GRAPE

Botrytis bunch rot/ gray mold (<i>Botrytis cinerea</i>)	439-877 mL/ha (178-355 mL/ac.)	10	Target application timings are early bloom, bunch closure and veraison Make 3-4 applications per season depending on disease pressure and rate
Suppression of powdery mildew (<i>Uncinula necator</i>) on grape and Amur river grape			Target application timings are bud break and again on a 10-14 day interval Make 3-4 applications per season depending on disease pressure and rate Applications of Intuity or any other Group 11 fungicides are limited to 2 per vine crop

Parasol® WG provides growers with consistent, uniform copper coverage and enhanced disease protection through extremely small particle size and a high organic copper load.

Parasol® WG

Benefits

- Easy to handle and mix
- Eliminates clogging of sprayer and booms
- Highly compatible with other products
- Small active particle size to ensure superior coverage

Registered crops

- Bean
- Cranberry
- Cucumber
- Grapes
- Hops
- Pepper
- Potato
- Sugar beet
- Tomato

General usage information

- Use as a preventative/protective fungicide spray
- Use on a 7-14 day interval depending on disease conditions
- Adaptable for spraying with all types of equipment



Technical information

CHEMICAL CLASS

- > M1 fungicide

ACTIVE INGREDIENTS

- > copper hydroxide 50%

PACKAGING

- > 10 kg bag

RAINFAST

- > Avoid application when heavy rainfall is in the forecast

PCP

- > 29063

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Specific crop usage information

DISEASE CONTROLLED RATE PHI APPLICATION INFORMATION

GRAPES

DISEASE CONTROLLED	RATE	PHI	APPLICATION INFORMATION
Black rot <i>(Guignardia bidwellii)</i> Phomopsis rot <i>(Phomopsis viticola)</i> Powdery mildew <i>(Uncinula necator syn. Erysiphe necator)</i> Downy mildew <i>(Plasmopara viticola)</i>	2.24-6.72 kg/ha (0.91-2.7 kg/ac.) in 400 to 600 L water/ha	2	The amount of product applied per ha in concentrate must be the same as the amount applied per ha in dilute spray Ensure crop is thoroughly covered with spray mixture For all diseases, begin application at bud break and repeat at 3 day intervals through the season if needed For all diseases, do not make more than 8 applications per year with a minimum of 3 days between applications May be applied using vertical boom or air-assisted sprayers. Note: Injury to foliage may occur in copper-sensitive varieties such as: Concord, Delaware, Niagara and Rosette. The addition of hydrated lime at a rate of 0.454-1.36 kg per 0.454 kg of Parasol WG Fungicide may reduce the severity of phytotoxicity. Add lime to the spray tank first and mix thoroughly before adding product.

DiPel® 2X DF is a leading biological insecticide with a high potency resistance management tool for proven control of Lepidoptera pests in both conventional and organic cropping systems.

DiPel® 2X DF

Benefits

- The most potent Bt insecticide on the market with a unique mode of action, making it an excellent tool for managing resistance
- Immediately deters insects from feeding – death occurs within 1-3 days
- 36 month shelf life when stored at room temperature
- Not harmful to bees or beneficial insects making it a great tool for spring feeding caterpillars
- Very low REI of 4 hours or until spray is dried

Registered crops

- | | | |
|------------------------------------|--------------------------|------------------------------|
| • Apple | • Corn (sweet and field) | • Ornamental and shade trees |
| • Asian radish | • Cranberry | • Parsley |
| • Berries and small fruit | • Ginseng | • Pear |
| • Blueberry (highbush and lowbush) | • Grape | • Potato |
| • Bok choy | • Greenhouse herbs | • Raspberry |
| • Broccoli | • Greenhouse ornamentals | • Sea buckthorn |
| • Cabbage | • Greenhouse vegetables | • Spinach |
| • Cauliflower | • Herbs and spices | • Stone fruit |
| • Chinese broccoli | • Kale | • Sunflower |
| • Chinese cabbage | • Lettuce | • Timothy |
| • Chokecherry | • Mustard greens | • Tobacco |
| • Collards | • Nut crops | • Tomato |
| | | • Turnip greens |

For a complete list of all crops registered and what is included for each crop group refer to the label

General usage information

- OMRI-certified for use in organic production
- Apply when insect pests are small (egg hatch to early instars) before crop damage occurs
- Apply using sufficient water volume for thorough crop coverage
- Repeat at an interval sufficient to maintain control, usually 3-14 days
- Use with a water pH 7 or lower
- **Use with a non-ionic surfactant for hard to wet foliage (such as cabbage or broccoli)**



Technical information

CHEMICAL CLASS

- > Group II

ACTIVE INGREDIENTS

- > *Bacillus thuringiensis*, var. *kurstaki* strain ABTS-351 (57%)

PACKAGING

- > 24 x 0.5 kg case
- > 5 kg bag

RAINFAST

- > Avoid application when heavy rainfall is in the forecast

PCP

- > 26508



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Specific crop usage information

INSECT CONTROLLED RATE APPLICATION INFORMATION

GRAPE

Grape berry moth	1,125 g/ha (455 g/ac.)	Begin applications after adult flight begins – before egg hatch Use a high water volume Repeat on a 7-10 day interval Maximum 6 applications per year
Leafrollers	125-250 g/ 400 L water	Repeat on a 3-14 day interval

XenTari® WG is a leading biological Bt insecticide that controls a broad range of pests with proven control on tomato looper in greenhouses, as well as armyworm and diamondback moth control in conventional and organic operations.

XenTari® WG

Benefits

- Unique mode of action making it an excellent tool for managing resistance
- Immediately deters insects from feeding – death occurs within 1-3 days
- Excellent product to rotate with conventional insecticides
- Not harmful to bees or beneficial insects making it a great tool for spring feeding caterpillars
- Very low REI of 4 hours or until spray is dried

Registered crops

- | | | | |
|---------------------------------------|----------------------------------|--------------------------|-------------------------------|
| • Artichoke | • Chinese celery | • Greenhouse ornamentals | • Poppy seed |
| • Beans (dry and succulent) | • Fennel | • Hare's ear mustard | • Radish (including oriental) |
| • Brassica leafy greens | • Fruiting vegetables | • Herbs and spices | • Rhubarb |
| • Brassica vegetables (head and stem) | • Garden beets | • Hops | • Rutabaga |
| • Bulb vegetables | • Ginseng | • Horseradish | • Sea kale |
| • Camelina | • Grapes | • Kohlrabi | • Stone fruit |
| • Canola | • Greenhouse cucumber | • Leafy greens | • Sugar beets |
| • Cardoon | • Greenhouse fruiting vegetables | • Mustard seed | • Sweet potatoes |
| • Celery | • Greenhouse lettuce | • Oil radish | • Sweet rocket |
| • Celtuce | | • Outdoor ornamentals | • Tobacco |
| | | • Pome fruit | • Tree nuts |
| | | | • Turnip |

For a complete list of all crops registered and what is included for each crop group refer to the label

General usage information

- Apply when insect pests are small (egg hatch to early instars) before crop damage occurs
- Apply in sufficient water volume for thorough crop coverage
- Use with a water pH 7 or lower
- Use a non-ionic surfactant for hard to wet foliage (such as cabbage or broccoli)
- XenTari is OMRI certified for use in organic production



Technical information

CHEMICAL CLASS

- > Group II

ACTIVE INGREDIENTS

- > *Bacillus thuringiensis subsp. aizawai*, Strain ABTS-1857 (48.1%)

PACKAGING

- > 24 x 500 g case

RAINFAST

- > Avoid application when heavy rainfall is in the forecast

PCP

- > 31557



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Specific crop usage information

INSECT CONTROLLED	RATE	APPLICATION INFORMATION
GRAPE		
Grape berry moth Grape leafroller Grape leafroller Grapeleaf skeletonizer Oblique-banded leafroller Omnivorous leafroller	500-1,000 g/ha (202-404 g/ac.)	Begin applications at "black head stage" of eggs, 2 days before larvae hatch May be repeated if needed every 7-10 days up to 6 applications per year

Always read and follow the product label for more detailed information on control of weeds, insects or disease, application directions, and use precautions. Please refer to label for more information including future label expansions that may include new crops, pests and use patterns. Refer to the product labels for re-entry periods.

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