



Frequently Asked Questions

What is Rotstop C?

Rotstop C is a stump treatment used to protect freshly cut stumps from Heterobasidion (also known as *Fomes* or *Annosum*) Root Disease (HRD). Rotstop C is a biological fungicide that contains spores of the naturally occurring wood decay fungus, *Phlebiopsis gigantea*. Rotstop C is a wettable powder that is applied as an aqueous mixture.

Is Rotstop C registered in Canada?

Rotstop C is registered in Canada by the Pest Management Regulatory Agency (PMRA) (registration NO. 31140).

Is Rotstop C effective?

Rotstop formulations have been proven to be very effective in protecting conifer plantations from HRD in Europe for over 30 years. Numerous field studies in Europe and North America and years of operational application have demonstrated very high efficacy (in some studies up to 90% effectiveness) of *Phlebiopsis gigantea* in preventing HRD.

What are the benefits of using Rotstop C?

Benefits of using Rotstop C include:

- Incorporating Rotstop C into conifer plantation management can maximize productivity by preventing tree growth loss and mortality and provides assurance that conifer assets are protected from HRD.
- According to peer-reviewed research, *Phlebiopsis gigantea* poses no risk to living trees or agricultural crops, making Rotstop C an ideal treatment option to help sustain forests for future generations¹
- Peer-reviewed research also confirms that *Phlebiopsis gigantea* naturally decomposes dead wood, aiding in the decay of freshly cut stumps². Other treatment options, such as borate products, act as a wood preservative, increasing the time it takes for a stump to naturally decompose.
- Rotstop C is a low-cost control option, comparable to other stump treatments available

What package sizes does Rotstop C come in?

The following package sizes are available in Canada:

- 20 - 5 g wettable powder packages
- 10 - 5 g wettable powder packages

Where can Rotstop C be purchased?

Rotstop C is distributed by BioForest. Orders can be placed by contacting the Order Desk at order@bioforest.ca or by phone at 1-888-236-7378.

Does Rotstop C need to be vigorously agitated to dissolve?

Vigorous agitation is not needed. Rotstop C comes in pre-measured packages that, after being mixed with a small amount of water to form a slurry, are poured into 5 or 25 litres of water. Gentle mixing is sufficient to disperse the *Phlebiopsis gigantea* spores in the water. Refer to the product label for the Directions for Use.

Can dye be added to Rotstop C to better observe coverage?

Dye can be added to the mixture to observe treatment coverage. Blue dye can be purchased from BioForest.

Will Rotstop C freeze in colder temperatures?

During cold times of the year, if the temperature is expected to rise above 4°C anytime during the two weeks after felling, Rotstop C should be applied if possible. Because Rotstop C is mixed with water, applying it in very cold weather may not be possible because the product might freeze in the lines of the spray system. However, under these conditions, adding propylene glycol (not ethylene glycol) to the mixture (up to 10%, e.g. 500 mL propylene glycol in 5 litres of mix) can prevent freezing to -3°C without reducing the efficacy of Rotstop C, if used the same day.

How many stumps can be treated with 1 litre of Rotstop C?

When applied to the point of wetness and depending on the accuracy of the application, a 25 gram package is enough for treating an area corresponding to 37-75 m³ of timber (approx. 1 ha in thinning - approx. 1/6 ha in final cutting). Contact BioForest for estimate conversion factors for manual and mechanized application rates.

When should Rotstop C be applied after felling?

It is recommended to apply Rotstop C within 3 hours after felling whenever the temperature is above 4°C to ensure Heterobasidion spores cannot infect freshly cut stumps.

What is the storage and shelf-life for Rotstop C?

Rotstop C contains living microbes, therefore it must be stored in a cool, dry place away from food, drink and animal feed. In a refrigerator, below 8°C, the shelf life is 12 months from the time of packing (see expiry date on package). At room temperature (22°C) the product must not be stored longer than 5 months. At temperatures up to 28°C the product should not be stored longer than one month. After opening the package, the contents should be used within 24 hours. Never expose a package or a working suspension to temperatures above 40°C. To prevent contamination, store this product away from food or feed.

Who can be contacted for more information about Rotstop C?

For more information, please contact BioForest's technical support at support@bioforest.ca or 1-888-236-7378. The Rotstop C label, SDS and other product information can be obtained at www.BioForest.ca.

^{1,2} Dumas, Michael T., and Gaston Laflamme. "Efficacy of Two *Phlebiopsis gigantea* Formulations in Preventing Heterobasidion Irregular Colonization of Red Pine Stumps in Eastern Canada." 93.1 (2013): 25-31. <http://id.erudit.org/iderudit/1018887ar>. érudit, 18 Feb. 2013. Web. 9 Sept. 2016.