

Best Practices for Planting Grapes

Successful replanting requires careful planning, attention to detail, and patience. Below are the recommended practices and resources to use to help ensure a successful replant project.

PRE-PLANNING

Removal

 Evaluate the vineyard being removed and thoroughly examine any variations within the block. Identify areas of weak growth, record observations, and assess soil profiles.

Pathogen Considerations:

- Replant disease can develop when grape vines are repeatedly planted in the same field. Soil pathogens like crown gall bacteria, fungi, oomycetes and nematodes, can build up in the previous crop, causing newly planted vines to gradually decline.
- Sanitation is crucial during removal.
 Remove as much of the old roots as possible to reduce the risk of spreading disease to the new vineyard and inhibiting new grapevine growth.
- If disease was present, burn or compost all old vines and roots instead of chipping or re-incorporating back into the replant area.

- Before replanting, consider planting a cover crop or leave the field fallow for at least one growing season.
- Selecting a tolerant rootstock, if available, also reduces the impact of soilborne pathogens or other pests.

Soil Testing

- Complete soil nutrient testing within three years before replanting, ideally after the previous field has been removed. If the area under the vines has been managed differently than the drive rows, consider taking more than one sample.
- Use soil test results to guide your soil amendments before planting. Adjust soil pH with lime or sulfur as needed. Make sure to test any compost for nutrients, carbon, and salts before applying it.
- For information on submitting soil samples for nutrient analysis in BC, please visit: <u>Nutrient Testing Laboratories</u> | <u>Province of BC</u>



A compost pile is ready to be mixed into the soil.

Install Irrigation

- Install irrigation (either permanent or temporary) before planting. Check that the system is functioning and able to water new vines immediately after planting to reduce stress and eliminate air pockets in soil.
- Consider upgrading irrigation systems, such as laying wires when sub-mains are exposed for future automation, or redesigning irrigation zones.
- Check out the Environmental Farm Plan and Beneficial Management Practices programs for potential funding towards upgrading irrigation: <u>Beneficial</u> <u>Management Practices Program |</u> <u>Investment Agriculture Foundation of BC</u>
- Depending on where your farm is located, you may require a water license. For information on applying for a water license, please visit Front Counter BC: <u>Water Licence - New - Authorization</u> <u>Guidance - Natural Resource Online</u> <u>Services (gov.bc.ca)</u>

Cover crops

- Plant a cover crop following removal of the old field and before replanting the new field to protect against soil erosion and improve soil structure.
- Some cover crops (e.g. mustard) can also be used as a biofumigant to reduce pathogens in the soil.
- Select a cover crop suitable to the time of year, growing conditions and desired plant characteristics. For more information, please visit: Cover crops | Province of BC

REPLANTING

Nursery Stock

- Using certified virus-free planting material is critical to the health and longevity of your vineyard. Here are suggestions for sourcing domestic and international certified-virus free grapevines:
 - Domestic vines: Select a nursery that is registered by the Canadian Grapevine Certification Network (CGCN-RCCV) and uses one of the following protocols: Certified Plus, Certified, or Verified. For more information on CGCN-RCCV, please visit: <u>CGCN Certification Program</u> <u>| Canadian Grapevine Certification</u> Network
 - USA imported vines: Select vines certified as virus/pathogen-free by State certification programs in California, Washington (includes Oregon), or New York.
 - International imported vines: No other international certification programs are currently recognized by CGCN-RCCV. However, France's program is under review for 2025, and international programs can apply directly to CGCN-RCCV for consideration.
- Visually inspect nursery stock upon pickup to ensure there are no signs or symptoms of disease or damage.
- When vines arrive, keep them cool, roots moist, and plant as soon as possible. Do not store them with fruit as the ethylene produced can break dormancy of plants.

Planting

- Determine the optimal planting density to achieve desired vine balance and fruit yield.
- Avoid interplanting between existing vines, as competition and different management needs can lead to weak growth or failure of the younger vines.



Newly planted grapevines.

Alleyway Vegetation

 Plant a cover crop in the alleyways to reduce weed pressure, improve soil health, increase water retention and percolation, and moderate vineyard temperatures.
 Information can be found at <u>Cover crops |</u> <u>Province of BC</u>

MONITORING AND MAINTENANCE

- Training and Trellising: support and train young vines early to create well-formed, productive mature vines.
- Do not crop for at least 2 years and until the canopy is fully developed.

- Pest and Disease Management:
 Implement preventive measures to control pests (e.g., nematodes, Phylloxera) and diseases (e.g. powdery mildew).
- Regularly monitor vine growth, adjust practices as needed, and provide ongoing care to ensure successful establishment.

ADDITIONAL RESOURCES

- <u>Financial Planning for Replanting and</u>
 <u>Establishing a Vineyard | BCWGC</u>
- BC Wine Grape Council Best Practices
 Guide
- <u>Sustainable Wine Growing BC</u> resources:
 - Vineyard Management Plan
 - Integrated Pest Management Monitoring
 - Pesticide Record Single Application
 - Nutrient Management Plan