



Vineyards Disease Series – Part 1: Black Rot

Description

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Did You Know?

Black Rot is one of the diseases that helped shape modern viticulture.

It reached Europe from North America in the late nineteenth century, around the same time as phylloxera and downy mildew. Together, these triad of viticultural threats, transformed vineyard management and forever changed how European vineyards were protected.

Today, Black Rot, caused by the fungus *Guignardia bidwellii*, occurs in many grape growing regions across the world.

Recognising Black Rot

The fungus attacks leaves, shoots, tendrils and grape berries. Infection usually begins as small tan or brown spots on the leaves. Tiny black fruiting bodies soon appear within these lesions, giving the disease its name.



The greatest damage occurs on young berries. They turn brown, shrivel and eventually dry into hard, black “mummies”.

A Tiny Survivor

Those shrivelled berries are far more dangerous than they look. Left hanging on the vine or lying on the vineyard floor, they harbour the fungus throughout winter. When warm, wet weather returns in spring, they release spores that begin a fresh cycle of infection.



This is why removing mummified berries after harvest is one of the simplest and most effective ways to reduce disease pressure in the following season.

The Grower's Dilemma

To most visitors, a few dried berries may seem insignificant. To a vineyard manager, they are an early warning. Every infected berry left behind has the potential to become the starting point of next year's outbreak.

One Rainstorm Can Be Enough

Black Rot thrives under warm, humid conditions, especially when vines remain wet for several hours after spring rain. Under favourable conditions, infection can occur surprisingly quickly.

This is why many premium vineyards rely on weather stations and disease forecasting models to monitor rainfall, humidity and leaf wetness, allowing growers to act only when the risk is high.

Not Every Grape Variety Is Equally Vulnerable

Some grape varieties are more tolerant than others, but no *Vitis vinifera* variety is completely immune. Thin skinned cultivars generally suffer greater berry damage, making regular vineyard inspections essential throughout the growing season.

Keeping Black Rot Under Control

Successful management relies on an integrated approach:

- Remove mummified berries and infected plant debris.
- Prune to improve sunlight penetration and air circulation.
- Monitor weather conditions for infection risk.
- Apply approved fungicides at the appropriate time, where necessary.

A Highly Specialised Pathogen

Unlike many plant pathogens, *Guignardia bidwellii* infects grapevines almost exclusively. Over centuries, it has evolved alongside its preferred host, making vineyards its natural home.

Final Thought

Black Rot reminds us that producing fine wine begins long before fermentation. Behind every healthy bunch of grapes lies the vigilance of the vineyard manager â?? watching the weather, inspecting the vines and making timely decisions. Sometimes, the difference between an outstanding vintage and a disappointing one begins with something as small as a single black, shrivelled berry left behind in the vineyard.