

# How to recognize and control Cherry leaf spot (*Blumeriella jaapii*) in organic orchards

## Problem

Cherry leaf spot caused by the fungal pathogen *Blumeriella jaapii* is a fungal disease causing premature defoliation. Leaf drop decreases assimilation lowering the fruit size and quality.

## Solution

Manage this disease with proper sanitation, orchard management and organic sprays to control infections.

## Benefits

Adopting good agricultural practices and selecting less susceptible varieties helps prevent yield losses and enhances orchard profitability.

## Applicability box

### Theme

Crop production, disease control

### Keywords

Plant protection, plant disease control

### Context

Cherry production areas, temperate regions

### Application time

Orchard establishment, vegetative period

## Practical recommendations

- **Host plants:**
  - Sweet cherries (*Prunus avium*) and sour cherries (*Prunus cerasus*) are the primary hosts. Whereby sour cherries, and especially some varieties, are highly susceptible. Plums can occasionally be infected.
- **Infection and spread:**
  - **Primary infections:** Caused by ascospores released from overwintered infected leaves in spring during warm, wet weather.
  - **Secondary infections:** Conidia (Picture 1) develop on infected leaves and are spread by rain to healthy foliage. The disease can spread extremely quickly in years with frequent rains in May and June.
  - **Peak infection period:** 2<sup>nd</sup> to 4<sup>th</sup> week after blossom (possibly up to the 6<sup>th</sup> week depending on weather development). Infections rapidly increase in rainy, warm conditions.
- **Symptoms and damage:**
  - **Early signs:** Purple spots appear on leaves 10–15 days after infection. The spots eventually turn brown in early summer (Picture 2).
  - **Progression:** Infected leaves turn yellow (Picture 3) and fall prematurely.
  - **Severe cases:** Total defoliation by late summer, reduction of fruit set for the following year and thus increasing winter cold damage risk.
- **Protection strategy: Preventive measures**
  - Choose a suitable orchard **location** with good airflow.
  - Maintain proper **canopy ventilation** and light penetration through pruning.
  - **Field hygiene:** Remove or shred fallen leaves in autumn to destroy overwintering fungal spores.
  - **Varieties:** Plant less susceptible varieties, sweet cherry varieties are generally less susceptible than sour cherries. **Sour cherries: Susceptible:** Griotte du Nord (syn. Chatel Morel), Morellenfeuer, Fanal,

Kelleris, Montmorency. **Less susceptible:** Csengôdi, Akasztói, Jade, Achat, Rubellit, Coralin, Spinell, Jachym.

### • Protection strategy: Direct measures

- **Plant protection:** Two sprays with copper hydroxide (Cu<sup>2+</sup>) or copper oxides (Cu<sup>+</sup>) after harvest are recommended to prevent premature defoliation. Integrate with sanitation for improved effectiveness. Check recommendations of a decision support system (e.g. RIMpro) for accurate preventive application.
- **Rain protection:** Covering the trees with a rain coverage in high infection period (from 2nd to 4th week after blossom) prevents/reduces infections.



**Picture 1:** Fungi conidias cause secondary infections during the vegetation period.  
Photo: Jana Kupková, VSUO.



**Picture 2:** First symptoms appear as purple spots. Photo: Jana Kupková, VSUO.



**Picture 3:** Infected leaves turn yellow and drop of the tree. Photo: Jana Kupková, VSUO.

## Further information

### Further reading:

- Holb, I.J.; Lakatos, P.; Abonyi, F. Some aspects of disease management of cherry leaf spot (*Blumeriella jaapii*) with special reference to pesticide use. *Int. J. Hort. Sci.* 2010, 16, 45–49.
- Eisensmith, S. P., & Jones, A. L. (1981): Infection model for timing of fungicide applications to control cherry leaf spot. *Plant Disease*, 65: 955–958.

### Weblinks:

- Check [EPPO \(European and Mediterranean Plant Protection Organization\)](#) for more pest-specific information
- <https://extension.umn.edu/plant-diseases/cherry-leaf-spot>
- Check the [Organic Farm Knowledge](#) platform for more practical recommendations
- [Plant protection in organic stone fruit production](#) (available in DE, FR, RO, CZ, HU, RU)

## About this practice abstract

**Publisher:** VÝZKUMNÝ A ŠLECHTITELSKÝ ÚSTAV OVOCNÁŘSKÝ HOLOVOUSY s.r.o., Holovousy 129, 508 01 Hořice, Czech Republic, phone: +420 491 848 205 info@vsuo.cz

**Authors:** Radek Vávra, Jana Kupková

**Contact:** radek.vavra@vsuo.cz



**Review:** Clémence Boutry, Lauren Dietemann (FiBL), Daniela Giovannini (CREA), Jean-Marc Audergon (INRAe)

**Permalink:** [organic-farmknowledge.org/tool/56835](https://organic-farmknowledge.org/tool/56835)

**Project name:** InnOBreed - Innovative Organic fruit Breeding and uses

**Project website:** <https://innobreed.eu/>

© 2025