PRACTICE ABSTRACT

Susceptibility of apricot cultivars to blossom brown rot

Problem

Monilinia ssp. causes blossom brown rot (BBR) (Picture A) leading to necrosis of flowers and shoots, and up to 80% fruit loss. Most of the apricot cultivars are susceptible to BBR and the efficacy of plant protection products is low.

Solution

Knowing the susceptibility of apricot cultivars when planting a new organic orchard is crucial. We propose a list of assessed cultivars suitable for organic apricot orchards establishment.

Benefits

Choosing low susceptible cultivars to BBR decreases the risk to economic damage and limits the use of plant protection products.

Practical recommendation

- **Infection:** The infection of the flowers depends on climatic conditions (e.g., precipitation, humidity, temperature), phenological stages and cultivar susceptibility. The risk of infection is high when it rains between phenological stages D (opening of petals) and F (end of flowering). Symptoms occur around 30-35 days after flowering.
- **Diagnostic:** Symptoms of BBR can be confused with those of the *Pseudomonas* canker (PC). However, BBR starts from the tip of the branches, while PC usually starts at the basis of branches. While PC can attack single trees, BBR attacks are broader. The grey mycelium of BBR can be observed on flowers when conditions are wet (Picture B). On a petri dish, it appears in several layers (Picture C).
- **Cultivars:** Prefer a choice of varieties allowing for staggered flowering dates, to limit the risks of a year without harvest. The table below shows the susceptibility of 44 apricot cultivars to BBR, assessed in experiments conducted by GRAB and FiBL. It can be used to help choose cultivars.

Applicability box

Theme

Crop production, Disease and pest control, Disease tolerance.

Keywords

Blossom brown rot, *Monilinia*, Apricot, Cultivar, Susceptibility

Context

Applicable to all apricot orchards

Application time

Before planting a new orchard

Required time

None

Period of impact

Lifespan of the orchard

Equipment

No

Best in

All types of apricot orchards

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Early	Susceptibility
Flopria	***
Early Blush	***
Orange rubis	**
Mediabel	**
Tom Cot	**
Bakour	*
Elsa	*
Samouraï	**

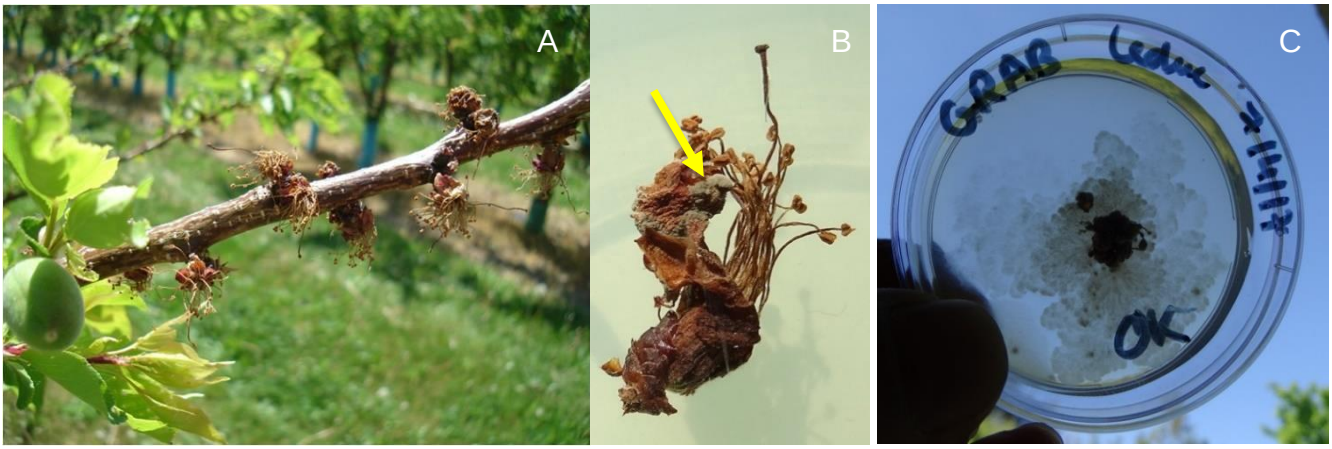
Seasonal	Susceptibility
Bergeval	****
Apribang	***
Mia	*
Orangered	***
Lido	***
Vallamust	*
Malice	**
Goldrich	**
Muscat de Provence	*
Julin	***
Flavor Cot	***
Candide	****
Delice Cot	****
Apridelice	***
Aprisweet	***

Late	Susceptibility
Canino	***
Bergarouge	****
Hargrand	***
Vertige	***
Polonais	***
Bergeron	***
Incomparable de Malissard	**
Harval	***
Harogem	****
Swired	**

Super early	Susceptibility
Wonder Cot	****
Magic Cot	***
Sefora	***
Lilly Cot	**
Précoce de Millet	***

Very late	Susceptibility
Tardif de Tain	***
Frisson	****
Farely	***
Milord	***
Congat	*
Farbaly	***

Level of susceptibility: * very low; ** low; * intermediate; **** high**



Picture (A) BBR symptoms on flowers, (B) Mycelium of *Monilinia laxa* on a flower and (C) BBR isolated on Petri dishes. Photos: CE Parveaud (GRAB).

Further information

Video

- Réguler le monilia dans les abricotiers biologiques. (FR)

Further reading

- Anselmo S., Araldi F. and Christen D. 2021. Gestion de la moniliose sur fleurs en culture d'abricots biologiques.
- Brun et al. 2021. Suivre la contamination des fleurs par *Monilinia laxa*. Phytoma 740. Janvier 2021.pp. 38-42

Weblinks

- Guide des sensibilités variétales. 2015. GRAB (FR)
- Variétés d'abricotier recommandées pour l'agriculture biologique. 2021. FiBL (DE, FR)
- Projet Fruinov : valorisation des variétés d'intérêt régional. 2019 (FR)
- Check the Organic Farm Knowledge platform for more practical recommendations.

About this practice abstract

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255 chemin de la Castelette, F-84 911 Avignon
Phone +33 (0)4 90 84 01 70, secretariat@grab.fr
www.grab.fr
Author: Claude-Eric Parveaud
Contact: claudeeric.parveaud@grab.fr

Review: Ambra De Simone (IFOAM Organics Europe), Radek Vavra (VSUO), Lauren Dietemann (FiBL)
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