

## Cultivar name: CALARDIS BLANC

Parents: Calardis Musqué x Seyve Villard 39-639

Breeders: Reinhard Töpfer, Rudolf Eibach

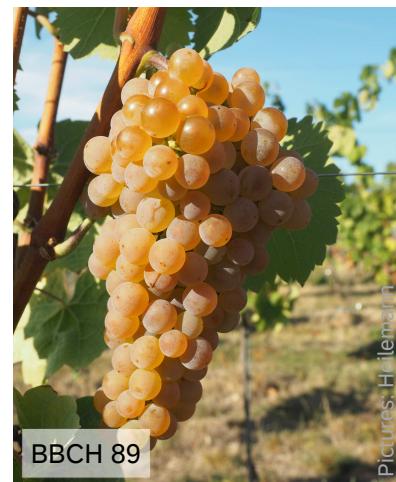
Resistance genes:

versus powdery mildew- Ren3, Ren9

versus downy mildew- Rpv3.1, Rpv3.2

Planting year at the Institut Viti- vinicole: 2019

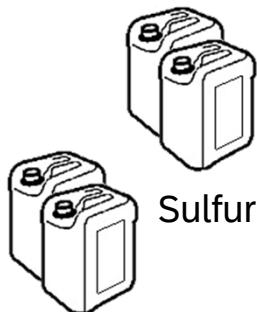
Powdery mildew and downy mildew are the two most destructive fungal diseases in viticulture. The cultivation of traditional grape varieties therefore requires extensive crop protection measures. Newly bred grape varieties, so-called PIWIs (fungus-resistant, abbreviation of the German term pilzwiderstandsfähig), exhibit greater resistance to the pathogens. As part of the [PIWI<sup>3</sup>](#) project funded by the Ministry of Agriculture, Food and Viticulture, the PIWI cultivars planted on the experimental plots of the Institute Viti-vinicole are examined in three dimensions: (1) agronomic, (2) economic, and (3) concerning their environmental impact. The well-known traditional varieties Pinot noir (for red varieties) and Rivaner (for white varieties) serve as comparisons.



Pictures: Heilemann

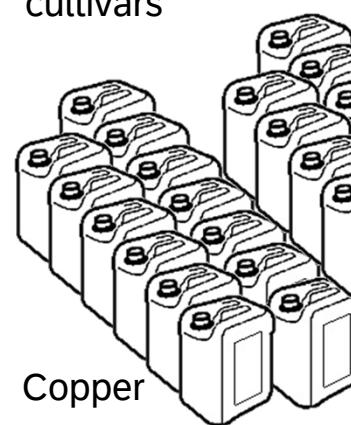
Expenses for crop protection (2023-2025, average)

PIWIs

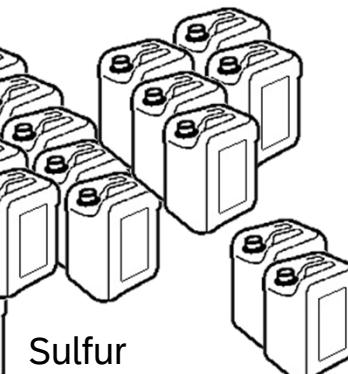


Copper

Traditional  
cultivars



Phosphonate



Sulfur

Hydrogen-  
carbonate

Difference ≈ 720€ per ha and season



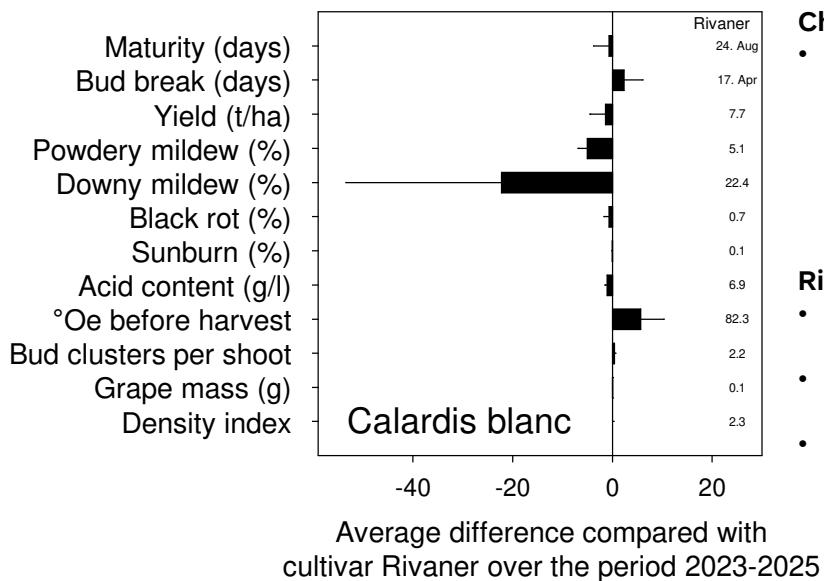
LE GOUVERNEMENT  
DU GRAND-DUCHÉ DE LUXEMBOURG  
Ministère de l'Agriculture,  
de l'Alimentation et de la Viticulture

Institut viti-vinicole

LUXEMBOURG  
INSTITUTE OF SCIENCE  
AND TECHNOLOGY

LIST 

Agronomic comparison with traditional cultivar Rivaner (2023-25)



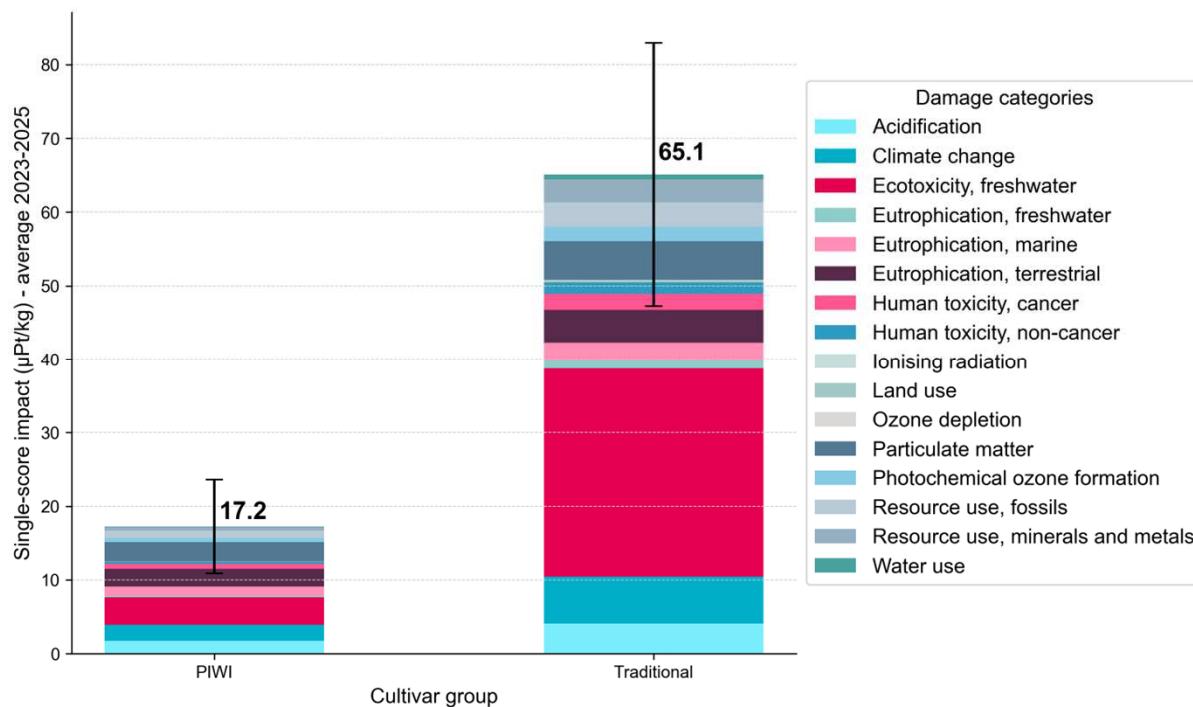
**Chances:**

- Very low susceptibility towards
  - Downy mildew and
  - Powdery mildew
  - Black rot
- allows significant savings in crop protection

**Risks:**

- Relatively low yield during the test period 2023-2025
- Tendency towards high sugar contents
- Tendency towards low acid contents

Environmental impacts (2023-25)



Where can I taste wines made from PIWIs? → [info@ivv.public.lu](mailto:info@ivv.public.lu)

This fact sheet was compiled within the project "Crop protection requirements, costs, and performance of fungus-resistant (PIWI) grape varieties under the growing conditions of Luxembourg (PIWI<sup>3</sup>)."<sup>3</sup> The project was funded by the Ministry of Agriculture, Food and Viticulture.

