Calys
(breeder reference: Col-2733L)

Wine grape variety from the INRAE-ResDur2 series, with polygenic resistance to downy mildew (*Rpv1 + Rpv10*) and powdery mildew (*Run1 + Ren3 + Ren 9*)

Origin/Parentage

Calys = Mtp 3160-11-3 x Bronner

Breeder: INRAE (France)

Mtp 3160-11-3: INRAE variety, selected by A. Bouquet in Montpellier by introgressing the resistance source *V. rotundifolia*.

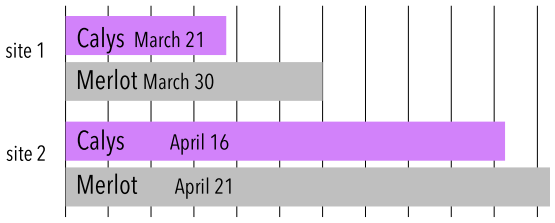
Bronner: Variety selected in 1999 by the Weinbau Institut in Freiburg (Germany). It carries resistance factors from American and Asian vines (*V. amurensis*) and is also highly resistant to black rot.

Calys was listed in the official catalog in March 2024.

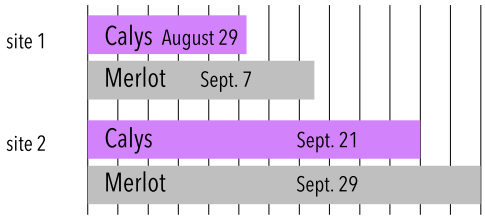
Agronomic traits

Phenology

Bud break date (3-year average)



Harvest date (3-year average)

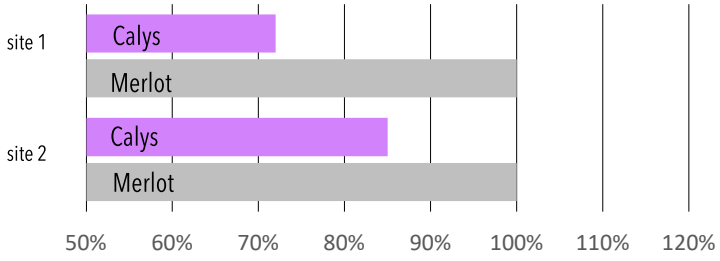


Early bud break. First period ripeness, 1 week before Merlot

Vigour and production

A variety of medium vigor, with spreading branches. Calys is fertile but not very productive due to its small, loose clusters made up of small berries.

Yield as a percentage of the control (3-year average)



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Design and production:
Vincent Dumas
Guillaume Arnold
February 2026

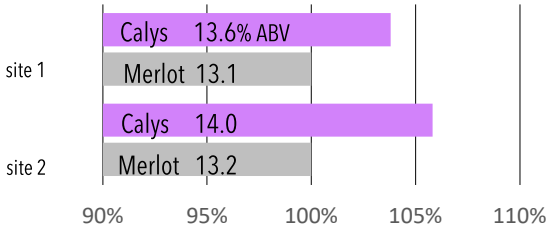
Calys

Enological parameters

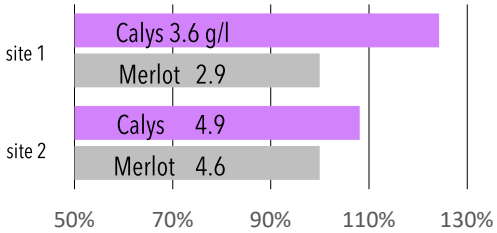
Sugar content and acidity of grapes

At maturity, sugar content is slightly higher than in the Merlot control variety. Berry acidity is slightly higher than in the control variety.

Potential alcohol content *(average over 3 years)*



Total acidity in sulf. acid *(average over 3 years)*



Wine quality

Suitable for producing fruity, complex, full-bodied wines rich in tannins, with high color intensity.

Resistance to fungal diseases

Downy mildew

Rare symptoms on inflorescences or clusters, with no impact on the harvest, whereas untreated control varieties are severely affected. Small necroses on foliage in cases of high pressure.

Powdery mildew

Total resistance observed at all sites, even under high pressure.

Black rot

Calys carries the resistance factor *Rgb1*, conferring limited and insufficient partial resistance. In high-risk situations, fungicide protection is nevertheless essential. Based on current knowledge from a limited number of trials, two treatments around flowering are sufficient to prevent damage to clusters and yield losses.

Botrytis

Very good tolerance to botrytis bunch rot

Potential savings on fungicides

Calys has polygenic resistance, consisting of two resistance factors against downy mildew and three factors against powdery mildew. In order to preserve these resistance factors, based on current knowledge, it is essential to carry out a minimum of two fungicide treatments. This protection must be increased in the event of high disease pressure. Fungicide savings are between 80% and 90% compared to a susceptible variety.

ÉCOPHYTO RÉDUIRE ET AMÉLIORER L'UTILISATION DES PHYTOS

Variety eligible for the Plant Protection Product Savings Certificates (CEPP) scheme.

Acknowledgments:

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