# Exelys
## (breeder reference: Col-2395L)

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



## Origin/Parentage

Exelys = 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*.

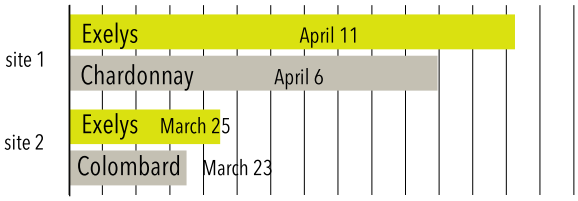
Bronner: Variety selected in 1999 by the Weinbau Institut in Freiburg (Germany). It carries resistance factors from American and Asian vines (*V. amurensis*) and is also highly resistant to black rot.

Exelys was added to the official catalog in May 2024.

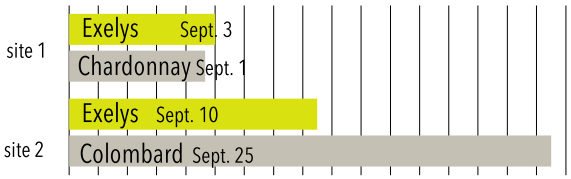
## Agronomic traits

### Phenology

Bud break date *(3-year average)*




Harvest date *(3-year average)*

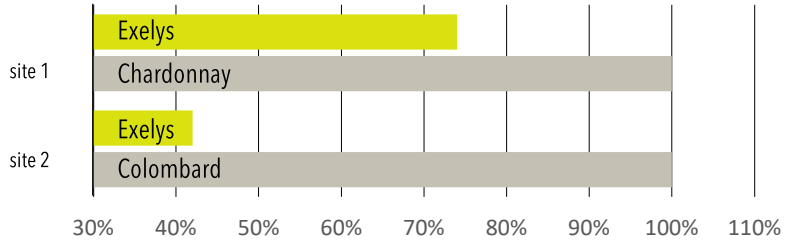



Bud break slightly later than Chardonnay. First period ripeness, comparable to controls.

### Vigour and production

Variety of average vigor, with semi-upright shoots. Exelys is very fertile with small, slightly compact clusters, which limits overall yield; a relatively high bud load is therefore recommended. Berries are small.

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




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Design and production:
Vincent Dumas
Guillaume Arnold
February 2026

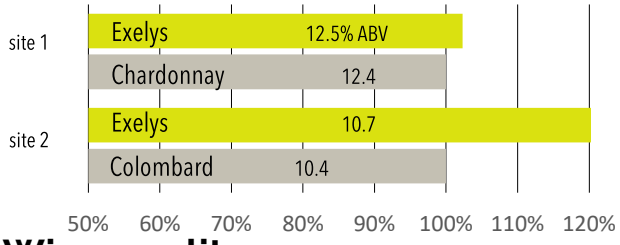
# Exelys

## Enological parameters

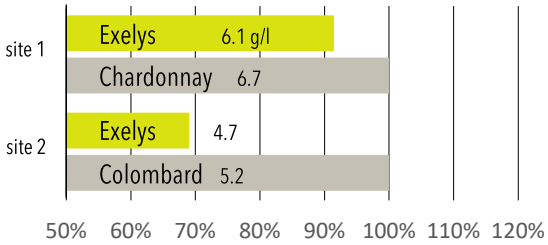
### Sugar content and acidity of grapes

At maturity, sugar content is equivalent to that of Chardonnay control varieties. Berry acidity is slightly lower than Chardonnay in Champagne. The sugar/acidity balance is comparable to Colombard.

Potential alcohol content *(3-year average)*




Total acidity in sulf. ac. *(3-year average)*




### Wine quality

Suitable for producing aromatic white wines with terpenic fruit notes.

## Resistance to fungal diseases

### Downy mildew

Very 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

Totally resistant, observed on all sites, even under high pressure.

### Black rot

**Exelys** carries the resistance factors *Rgb1* and *Rgb3*, conferring limited and insufficient partial resistance. In high-risk situations, fungicide protection is 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

Good tolerance despite compact clusters.

## Potential savings in fungicides

**Exelys** 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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