Voltis
(breeder reference: Col-2011G)

A wine grape variety from the INRAE-ResDur1 series, with polygenic resistance to downy mildew (*Rpv1 + Rpv3.1*) and powdery mildew (*Run1 + Ren3 + Ren 9*)



Origin/Parentage

Voltis = Villaris x Mtp 3159-2-12
Breeder: INRAE (France)

Villaris: Variety selected by the JKI Institute in Geilweilerhof, registered in 2011. It carries resistance factors from American vines, mainly *V. rupestris* and *V. aestivalis*.

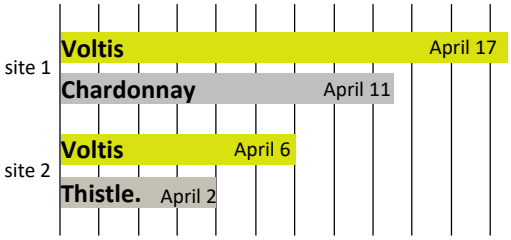
Mtp 3159-2-12: INRAE variety, selected by A. Bouquet in Montpellier by introgressing the resistance source *V. rotundifolia*.

Voltis was registered in the official catalog in January 2018.

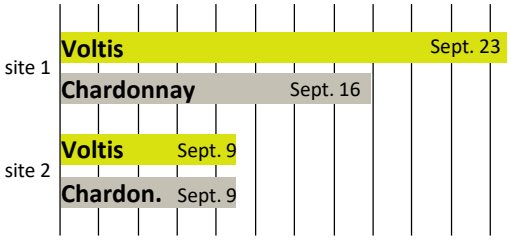
Agronomic traits

Phenology

Bud break date *(3-year average)*



Harvest date *(3-year average)*



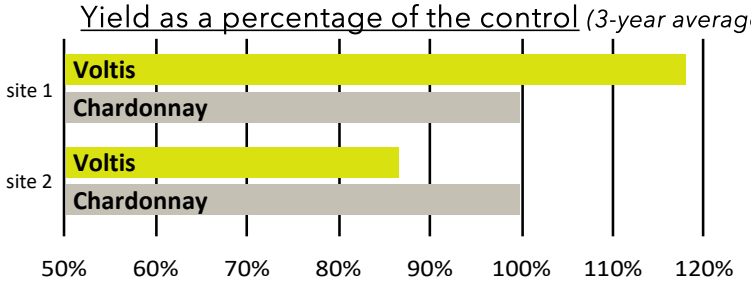
Bud break later than Chardonnay. Second period ripeness, comparable to Chardonnay.

Vigor and production

A vigorous variety with upright shoots.

Yield is constrained by low fertility of the basal buds (site 2). Long pruning is recommended. Medium-sized berries.

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



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Design and production:
Vincent Dumas
Guillaume Arnold
February 2026

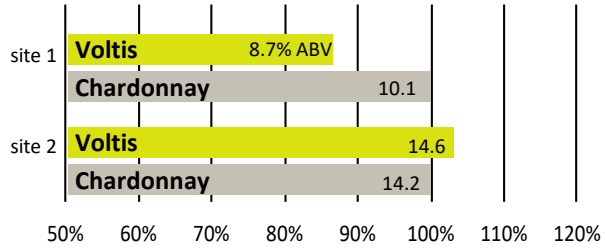
Voltis

Enological parameters

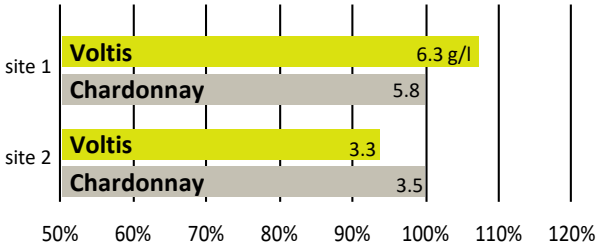
Sugar content and acidity of grapes

The degree of ripeness depends greatly on the location and management: With a limited yield (site 2), the sugar content and acidity are comparable to Chardonnay. When the yield is higher (site 1), the sugar content is lower and the acidity slightly higher.

Potential alcohol content *(3-year average)*



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



Wine quality

The wines produced are slightly bouqueted, supple, full-bodied, and persistent if yield is limited. At low levels of maturity, acidity remains high.

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

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

Black rot

Voltis has no identified resistance factors to black rot. 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

Fairly tolerant to rot.

Potential savings on fungicides

Voltis 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.

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