

Asset: Dataset of phenological stages in grapevines.

Date: April 2023

## 1. Content

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This asset is provided by the following items:

- SCAVIHO\_PhenologicalStage.csv: Dataset with the information of the phenological stages in grapevines from 2018 to 2022.
- Geojson: Folder that contains all the plots in which the phenological stages have been recorded. These files are configured in gejson format.

Phenological stages are recorded from 11 plots for 5 years, including two varieties of grapes: Tempranillo y Garnacha.

## 2. Phenological classification

The Crop Protection Agency (CPA) in La Rioja defined the phenological stages for grapevines for the most common varieties of grapes in La Rioja IGP. It is based on Baggiolini scale, and the classification is applied to many varieties of grapes and widely used in many wine regions in Spain.

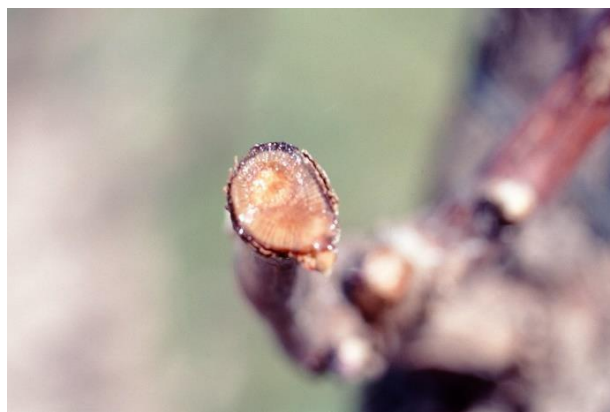
The classification is shown in Table 1 and Pictures of the stages are shown in Figure 1

Phenological status	Description
A	Winter bud.
B1	Cry.
B2	Swollen bud.
C	Green tip.
D	Incipient leaves.
E	Extended leaves.
F	Visible clusters.
G	Separate clusters.
H	Separated flower buds.
I1	Beginning of flowering (5% of open flowers).
I2	Full bloom.
J	Fruit set.
K	Pea-sized berries.
L	Cluster closure.
M1	Beginning of veraison (5% of grains veraisoned).
M2	Full veraison.
N	Ripening.
O1	Beginning of leaf fall (5% of fallen leaves).
O2	Full leaf fall.

*Table 1. CPA phenological classification*



*Stage A*



*Stage B1*



*Stage B2*



*Stage C*



*Stage D*



*Stage E*



Stage F



Stage G



Stage H



Stage I1



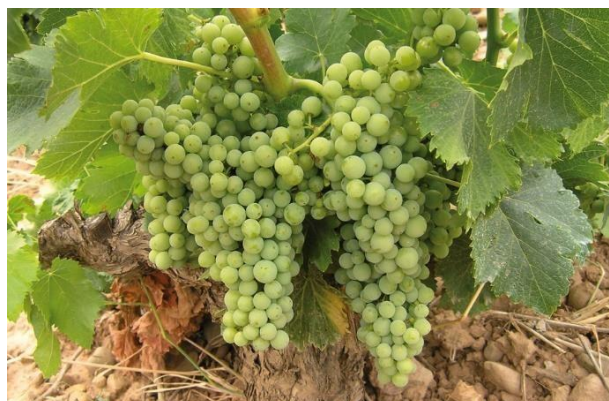
Stage I2



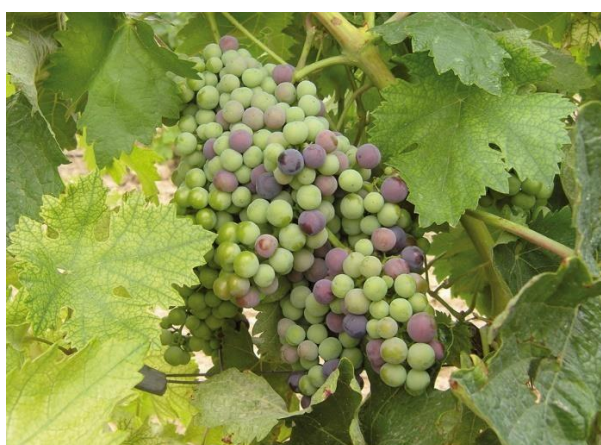
Stage J



*Stage K*



*Stage L*



*Stage M1*



*Stage M2*



*Stage N*



*Stage O1*



*Stage 02*

*Figure 1. Phenological stages of grapevine. Source: CPA La Rioja Government*

### 3. Plots situation

Plots and polygons the total area of plots according to grape variety is:

- Tempranillo: 7 plots (P101, P102, P106, P111, P117, P119, P93), total area: 43.576 m<sup>2</sup>
- Garnacha: 4 plots (P110, P109, P223, P81), total area: 84.413 m<sup>2</sup>

The situation of these plots is:

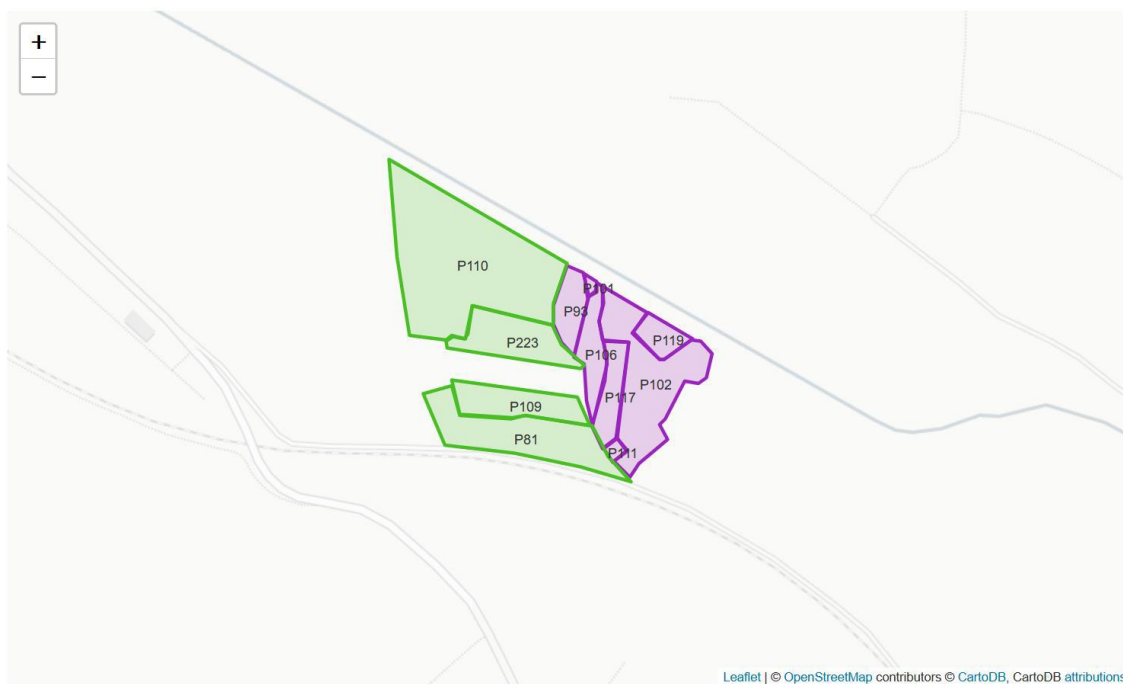


Figure 2. Map of vineyards plots using geojson

For a further knowledge of the region, these references may be of interest:

- Sistema de Información Geográfica de Parcelas Agrícolas- SIGPAC. <https://sigpac.mapa.es/feqa/visor/>
- Consejo Regulador de la Denominación Calificada Rioja. <https://www.riojawine.com/>