# PROJECT POLYAMINES

### Study of polyamines as indicators of stress in vineyards and their relationship with the microbiota

The main objective of this project is to contribute to maintaining or improving the quality of wines by establishing stress indicators in the vineyard, through the evaluation of polyamine content in grapes and wine, and its relationship with different factors in the vineyard, climatology, soil and microbiota of grapes and wine.

To this end, the following partial objectives are proposed:

1.To study the evolution of amino acid and polyamine content throughout the grape ripening period.

2. To evaluate the content of amino acids, polyamines and monoamines from the must to the wine during the whole process of elaboration and aging.

3. To study the evolution of yeast and bacterial populations (microbiota) using massive sequencing techniques during the winemaking and aging process.

4. To study the correlation of all the data obtained for amino acids, polyamines and monoamines with vineyard, climatology, soil and microbiota data.



PAGO DE CARRAOVEJAS

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The study of polyamines in relation to vineyard stress conditions will improve plant development, growth and yield.

On the other hand, the study of the microbiota, yeasts and bacteria, present during winemaking processes and the possible formation of polyamines and monoamines will make it possible to optimize fermentation conditions and improve wine quality, as some of these compounds can be negative from a sensory and/or health point of view.

#### CONSORTIUM

Partners: Pago de Carraovejas, Milsetentayseis and Instituto Tecnológico Agrario de Castilla y León, ITACyl.

### DETAILS OF THE GRANT:

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#### **DURATION**

- Start date: 01/04/2022

- End date: 31/12/2024





📲 Junta de Castilla y León