

# PROJECT INTELWINES

Development and implementation of new artificial intelligence techniques for vineyard irrigation optimization and reduction of sulfite content in the winery

INTELWINES is an individual R&D project whose overall objective is to investigate new techniques for precision viticulture and food safety. To this end, these techniques will incorporate hybrid algorithms of artificial intelligence and Deep Reinforcement Learning capable of homogenizing the processes and transferring the knowledge of the experts to a system that guarantees the quality and healthiness of the wine that reaches the consumer. To achieve progress in precision viticulture techniques, "strategic" intelligent irrigation systems will be developed. With respect to the improvement of food safety techniques, a novel monitoring system will be designed and implemented to model the level of sulfur in wines and follow its evolution (up to the bottle) to predict the degree of combination throughout the process (up to consumption).

**BENEFICIARY:** Pago de Carraovejas

**COLLABORATING ENTITY:** Bioinformatics, Intelligent Systems and Educational Technology Group (BESITE) of the University of Salamanca (USAL).



PAGO DE CARRAOVEJAS

FINCA Y BODEGA

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## DETAILS OF THE AID:

- Aid: Individual National R&D Project
- Agency: Center for the Development of Industrial Technology (CDTI).
- Type of aid: Financing of 74.68% of the budget.
- Budget: Total:
  - Total: 631,809.00 euros.
- Financing:
  - Total: 471,834.96 euros.

## DURATION:

- Start date: 01/01/2019
- End date: 12/31/2021

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