

Una manera de hacer Europa



BUENAS PRÁCTICAS Actuaciones Cofinanciadas

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Programa Operativo de La Rioja

Año 2021

Fondo Europeo de Desarrollo Regional

KNOWLEDGE TRANSFER AND STRENGTHENING OF THE WINE SECTOR IN LA RIOJA

The action presented is aimed at the development of research projects applied to the wine sector of La Rioja. These projects are focused on the transfer of knowledge and technology to the world of vines and wine, with the main objective of improving the economic and social competitiveness of wine growers and wineries.

The researchers of the Institute of Grapevine and Wine Science (ICVV) belonging to the Government of La Rioja, are the main protagonists of this good practice. The projects have a strong regional character and, in many cases, constitute the seeds of future national or international projects of wider scope, increasing their degree of scientific impact.

The Government of La Rioja and the European Regional Development Fund (ERDF) finance research activities through these projects in such strategic areas as adaptation and mitigation against climate change, improvement of oenological processes, genetic selection and improvement of plant material, as well as the development and improvement of more sustainable and environmentally friendly wine production techniques.

In this context, it is important to note that, in 2021, the GESVIN research group (member of the Agricultural Research and Plant Health Service of the Regional Ministry of Agriculture, Livestock, Rural World, Territory and Population), mostly composed of female researchers, received on 9th June La Rioja Medal awarded by the regional government in recognition of its research career. To illustrate this, it should be noted that GESVIN has developed more than 10 R & D projects co-financed through the good practice analyzed during the period 2016-2021.



Award of the Gold Medal of La Rioja to the gesvin research group

The action presented as **Good Practice** has been promoted by the **Directorate-General for Agriculture and Livestock of the Regional Ministry of Agriculture, Livestock, Rural World, Territory and Population, during the years 2016 to 2021**. Over the six years, these regional projects have mobilized an investment of EUR 2,573,442.89, of which 50 % (EUR 1,286,721.45) is co-financed by the European Regional Development Fund (ERDF).

The projects have counted as human capital with the involvement of 19 researchers, 57 percent of them female researchers.

Criteria identifying good practice:

1.- The action has been conveniently disseminated to beneficiaries, potential beneficiaries and the general public.

The action has been disseminated in compliance with the communication obligations set out in the regulations. In this way, identification plates of the research activities have been placed in the facilities and laboratories

where these projects are carried out, as well as their dissemination through a specific section on the website of the Regional Ministry of Agriculture, on each action promoted under the ERDF OP of Rioja 2014-2020.



In this action, the [I International Congress on Grapevine and Wine Sciences](#), which was held in Logroño from 7 to 9 November 2018, and commemorated the tenth anniversary of the creation of the Institute of Grapevine and Wine Science (ICVV).

RESULTS

Figure 1. Average residual population of microorganisms (log UFC/ml) after ACP treatments.

Table 1. Chromatic properties of wine.

Indexes	Batch			Flow 1			Flow 2		
	0 min	5 min	10 min	0 min	5 min	10 min	0 min	5 min	10 min
Folin-Ciocalteu	1005 a	1155 b	1194 b	1087	1070	1078	1052	1097	1103
Polimeritation	1.23 a	1.41 ab	1.55 b	1.54	1.42	1.47	1.20	1.20	1.24
Color	6.52 a	7.94 b	8.24b	7.82	7.89	7.91	6.49 a	6.66 b	6.75 b

Results showed that microbial populations were not significantly reduced with the applied ACP treatments (Figure 1). Nevertheless, some important variations in colour properties were observed (Table 1). A case in point was the ACP application in batch that increased significantly every color indexes with 5 and 10 min of treatment. Moreover, the ACP applied with the quickest flow produced a significant increase of the color index.

CONCLUSIONS

- ✗ The treatments should be improved for microbial inactivation in future works.
- ✗ The ACP applied in batch and with a continuous flow resulted effective, at least for some color features of wine.

Acknowledgement
 This study was supported by the Government of La Rioja project R-11-18 that could be co-financed by the European Regional Development Fund, granted to the Autonomous Community of La Rioja, within the ERDF Operational Program.

Poster Conclusions of the International Congress of the Institute of Grapevine and Wine Science (ICVV)

Agradecimientos



Ponencia del congreso científico en Ourense, abril de 2018.
Presentation of the scientific congress in Orense, April 2018

Presentacion en el Congreso Ibérico de Ciencias del Suelo 2018
Presentation at the Iberian Congress of Soil Sciences

CONCLUSIONES

Los resultados obtenidos han puesto de manifiesto las diferencias en la composición fenólica y actividad antioxidante de las variedades blancas autorizadas en la D.O.Ca. Rioja. La variedad Tempranillo Blanco mostró la mayor concentración en ácidos hidroxixinámicos y catequinas, lo que justificaría su mayor capacidad antioxidante. Esta variedad, autóctona de la D.O.Ca. Rioja, representa una alternativa para la diferenciación de los vinos por sus características cualitativas, y además manifiesta un elevado potencial antioxidante.

BIBLIOGRAFÍA

1. Álvarez-Casas, M., Pajaro, M., Lores, M., García-Jares, C. 2016. International Journal of Food Properties. 19(10): 2307-2321.
2. Brand-Williams, W., Cuvelier, M.E., Berset, G. 1995. LWT-Food Sci Technol. 28(1): 25-30.
3. Kris-Etherton P.M., Lefevre M., Beecher G.R., Gross M.D., Keen C.L., Etherton T.D. 2004. Annual Review of Nutrition. 24: 511 – 538.
4. Martínez, J., Gorzasio-Diogo, A., Baroja, E., García-Escudero, E. 2017. Zubia Monográfico Vid y Vino, 29: 63-78.

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 L.A. agradece a INIA por su contrato pre-doctoral.

Conclusiones de un poster en el XIV CONGRESO NACIONAL DE INVESTIGACIÓN ENOLÓGICA – GIENOL2018.

Conclusions of a poster at the XIV National Congress of Oenological Research – GIENOL2018

In parallel, the dissemination is channeled through articles published by the magazine ‘Cuaderno de Campo’, edited by the Regional Ministry of Agriculture, Livestock, Rural World, Territory and Population, aimed at a wider audience.

Procesos actuales de selección clonal de vid en La Rioja

El ICIV evalúa en suerto plantaciones experimentales blancas de Tempranillo, Graciano, Viura y Garnacha Blanca que permitirán al sector disponer de vides más heterogéneas y mejor adaptadas a las necesidades de la viticultura actual

Introducción

En el año, con cuatro repeticiones de 20 cepas, siendo que posibilita la adecuada comparación estadística entre los diferentes clones. Esta plantación experimental cuenta con una superficie de 0,40 ha y un muro de plantación de 2,80 x 1,20 m. El protocolo de riego ha sido 500 l/m². El protocolo de abonado ha sido 200 kg/ha de N, 200 kg/ha de P₂O₅ y 200 kg/ha de K₂O. En el caso de la Garnacha Blanca, además de los 20 clones presentados por el ICIV en La Rioja, se han añadido cuatro clones presentados por Guelavia, Navarra y Aragón. Estas variedades, Navarra y Aragón, representan un desafío de gestión en cuanto a la adaptación de la planta a las condiciones de cultivo de la zona de estudio.

Financiación

Este trabajo ha sido realizado en el marco de diversos proyectos regionales de investigación financiados por el Gobierno de La Rioja (2009-2019). Se prevé, en su caso, la cofinanciación del 50% del importe de este gasto con cargo a las ayudas del Fondo Europeo de Desarrollo Regional otorgadas a la Comunidad Autónoma de La Rioja, dentro del Programa Operativo FEDER de La Rioja 2014-2020.

Extracto de artículo publicado en la Revista “Cuaderno de Campo” N° 63 Año 2020

<https://www.larioja.org/larioja-client/cm/agricultura/images?dMmedia=1192179>

CARACTERÍSTICAS AGRONÓMICAS Y POTENCIAL INOVLÓGICO DE LAS VARIETADES DE VID BLANCAS AUTORIZADAS EN LA D.O.C.A. RIOJA

IRINA MARTINEZ-ANA GONZALEZ-BLASEZ, ELENA BARRIO-ENRIQUE GARCÍA-LEZDERO

RESUMEN

La D.O.C.a. Rioja amplió en 2008 el número de variedades blancas admitidas para mejorar la competitividad de sus vinos blancos y adaptarlos a las demandas del mercado. En este trabajo se ensalza el comportamiento agronómico y las posibilidades enológicas de las nueve variedades blancas autorizadas...

Palabras clave: variedad, Tempranillo Blanco, Marzemino Blanco, diferenciación, calidad.

In 2008 the D.O.C.a. Rioja increased the number of white wine varieties authorized until then in order to improve the competitiveness of its white wines and to satisfy the market demand. In the present paper, the agronomic behavior and the enological potential of nine authorized white wine varieties...

El trabajo de García de la Haza et al. (Gobierno de La Rioja, CSIC, Universidad de La Rioja, 2016) y García de la Haza et al. (2017) Legorria (La Rioja).

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otro, a la falta de adaptación a las condiciones de la zona, o bien a la necesidad de aplicación de otros procesos de vinificación que permitan resaltar su potencial aromático, ya que se trata de una variedad bastante delicada agrónomicamente y enológica. Por el contrario, la variedad Chardonnay ha conducido a vinos con buena calidad sensorial, que confirman su mayor plasticidad agronómica y enológica. (ESTIVA, 2007; VCR, 2015).

4. CONCLUSIONES

Los resultados obtenidos en este ensayo han puesto de manifiesto las características agronómicas y enológicas de las nueve variedades blancas (autorizadas y tradicionales) autorizadas en la D.O.C.a. Rioja. Las diferencias observadas pueden conducirnos a adaptarnos a distintos entornos vitícolas, y contribuir a la diversificación de las elaboraciones de vino blanco. Las variedades de ciclo más corto (Tempranillo, Sauvignon y Chardonnay) pueden ser de interés en las zonas con condiciones climáticas más limitadas para alcanzar la madurez. En general, todas las variedades han mostrado buen potencial productivo, aunque algo más bajo en el caso de las fortíneas Chardonnay y Sauvignon. La composición físico-química y la calidad sensorial de los vinos obtenidos muy influenciada por la vidlera, observándose importantes diferencias en los parámetros de acidez y en la composición polifenólica. A nivel organoléptico destacaron por su mayor calidad Chardonnay, Tempranillo Blanco y Marzemino Blanco.

Todas las variedades estudiadas manifiestan características diferenciadas, por lo que pueden contribuir con mayor o menor intensidad a la obtención de vinos más complejos, algunas en elaboraciones monocorales y otras en mezclas en diferentes porcentajes.

Entre las variedades autorizadas, Tempranillo Blanco y Marzemino Blanco han mostrado un buen potencial productivo y cualitativo, y pueden ser una alternativa de cara a la diferenciación de los vinos blancos de esta zona, frente a la homogeneización que supone el empleo de variedades internacionales. Además, Tempranillo Blanco manifiesta más amplias posibilidades de adaptación a diferentes entornos, debido a su ciclo más corto, y permite diversificar las elaboraciones, tanto de vinos jóvenes como destinados a la crianza en barrica. Por otro parte, tiene un notable interés asociado a la variedad tinta de la que procede y muy vinculado a la D.O.C.a. Rioja.

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Este trabajo ha sido realizado mediante un proyecto de investigación financiado por el Gobierno de La Rioja durante los años 2012-2015, y posteriormente cofinanciado al 50% con Fondos FEDER durante 2016 (Programa Operativo FEDER de La Rioja 2014-2020).

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Extracto de artículo publicado en la Revista "Zubia" N.º 29, Monográfico "Vid y vino"

<https://dialnet.unirioja.es/ejemplar/482329>

<https://www.icvv.es/el-largo-camino-de-la-seleccion-clonal-en-la-rioja>

2.- The action incorporates innovative elements.

The innovative nature of this action rests on several aspects. Firstly, these are research projects applied to a sector, the wine sector, considered technologically mature, but which is allowing the latest scientific and technological innovations to be brought to winegrowers, cooperatives and wineries in the sector.

On the other hand, and as a result of contact with the sector and with the current problems of viticulture and oenology, the work focuses on areas of knowledge and application according to the new scenarios faced by wine-growing: climate change; the need to invest in sustainability-based production systems; the study and strategies to combat wood diseases and emerging pests; the use of management and decision-making tools based on viticulture and precision oenology; the commitment to plant biodiversity (intravarietal diversity, varieties with strong roots in our wine-growing environment and minority varieties); zoning studies and criteria; the selection and improvement of micro-organisms associated with the production and preservation of wine; the improvement of oenological processes (processing, inertisation of barrels...), the development of methodologies for sensory analysis or wine binomial and nutrition.

There is also an agile funding mechanism, which makes it possible, directly and easily, through ERDF funds to finance projects from a regional perspective, many of which end up being converted into national or international consortia and proposals.

Finally, it should be pointed out that this funding mechanism, through an internal call within La Rioja's public sector, allows young researchers to work together with experienced researchers. This opportunity serves as a shuttle for young research talents in the region, who directly exploit their first research results.

3.- Alignment of the results obtained with the established objectives.

The aim of this action is to promote wine and wine research in key areas of concern to the wine sector, such as the improvement of plant material, with particular emphasis on genetic biodiversity, by taking into account intravarietal diversity and the study and cultivation of minority varieties such as Tempranillo Blanco; in the search for knowledge and strategies against vine wood diseases; actions to address climate change and the improvement of wine production and control processes.

With this type of action, the scientific capacities of La Rioja are continuously increased over the last four years, from 2016 to 2021, which contributes to improving the competitiveness of the wine sector, the first economic sector in the region, throughout its value chain, from the vineyard to the bottle. At the same time, it has made it possible to increase substantially the funds allocated to regional research, as well as to improve the scientific activity of the Institute of Grapevine and Wine Science (ICVV), through the creation of collaborative networks between the regional administration, the University of La Rioja and the Higher Council for Scientific Research, with a clear commitment to the relationship with the private business sector.

4.- Contribution to the resolution of a problem or weakness detected in the territorial area of implementation.

The first problem that has been solved is the funding of research of a strategic nature, directly and with great ease of management. This action has made it possible to return EU funds, which would have been very difficult in larger calls for new or short-lived research teams.

Another challenge achieved with this type of project has been the possibility of generating public-private partnerships by innovating with winegrowers and winemakers. One area that has been enhanced, although there was a background, is the hiring of transfer technicians, and the possibility has thus been opened in the coming years to create a transfer unit at the Institute of Grapevine and Wine Science (ICVV).

Finally, it should be pointed out that these projects have had a direct impact on the development of more sustainable vine cultivation techniques, such as efficient management of water and fertilisers, as well as the sustainable fight against pests and diseases or the use of plant covers and organic quilting materials (mulching). Also, in oenological terms, studies associated with the improvement of production processes within the winery are significant, both in the management of the grapes, in the fermentation process and in the conservation and bottling techniques of wine.

5.- High degree of coverage of the target population.

The target audience of these projects is undoubtedly the researchers of the Agricultural Research and Plant Health Service who carry out their research work within the framework of the Institute of Grapevine and Wine Science (ICVV), and who have been able to carry out research projects geared to the challenges and demands that the productive sector requests.

The beneficiaries of these projects are not only wine growers and consumers in La Rioja, but the entire value chain of wine at national level, which can enjoy a product of higher quality, healthier, safer and more sustainable.

From a more global perspective, these projects are making it possible to establish talent in the region, open up new collaboration networks and empower the Institute of Grapevine and Wine Science (ICVV) as a national and international benchmark in basic and applied wine research. They also have a direct impact within La Rioja's Innovation System, by consolidating La Rioja's public R & D sector within the national and international context, and serve as a bridge or link with other networks derived from research: genetics, microbiology, plant biology...

In terms of attracting research talent, mention two researchers involved in these regional projects.



Dr. Javier Portu Reinares, Extraordinary Doctoral Prize awarded by the Governing Council of the University of La Rioja. (Currently researcher of the Agricultural Research and Plant Health Service)



Dr. Dr. Lucía González Arenzana awarded internationally for a research work on cleaning oak barrels with cold plasma.

6.- Consideration of the horizontal criteria of equal opportunities and non-discrimination, as well as social responsibility and environmental sustainability.

This operation is closely linked to environmental sustainability. Many of the objectives of the co-financed projects are aimed at promoting mitigation and adaptation to climate change problems, through the reduction of greenhouse gas emissions (through the optimisation of nitrogen fertiliser among other lines of work), the efficient use of irrigation water or the management of plant roofs as a soil maintenance technique, useful against soil erosion and as CO₂ sinks.

With regard to the generation of opportunities and non-discrimination, as has been widely explained, this modality of projects is also serving as a shuttle for young researchers, pre- and post-doctoral, to enable them to meet the challenge of project management by experienced research staff, which allows to create a climate of synergies and optimal opportunities.

In the area of gender equality, mention that in 2019 57 % of the participating staff were women, and that they are in line with the policy of incorporating human resources of the Government of La Rioja, guaranteeing transparency, merit and equality of opportunity.

This good practice thus serves to align regional scientific challenges with the Europe 2020 agenda by aiming for a smarter, more sustainable and more inclusive territory.

7. Synergies with other policies or instruments of public intervention.

The regional strengthening projects have served as seed for national research projects in several calls from the State Research Agency, in collaboration with INIA (National Institute of Agricultural and Food Research and Technology), which has enabled the development of a wider research network, and to attract resources from the State R & D & I Plan (co-financed by the State Operational Programme ERDF 2014-2020).

But synergies have not only been achieved at the state level. Thanks to these projects, other European projects have been generated in calls such as INTERREG SUDOE or INTERREG POCTEFA. We can highlight two very recent examples, the [VINIOT \(SUDOE\)](#) and the [VITISAD \(INTERREG POCTEFA\)](#) projects, both presented in 2019.

In short, the projects are directly related to the wine sector, which in the Autonomous Community of La Rioja is of strategic importance, being a key area within the Intelligent Specialisation Strategy of La Rioja 2014-2020 (RIS3). The figures show their prominence. In La Rioja the vine is the first crop in area, with 47.000 ha. Wine is the highest-weight product in the region's exports, with more than 10 % of the value of total exports. It also represents the first industrial sector in turnover in La Rioja and employs more than 2,000 people directly, in the winery sector alone. This scenario means that La Rioja shares leadership within the main wine regions of Europe, comparable to regions such as Porto, Bordeaux or Tuscany. There is no doubt that the R & D & I investment being made with these projects is closely linked to the socio-economic development of La Rioja.

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