



BIODIVERSITY MANAGEMENT IN VITICULTURE LANDSCAPES

- Demonstrating project LIFE+ BioDiVine –

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The BioDiVine project involves the study and management of biodiversity in vineyard landscapes. This project benefits of the cofunding of the European initiative LIFE+ 2009/2014 that supports innovative activities in the field of nature conservation and biodiversity.

The BioDiVine project objective is to identify the interest of arrangements in wine regions and adaptation of crop management on biodiversity, landscape and overall environment.

The project focuses on the management of seven experimental sites and a reference site, Saumur-Champigny, located in the Loire Valley (France).

Among the seven demonstration sites are involved the appellations of Saint-Emilion, Limoux and Costières de Nîmes in France, the Douro and Vinho Verde in Portugal and the Rioja and Penedes in Spain.

Seven different partners in the coordination and monitoring of European sites are included in the project. The IFV (French Institute of Vine and Wine) and ARD-VD (Association for Research and Development in Sustainable Viticulture) are partners in charge of the different French sites. The Spanish partners are ICVV (Instituto de Ciencias de la Vid y del Vino) and DIBA (Diputacio de Barcelona) who will implement the project respectively on the site of La Rioja and Penedes. In Portugal, the CVRVV (Comissão de Viticultura da Região dos Vinhos Verdes) will be in charge of the site Quinta Campos de Lima in the region of Vinho Verde, and ADVID (Associação para o Desenvolvimento da Viticultura Duriense) for the Douro site. Finally, Euroquality provides operational management of the project.

The objectives of this project stem from three complementary fields: environment, agronomy and landscape; allowing to demonstrate that a landscape approach and an environmental action plan can be integrated into a vine strategy while respecting biodiversity.

Management plans will be proposed for each of the experimental sites by the end of the project.

Concrete actions for conservation and arrangement will be implemented at each site with the creation of semi-natural complementary areas in vineyards (introduction of ground cover plants, hedges, reorganization of low walls and other elements of land management...)

Parallel with arrangements, it is planned to develop an alternative or integrated protection of the vineyard, particularly involving the use of predictive models of disease, the development of mating disruption by pheromones, the optimization of spraying.

Technical follow-ups will be conducted to assess the scope of these actions to conserve and enhance biodiversity through appropriate protocols for different specialties of biodiversity: soil microbiology, functional plant biodiversity (under validation with different partners). A methodology for studying birds and small mammals is also under development. Finally, the use of the RBA method (Rapid Biodiversity Assessment), already developed in various French wine regions (M. VAN HELDEN), will be used for each of the experimental sites in association with the ARD-VD.

This method aims at assessing arthropod biodiversity, through a trapping system (combination of “combi” and pitfall traps), while overcoming the classical taxonomy. The latter is replaced by a determination based on morphological criteria.

On the other hand, a cartographic analysis will be conducted for each site allowing to locate the major landscape units from the Corine Land Cover, but also more locally through Geographic Information System (GIS).

Furthermore, many public awareness activities and dissemination of results are planned throughout the project to interest the greatest number but also attract the attention of winemakers and wine professionals (creation of a public website www.biodivine.eu, information boards on sites, publications and press releases, “open days” on sites, but also training workshops and writing of technical guidelines, etc...).

Ultimately, beyond the seven experimental sites, the BioDiVine project aims to promote in all European countries the shares in favor of biodiversity, adapted to each vineyard context (climate, geology, slope, plot type, driving systems ...).