BioDiVine

Demonstrating biodiversity in viticulture landscapes

“Biodiversity measures in the vineyard, Biodivine life + project i.e. in a Malvasia de Sitges vineyard ”

Enric Bartra[1] / Lluís Giralt[1]/Joël Rochard[2]

[1] INCAVI, Spain, [2] IFV, France

LIFE+ BioDiVine

LIFE +
Nature and
Biodiversity 2009

Life

The project LIFE+ 2009 BioDiVine

- The study and protection of biodiversity is one of the priorities on the European Union.
- Vineyards are important in Europe as a traditional crop and can give a high added value. But often has been linked to high use of pesticides.
- This project aims to increase the functional biodiversity in viticulture landscape.

The project LIFE+ 2009 BioDiVine

BioDiVine objectives:

- To contribute to environment conservation and increase biodiversity.
  - Need to measure biodiversity in different vineyards and landscapes
- Promote a landscape structure to improve vineyard biodiversity.
  - Cover crops, hedges, non cultivated areas, use of non chemical pest control methods.

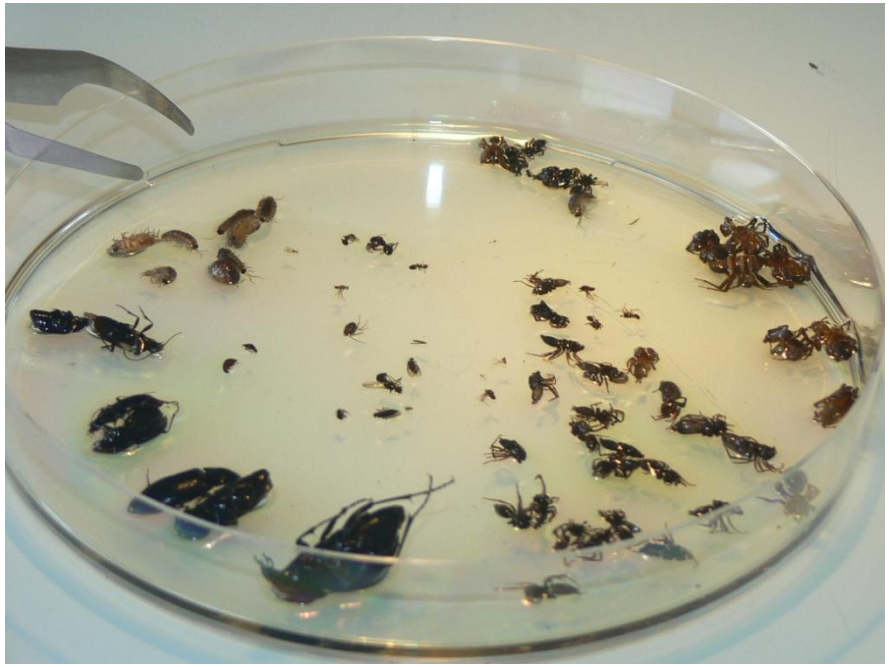
Measures in the Biodivine project

- Arthropods monitoring, regulation of pest populations.

- Plants monitoring, birds, mammals, soil microorganisms activity.

Natural control of pests

- *Anagrus atomus*
  - Egg parasitoids
- Pipinculid flies
  - Parasitoids of nymphs
- Predators
  - Malacocoris chlorizans
  - Orius sp.
- Jumping spiders
  - Salticus scenicus
- Lacewings
  - Chrysoperla sp.



Malvasia de Sitges is adapted to the area

- History
- Culture
- Ampelography
- Renewed interest
- Diversity of products

Natural control of pests

Malvasia de Sitges vineyard with cover crop

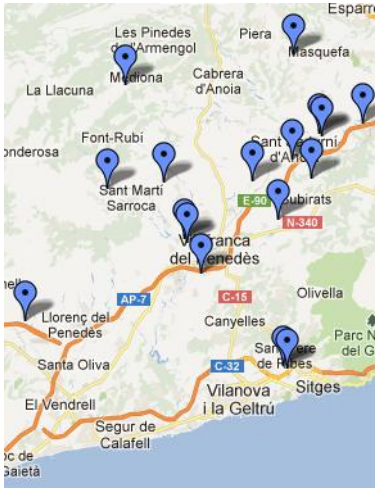
Example of plants and animal increase

Hypothesis on yeast population

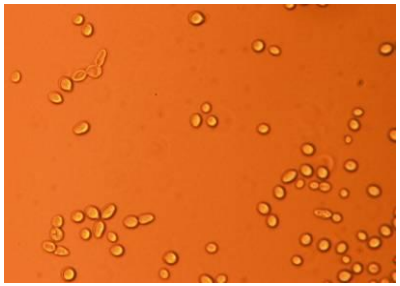
- Biodiversity can influence the population of fermenting yeast on the grapes and be important in non inoculated wines.
- To determine the risks of non inoculated fermentations from yeast samples taken in the vineyard.
- To compare the effects of vineyard landscape on yeast populations.

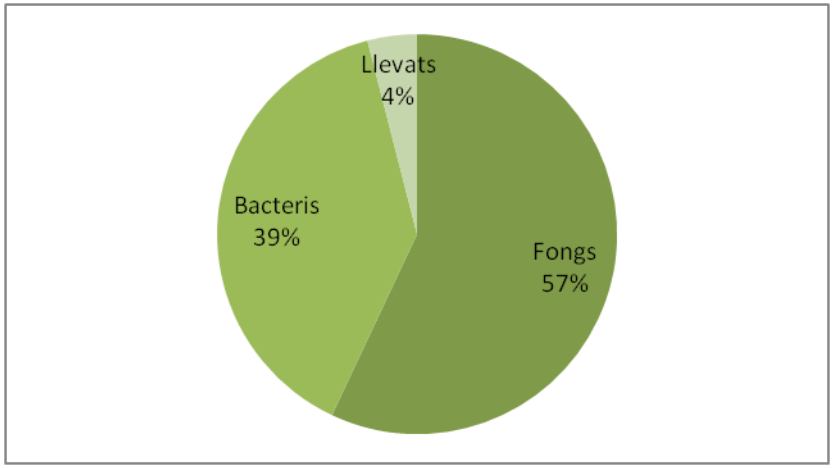
Sampling method

- The samples were collected from grapes in a sterile tubes.



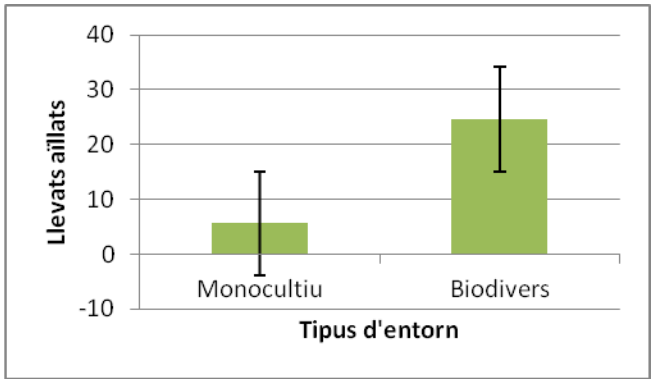
Results





Percent of microorganisms obtained in the first year

Results



In a preliminary result, bigger yeasts counts were obtained from the vineyards with a diverse landscape. Further studies are needed to interpret the results.

- Thank you Monemvasia for your hospitality