



Project Information Sheet

VVINNER (Vineyard Vigilant & INNovative Ecological Rover)

Programme area:	ECO INNOVATION
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Benefits (max. 150 characters incl. space):	For the first time ecological robots will help to remove chemical herbicides from the vineyard and will help winemakers to enter into the Data Driven Agronomy.
Keywords:	Vine robot, replace herbicides, Data Driven Agronomy
Sector:	Food and Drink
Type of solution	Product and service.
Duration:	26/08/2012 – 31/08/2015
Budget:	€ 1.791.970 (EU contribution: 50%)
Contract number:	VVINNER ECO 11 304336

Summary

Vitirover propose definitely to winegrowers, the most simple, most ecological, and most environmentally friendly solution to replace weed killers in the vineyards.

A mower-robot to eliminate weed killers and a robot sensing to manage health in the vineyard

The VITIROVER multi-functional robot was created together with the company VITIROVER in 2011 by a team of engineers (also wine growers in the famous vineyard of Saint-Emilion).

The VITIROVER robot is a solar powered all-land mower which can help control properly grass height in vineyards in substituting weed killing processes by the mowing VITIROVER capabilities.

But the VITIROVER is also conceived to be a 'Vigilant Ecological Guard of the Vineyard' capable to collect, all along its 24/7 on-the-field presence, all relevant information needed for monitoring the well-being of the vineyard ecosystem and for detecting as early as possible risks of diseases, insect invasion or meteorological stresses. Thanks to dedicated on-board measurement instruments, statistical measurements will be made possible from one year to another, from one day to another. All these readings are send to an expert System dedicated to vineyard. With this sensor-robot and its Expert System, wine growers will have more chance to detect risks or problems early enough to be in the position to mitigate in a natural way at each vine stock level, the anticipated threats and thus to avoid the implementation of systematic and highly concentrated pesticide based curative processes at the whole parcel scale.

- Design of an autonomous tractor robot with two tools (mowers and sensors),
- Design of an Expert System specialized in vine and very user friendly,
- 100% solar powered, navigation with centimetric GPS,
- Communication through WIFI and GPRS,
- Delivery of 50 robots in February 2015.