

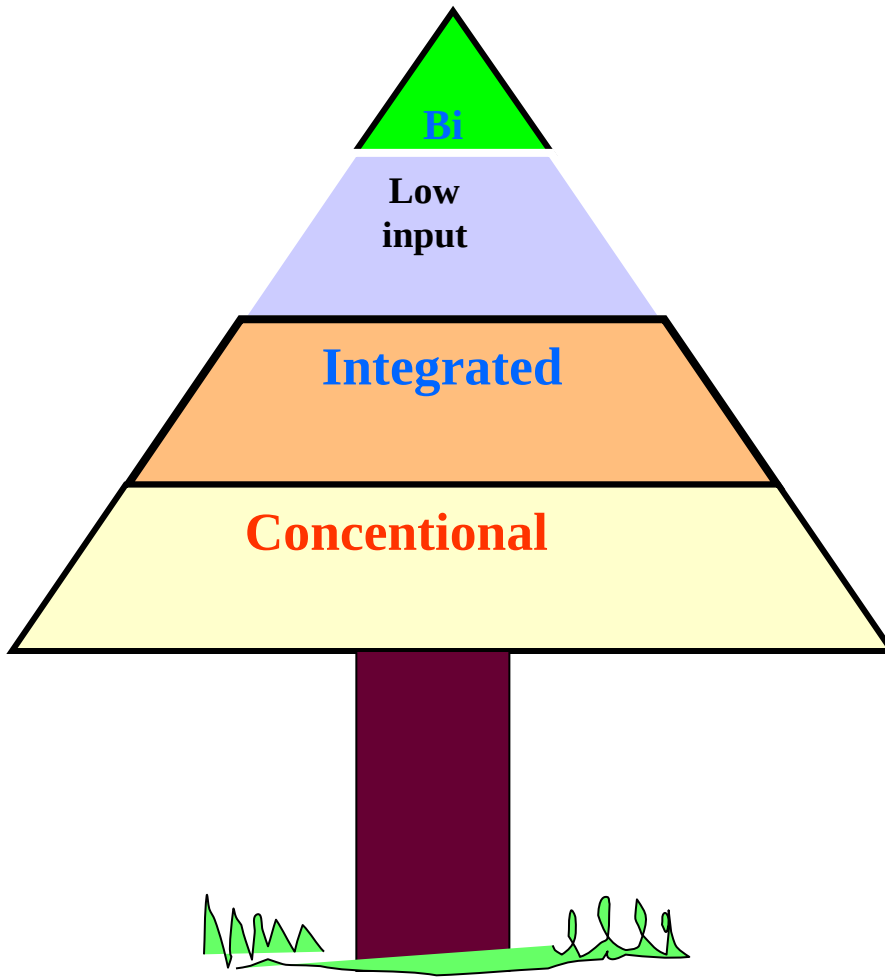


Priority of green technology demonstrated in bio vineyard in Albania.

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Organic agriculture in Albania



If we see agriculture as a seedling
Organic agriculture is a small segment of the tree
But is top of the tree
If we cut the top of the tree, or
Stoped its growth
The development is stoped too.

Organic agriculture has only 15 years experience

- . Are 250 bio-farm that produce vegetable, fruit, fresh herbs, olive and oil, grape and wine.
- . Has a certification body
- . Has a Institute for Organic Agriculture
- . Has a team for marketing
- . Has a law for production and marketing in organic agriculture (since 2004)
- Has not a national logo (but is working for that)

Some picture from organic production





Bio-Shops



Bio grape and wine production ; a positive example of green technology

In this example is demonstrated the economical and ecological priority of organic production in comparison with conventional vineyard

In the following tables are presented good agriculture practices implemented in bio-vineyard. Albania has 12.000 ha of vineyards.) and only 20 ha bio-vineyard

“Vila DUKA” vineyard, Durres region, 2012



Owner of vineyard E.DUKA, 2011



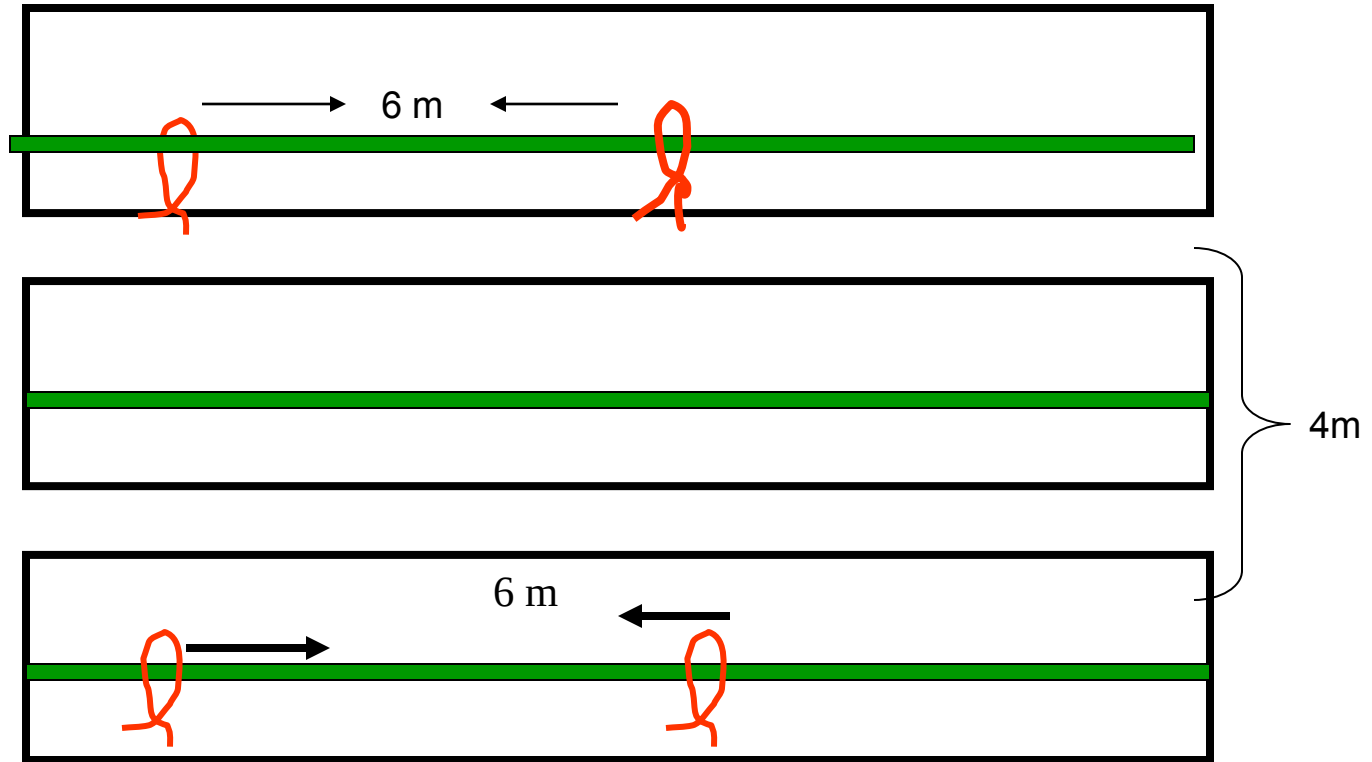
Hanging of dispenser of pheromones in the field



ISOMAT L



Hanging of pheromones against grape moth (Lobesia botrana)



Green manure in bio-vineyards



Green manure with (*Vicia faba*)



Production systems	Fertilization	Protection from oidium	Protection from (<i>Plasmopara viticola</i>)	Nr. of treatment against diseases and grape moth	Protection from grape morth (<i>Lobesia botrana</i>)	Infection from grape moth at the end of season
Organic vineyard	Organic manure & Green manure with the plant (<i>Vicia faba</i>) Herbagreen	Microthiol (80% Sulfur) (6 treatments)	Putilio bordoleze (Cupper) 6 treatments	6 Combination treatmnts	500 dispenser of pheromones/ha (ISONET L) Realized on the 28 th of April 2012 (Only 1 treatment)	2
Conventional vineyard	Diamonium Phosphate & Urea	Falcon and Folicur Nr.treatments 2	Melodi Combi(Bayer) and Mikal Flash(Bayer) Treatment.3	5	Decis (Deltamethrin and Calipso) 3 treatments	11

Systems	Ph	Humus %	N %	P2O5 ppm	K2O ppm	Organic matter %	Ca Total mg	Mg Total mg	Ca Active %	<i>Earthworm (Lumbricus Terrestis) m²</i>
Organic vineyard	7,5	1,7	0,100	16	30	8,5	27,5	8,5	4,8	8
Conventional vineyard	7,1	1,4	0,91	14	28	7,5	20	5,5	2,5	1

Conclusions and recommendation

- **Plant protection** :Biotechnical method with confusion pheromones have protect the production better than chemical insecticides. Infection from grape moth larvae was 2 % at bio-vineyard and 11 % in conventional vineyard
- **Soil fertilization** : The quantity of macro (NPK) and microelements (Mg) in the soil are in every case higher in bio-vineyard than in conventional vineyard .The organic mater (humus) is higher in bio-vineyard than in conventional vineyard, respectively 1,7 and 1,4 %
- **Environment impact**: The quantity of earthworms (*Lumbricus terrestris*) as main alive organism in the soil is eight time higher in the soil in vineyard managed organic way or concretely ; (8 *Lumbricus terrestris* for m² in organic vineyard and only 1 *Lumbricus terrestris* for 1 m² in the vineyard managing of conventional way)

- *That is so because the inputs used in bio-vineyard are much more friendly in comparison with the inputs used in conventional vineyard*
- **Efficiency of the farms in tow agricultural systems:** *One liter of wine produced with*
- *bio-grape origin is sold 5 Euro /liter and conventional wine is sold 3- 4 Euro for liter.*
- **Last Conclusion:** *The organic agriculture system need to stimulate and support because is an agricultural system with both priority; **economic** and **ecological** for today and future generations*



VILA DUKA bio wine in Fear, September, 2012



Visitors from Switzerland, September ,2012



***Thank you very
much !***