



ABONOS ORGANICOS

PEDRIN

www.organicospedrin.com

Brussels, 12th of may 2015

LOCATED IN MURCIA-SPAIN

ABONOS ORGANICOS
PEDRIN



**FAMILY BUSINESS SET UP IN THE
1940s**

ABONOS ORGANICOS
PEDRIN



**IT IS DEVOTED TO THE PRODUCTION AND
COMMERCIALIZATION OF ORGANIC
MATERIALS**





• NOWADAYS, WE ARE 15 PERMANENT EMPLOYEES AND 10 TEMPORARY WORKERS



• THE FIRM WORKS ON TWO LINES OF PRODUCTS:

- 1. CONVENTIONAL AGRICULTURE**
- 2. CONTROLLED/ECO-FRIENDLY AGRICULTURE**



• THE FIRM HAS SEALS OF QUALITY SUCH AS

- 1. ISO 9001:2008**
- 2. ISO 17025**



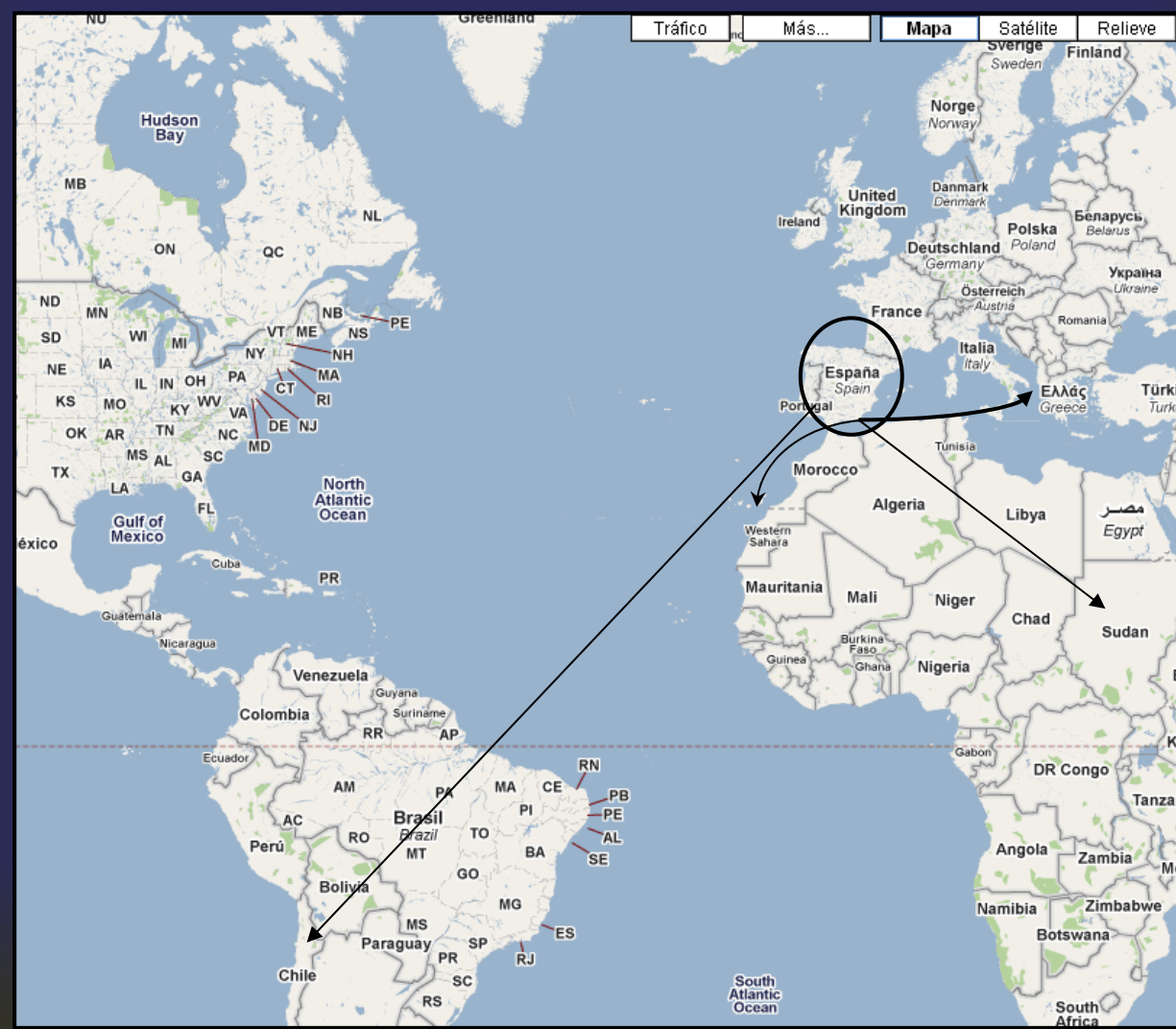
IT PARTICIPATES IN RESEARCH, DEVELOPMENT AND INNOVATION PROJECTS



IT HAS ITS OWN CENTRE FOR EXPERIMENTATION



OUR POINTS OF SALE ARE



WHERE IT IS APPLIED

ABONOS ORGANICOS
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WHERE IT IS APPLIED

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Benefits of application of organic materia

- 1. Improve the productivity of crops**
- 2. Favors the increment of biodiversity of the soils, reaching even the supresor condition soil**
- 3. Improve the retention of water and nutrients, reduce danger of lixiviation**
- 4. Guarantee the futur of agriculture at limiting desertization fhenomens, above all in South Europe countrys**

SOIL AND ORGANIC MATTER

Lithological material



Climate



Topography



SOIL

Biotic community



ORGANIC MATTER: i) A source of nutrients for plants.ii) Water retention; iii) Buffer action; iv) Control of cation exchange; v) Reduction of toxic effects of pollutants; vi) Improvement of soil aggregation

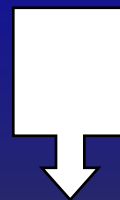
ORGANIC MATTER IMPROVES CHEMICAL, PHYSICAL AND BIOLOGICAL SOIL PROPERTIES

ORGANIC FERTILIZERS FOR SOILS



IMPORTANT ASPECTS ABOUT ORGANIC AMENDMENTS-FERTILIZERS

- 1) QUANTITY OF POLLUTANTS
(HEAVY METALS, SALINITY, PATHOGENS...)
- 2) WHERE AND HOW IT SHOULD BE USED

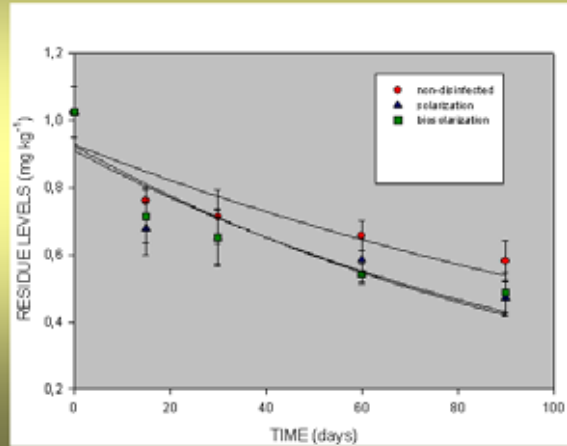


Compost

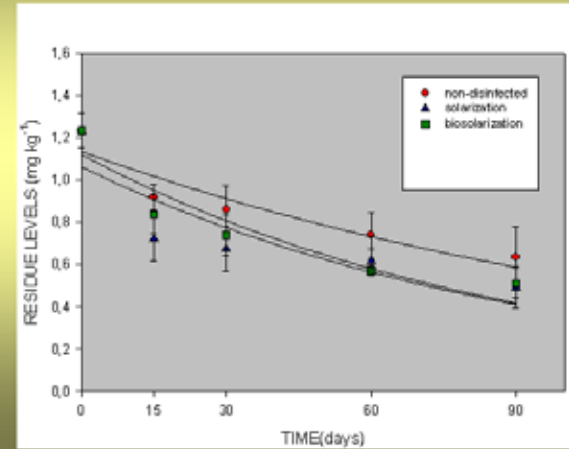
Compost management for enviromental use: an unique Addition in order to increase soil quality and productivity

Compost management for agriculture: Nitrogen, heavy metals

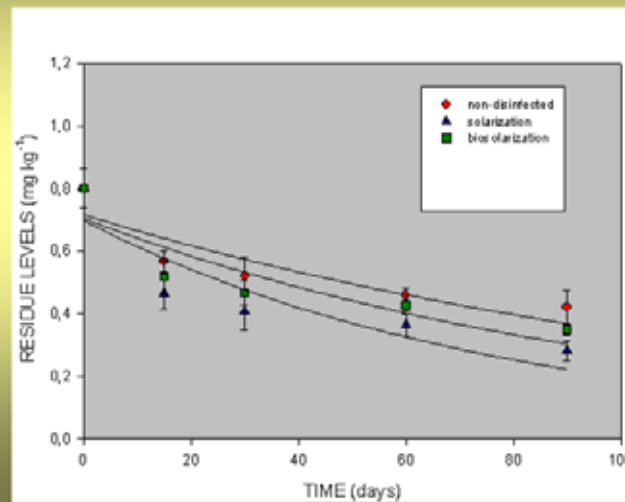
DISSIPATION OF AZOXYSTROBIN RESIDUES IN SOIL OF A GREENHOUSE PEPPER CULTIVATION FOR SOLARIZATION AND BIOSOLARIZATION TECHNIQUES



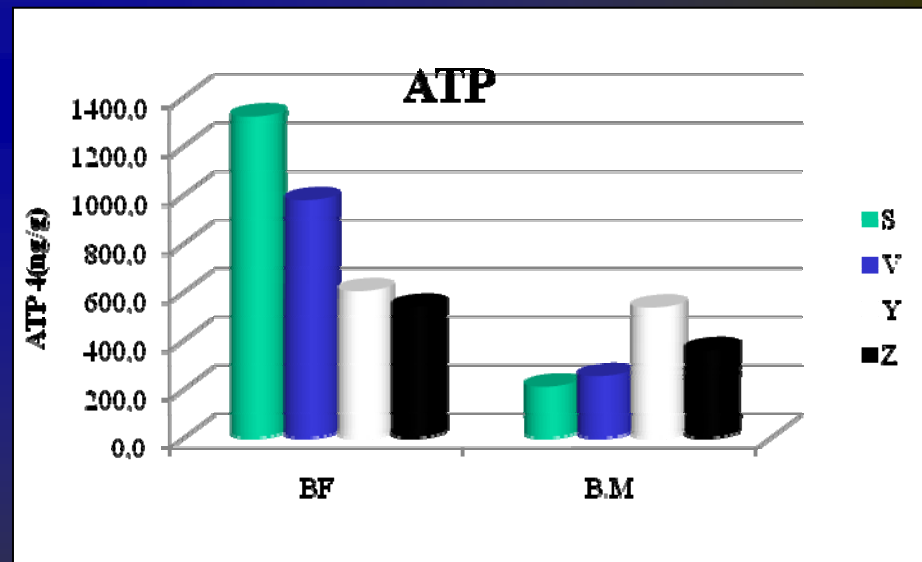
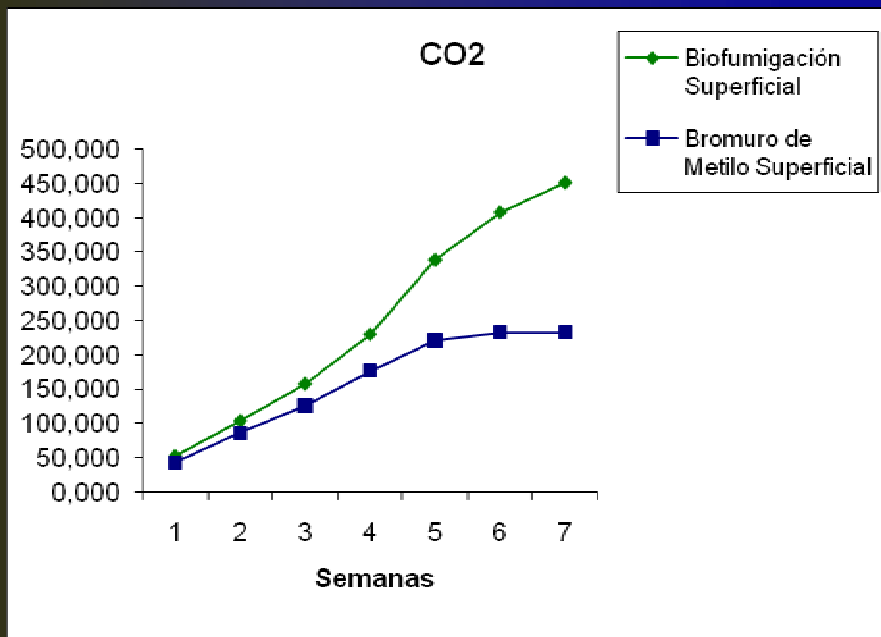
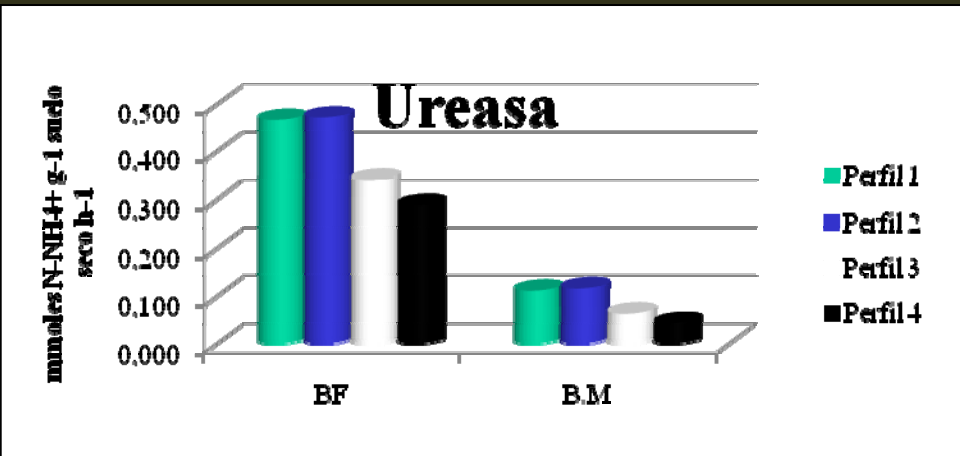
DISSIPATION OF CYPRODINIL RESIDUES IN SOIL OF A GREENHOUSE PEPPER CULTIVATION FOR SOLARIZATION AND BIOSOLARIZATION TECHNIQUES



DISSIPATION OF FLUDIOXONIL RESIDUES IN SOIL OF A GREENHOUSE PEPPER CULTIVATION FOR SOLARIZATION AND BIOSOLARIZATION TECHNIQUES



Fuente: Fenol et al., 2010



Strawberry



Fruits



Citrics



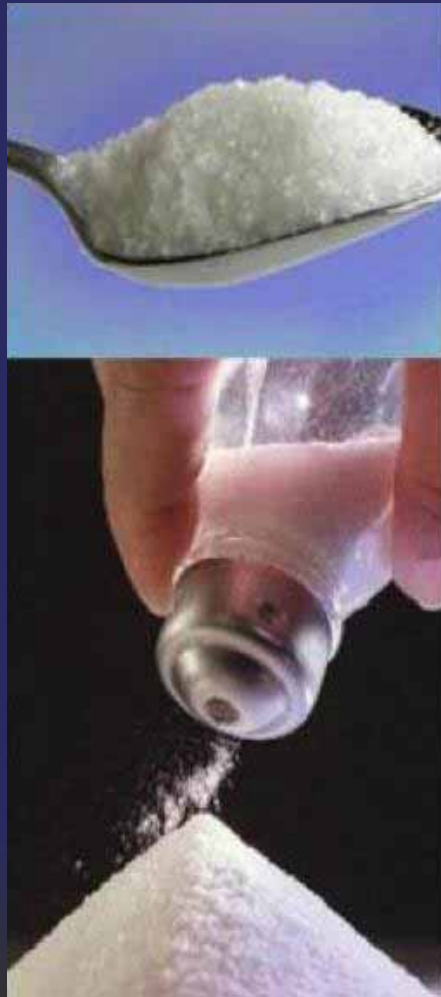
Citrics



Extensive



All that contains organic Carbon is valid for agriculture?



How much cost managing the wastes?



















**The organic materia applied is the adecuated?
and the dosis?**



A photograph showing a red tractor with a tillage implement, likely a moldboard plow or similar, working in a vineyard. The tractor is positioned on the left side of the frame, and the implement is cutting a furrow in the soil. The ground is covered with dry leaves and small rocks. In the background, there are several bare, light-colored trees, possibly grapevines, with some reddish-brown branches. A green oval with white text is overlaid on the center of the image.

Application in groove

Degradated soils



Degradated soils



Degradated soils





Bands application





Whit organic mater

Control

Whit organic mater



Control



Whit organic mater



Control



A wide-angle photograph of a lush green agricultural field, likely a vegetable or fruit crop, under a clear blue sky. In the background, there are rolling hills and mountains. A large, dark green oval is superimposed over the center of the image, containing the text "Ridge application" in white, bold, sans-serif font.

Ridge application





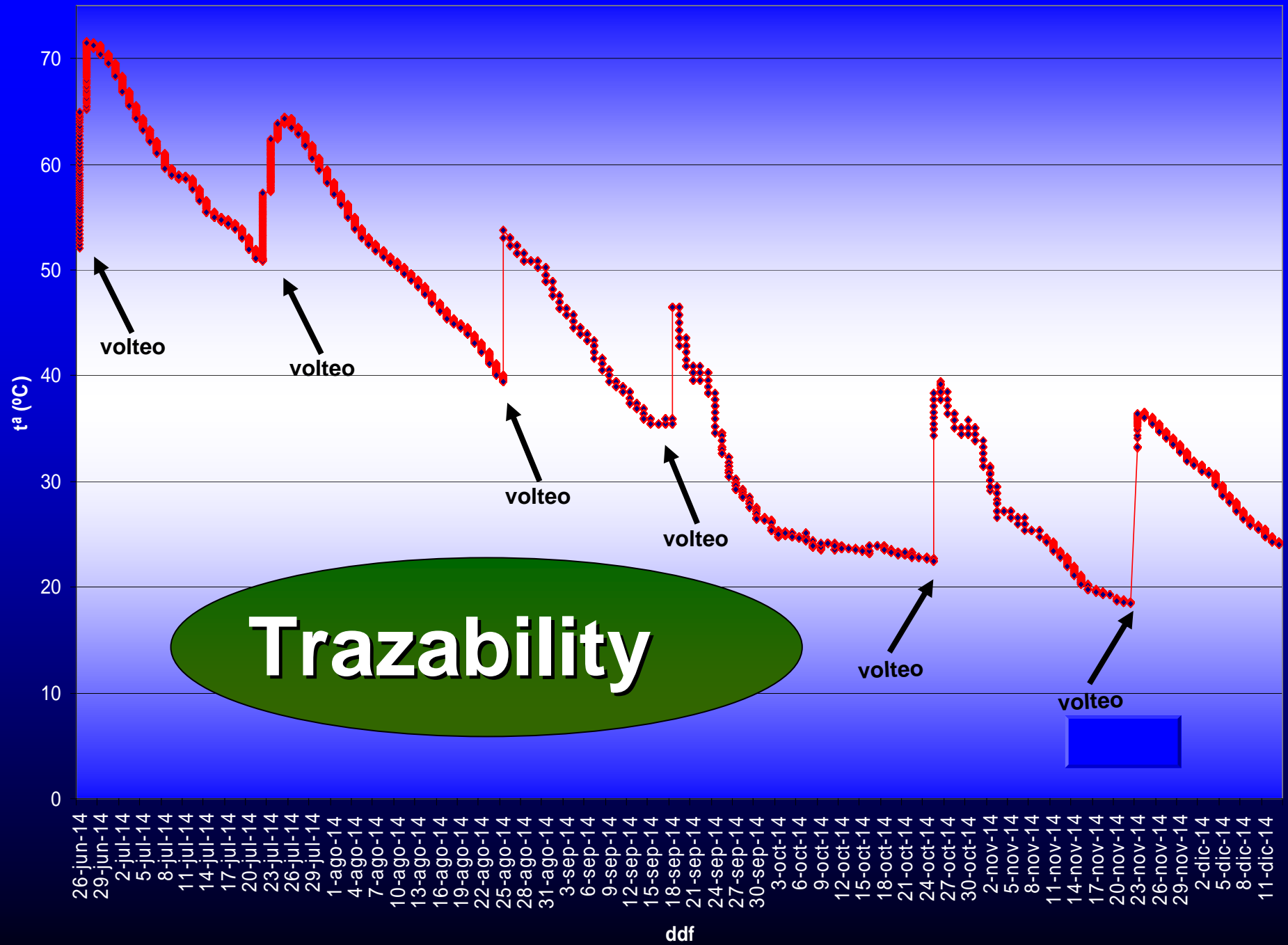




A photograph of a bell pepper in a field. The pepper is large and has a green-to-yellow gradient. It is surrounded by green leaves and stems. A green oval with a black border is overlaid on the center of the image, containing the text "Application in rivers" in white, bold, sans-serif font. The background shows dark soil and other plants in the field.

Application in rivers





Othe possible uses of organic materia

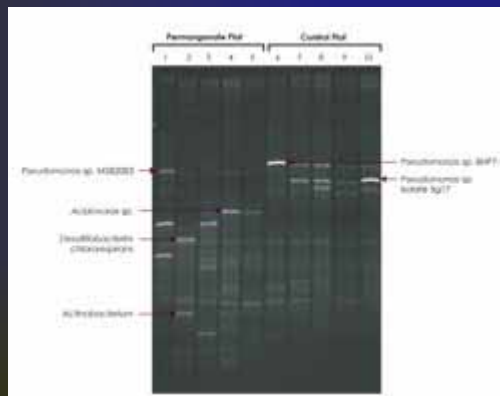


Biosolarization

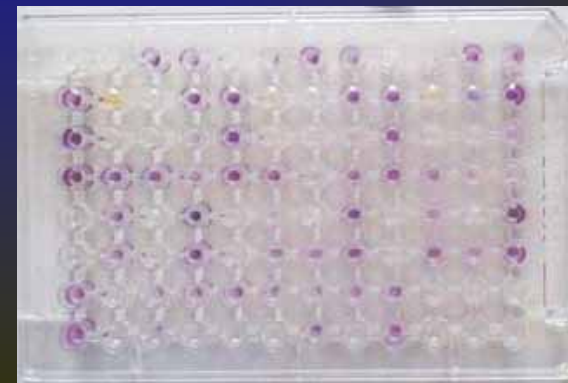
Objetives

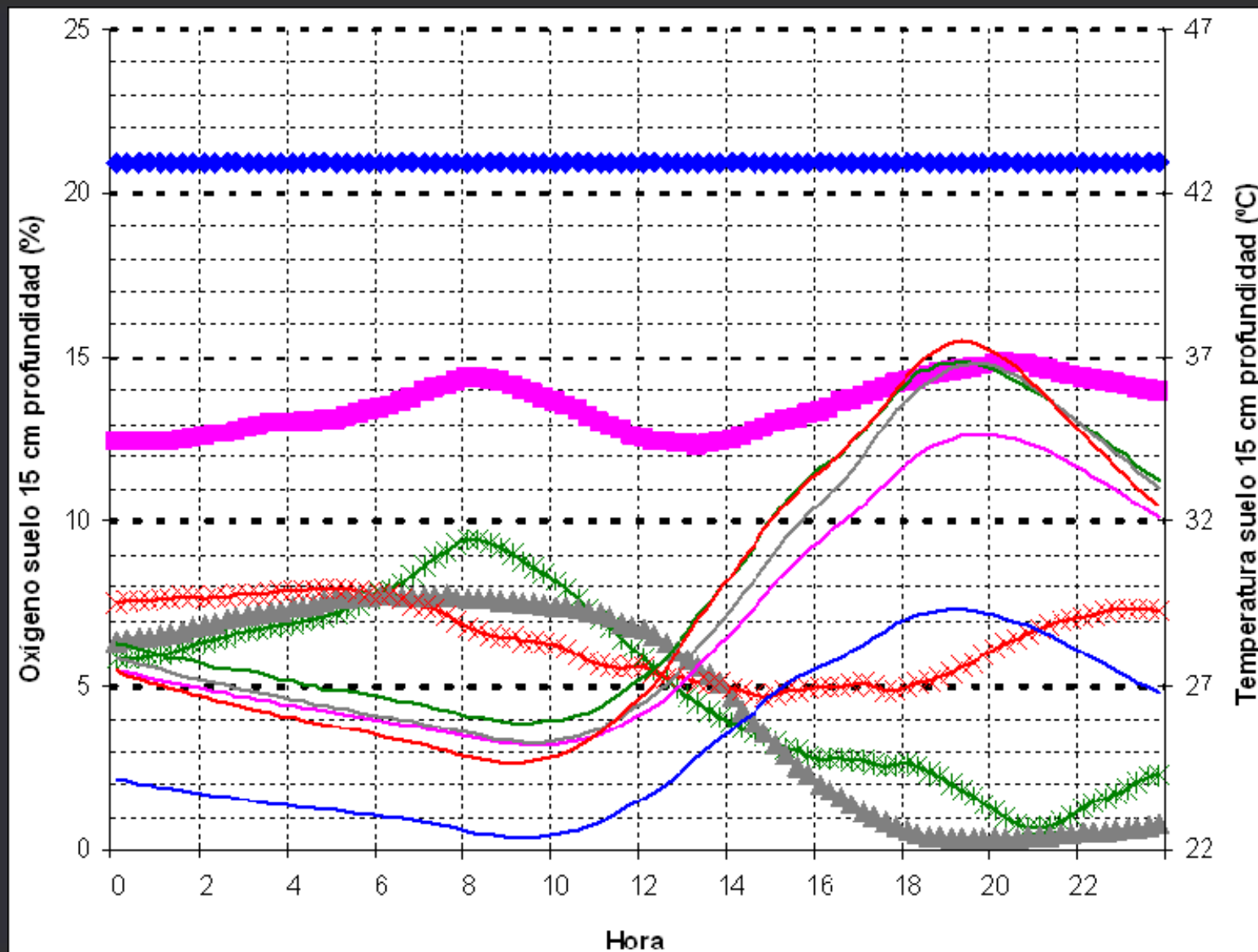
1. Mantain in the biosolarization process hipoxia (oxigen ausence)
2. Favor the antagonists development
3. Generation of volatil compounds of action: biocida, selective and complementary

Genetic Diversity
(DGGE)



Functional Diversity
(Ecoplacas)



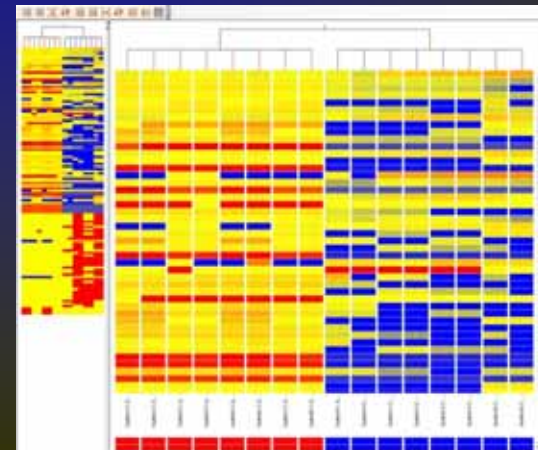






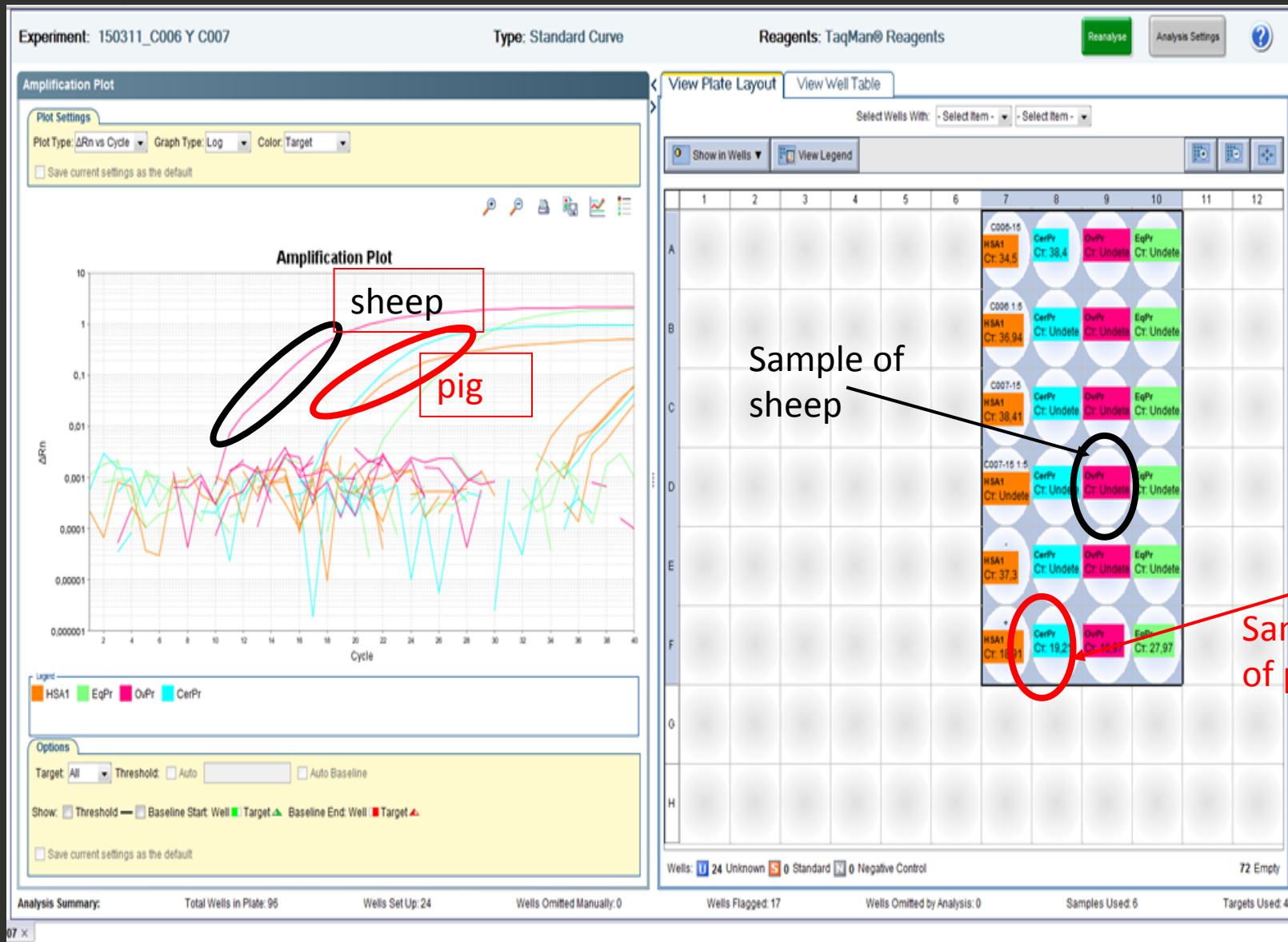
The organic amendments are characterized enough?

1. A physical-chemist analysis is enough?
2. Implementation of new analytic techniques; PLFAs (PhosphoLipid Fatty Acids), metabolomics techniques, proteomic techniques, (...)
3. Exigence of assays of efficiency and ecotoxicity
4. Essential knowing the source of the organic materia



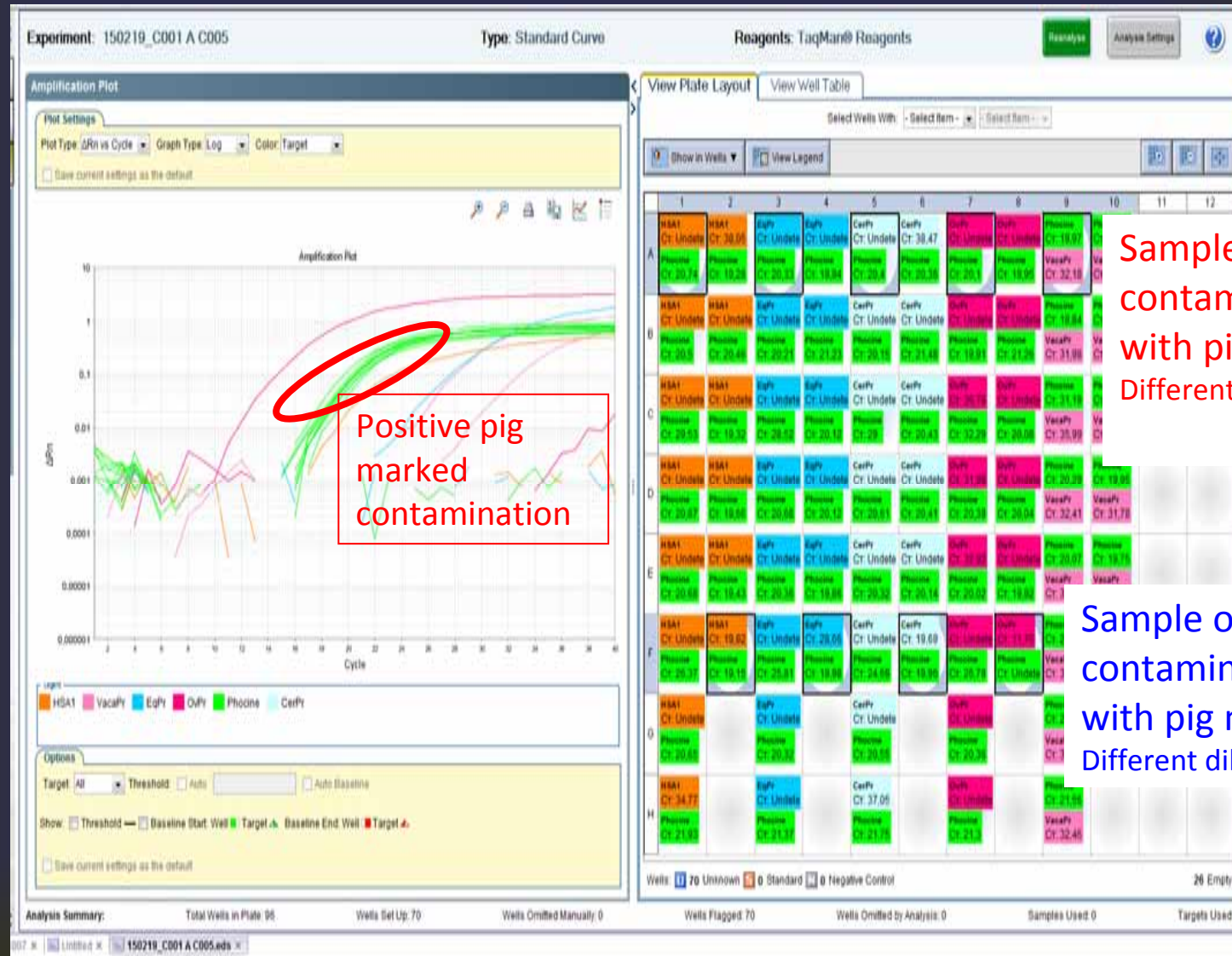
Target	Primer Fw	Primer Rv	Sonda
pig	CTGCATTAACAATCACCTTCCTA	GGGCA[REDACTED]TCATAGTAA	CCGAGCATCATACCCACGATTCCGATA
human	GAGCTCTTCTACAGCGTCACCAT	GCCGCACC[REDACTED]AGAGAAGATG	CGCGGCATCGCCTATTCTC
horse	TGGG[REDACTED]AGACA	CAGATCTCTGAGCATTGACCGTAGT	CTCTCGTGGCCTCTCGACCAGGACT
donkey	CATGCTAGCCTCATTATCAGTATTA ACTC	AA1[REDACTED].CGTGATGAGGAT	[REDACTED]CAACACCCACAAAAACAGC
cow	CGATTTTAAAGACTAGACCCACAAGTC	CAAAAAGTTGA[REDACTED]AACAAG	AATCACTCTATCGCTCATTG
sheep	CCGAGCATCATACCCACGATTCCGATA	CCGAG1[REDACTED]CGATTCCGATA	CC[REDACTED]CCACGATTCCGATA
chicken	GCCCATAT[REDACTED]AGGTT	CCTTAATAGCGGTTGCACCATT	CGACCTCGATGTTGGATCAGGACAACC

Example to differentiated pig from sheep manure



Example to differentiated different pig dilution into sheep manure

Preliminary conclusion: Possibility to detect contamination of pig manure till 1% on sheep manure



Sample of sheep contaminated with pig manure
Different dilutions

Sample of cow contaminated with pig manure
Different dilutions

Are the organic ammendments characterized enouth?

- 1. The mixture with agricultural waste can generate added problema: pesticides. We have detected in waste till 21 active materias**
- 2. What ammendments or waste or subproducts can or must be used in ecological agriculture?**
- 3. Who authorized? Certification companys?**

Agricultural waste

The most efficiency way and economic management the agricultural waste is the management in the own property



Agricultural waste

Cattle feeding, as the essence of protein. Europe need to import big quantities of protein



Agricultural waste

Management through the mixtures with other amendments
that give added valor and with defined objectives



Future organic vs not organic

The production of foods in Europe in a sustainable way is going to benefit the synergy of both models

Organique waste + inorganic fertilizer

