Press article
Soil Contamination

DECEMBER 2019

Press article long

Italian table grape farmers cooperate to improve soil quality

The extent of soil pollution in the EU is alarming. Altogether, over 137 000 km² (6.24% of all agricultural soils in Europe) need remediation activities.[1] In the Italian region of Apulia, 22 grape farmers are working together in a cooperative. One of their main aims is to manage and maintain healthy soil.

Cooperation among table grape farmers in this region is common. Cooperatives are very useful for marketing purposes, they help to increase negotiation capacity with retailers and markets. The cooperation is also very useful for maintaining healthy soils. One of these cooperatives is OP OROFRUIT located in Rutigliano, it brings together 22 table grape farmers and with its 220 ha of vineyards is one of the largest in the Apulia region.

Pasquale Parente works as an agronomist for OP OROFRUIT. "Our cooperative has set very high standards to keep our soil healthy and to increase its quality. Growing grapes is a very input-intensive process and it could potentially contaminate soils. This can happen by the overuse of fertilisers and other chemical inputs. Working together therefore is very powerful to prevent soil contamination", he says.

Several measures to improve and maintain soil quality are used by the members of the cooperative. Pasquale: "Central in our cooperation is the prevention and the possible increase of soil fertility through sustainable land management and green manure. Firstly, grinding rocks and mixing them with soil is the standard procedure in the area for cultivating table grapes. This increases soil depth and expands root growth penetration, providing them more water and nutrients. Moreover, the high content of calcium combined with good climatic conditions makes Apulia perfect for growing table grapes."

"Besides that, we have adopted a fertigation system based on the eco-physiological needs of the grapes. Fertigation is a technique that combines irrigation with fertilisation. It helps to maintain soil fertility, because it gives the adequate amount of fertiliser at the right time and the right place. The risk of contamination due to over-fertilisation is therefore reduced. In the end, it saves money for the farmers and increases potential yields. It is also a very useful tool to efficiently use water and nutrients, especially in this area where water is scarce."

"Besides the fertigation system, we go for a minimum use of pesticides and other chemicals. We normally apply some organic fertilisers as grapes are very demanding of nutrients which are easily absorbed. Finally, on some of our lands we combine reduced tillage associated with cover crops like legumes (i.e. *Vicia faba*). Biomass, from pruning for example, are added to the soil. Regarding the future, we can say that we are all open to try new technologies and soil management practices that will increase soil quality. If each farmer would use all these measures it would have some positive impact on soil, and in our cooperative this effect is positively multiplied 22 times." Pasquale concludes.

[1] Tóth, G., et al. 2016. "Heavy metals in agricultural soils of the European Union with implications for food safety." Environment international 88 (2016): 299-309.

funded by European Commission

Press article short

Italian table grape farmers cooperate to improve soil quality

The extent of soil pollution in the EU is alarming. Altogether, over 137 000 km2 (6.24% of all agricultural soils in Europe) need remediation activities. In the Italian region Apulia, 22 grape farmers are working together in a cooperative. One of their aims is to manage and maintain a healthy soil.

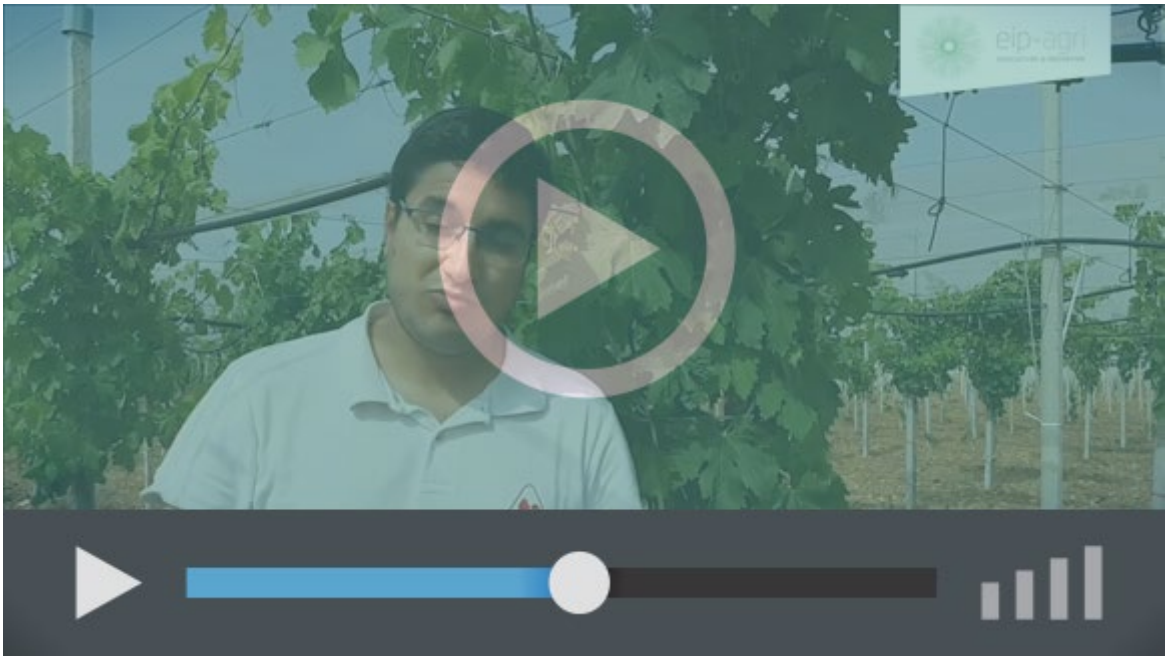
Pasquale Parente works as an agronomist for the cooperative OP OROFRUIT." Together we have set very high standards to keep our soil healthy and to increase its quality. Growing grapes is a very intensive process and it could potentially contaminate soils. This can happen by the overuse of fertilisers and other chemical inputs. Working together therefore is very powerful to prevent soil contamination", he says.

Several measures to improve and maintain soil quality are used. Pasquale: "Central in our cooperation is the prevention and the possible increasement of soil fertility through sustainable land management and green manuring. We have adopted a fertigation system based on the eco-physiological needs of the grapes. Fertigation is a technique that combines irrigation with fertilisation. It helps to maintain soil fertility, because it gives the adequate amount of fertilizer at the right time and the right place."

"We also go for a minimum use of pesticides and other chemicals. We normally apply some organic fertilisers as grapes are very demanding of those easy absorbed nutrients. When each farmer would use all these measures it would have some positive impact on soil, but in our cooperative this effect is positively multiplied 22 times", Pascquale concludes.

Background information

Watch the press article's movieclip



funded by European Commission

Project information

- **O.P. Orofruit Soc. Coop. Agricola**
  Pascual Parente
  info@orofruit.it - http://www.orofruit.it/

EIP-AGRI contact

Ina Van Hoye
Communication officer
EIP-AGRI Service Point
ina.vanhoye@eip-agri.eu
+32 486 90 77 43

Pictures

Click on the pictures to download the high resolution version. The pictures are free for use.

Pasquale Parente: "Our cooperative has set very high standards to keep our soil healthy and to increase its quality. Working together is very powerful to prevent soil contamination." – Copyright European Commission

Grinding rocks and mixing them with increases soil depth and expands root growth penetration, providing them more water and nutrients. – Copyright European Commission

More information on soil contamination

During a field visit of the EIP-AGRI Focus Group 'Soil contamination' (Bari, Italy, June 2019), the Focus Group experts visited Oro Fruit Cooperative in Rutigliano. The Focus Group members continue to work on the Focus Group report and the minipapers, scheduled to be published in 2020.

funded by European Commission

Operational Groups working on soil contamination

8 Operational Groups on soil contamination are available in the EIP-AGRI Operational Groups database (6 December 2019), are working on soil contamination.

Innovative phytosanitary risk management in vegetable crops	France
DIG-CONTROL - Operational Group for the experimentation of controlled distribution techniques of digestates and nitrification inhibitors	Italy
" Using Biochar as a biological filter for water purification: the fertilizer that cleans the environment"	Italy
Treatment of livestock waste products for the fixation of ammoniacal nitrogen (NH4+N) using magnesium by-products	Spain
FitoFarmGest - Sustainable management of phytopharmaceuticals in olive groves, vineyards and arable crops in the area of influence of EFMA	Portugal
MaisSolo	Portugal
Precision Irrigation	Portugal
GOEfluentes - Livestock effluents: strategic approach to the agronomic / energy valorization of the flows generated in agricultural activity	Portugal

EIP-AGRI

The European Innovation Partnership 'Agricultural Productivity and Sustainability' (EIP-AGRI) is one of five EIPs which have been launched by the European Commission in a bid to promote rapid modernisation of the sectors concerned, by stepping up innovation efforts. The EIP-AGRI aims to foster innovation in the agricultural and forestry sectors by bringing research and practice closer together – in research and innovation projects as well as via the EIP-AGRI network.
EIPs aim to streamline, simplify and better coordinate existing instruments and initiatives, and complement them with actions where necessary. Two specific funding sources are particularly important for the EIP-AGRI: the EU Research and Innovation framework, Horizon 2020, as well as the EU Rural Development Policy.

- EIP-AGRI Brochure on the EIP-AGRI Network (2015) (EN – BG – DE – ES – FR – GR – HU – IT – PT – RO)
- EIP-AGRI Brochure on Funding opportunities under Horizon 2020 – Calls 2019 Calls (EN)
- EIP-AGRI Brochure on Horizon 2020 Multi-actor projects (EN – BG – DE – FR – SI)
- EIP-AGRI Brochure on Thematic Networks under Horizon 2020 (EN – BG – DE – ES – FR – HU)

funded by European Commission

EIP-AGRI Operational Groups

- 98 rural development programmes (27 member states) provide support to EIP Operational Groups
- Over 3200 Operational Groups are expected to be established under the approved RDPs (2014 – 2020)
- Over 1000 Operational Groups projects have been selected for funding and are currently ongoing (or already finished)*

* Information officially submitted to the European Commission by RDP managing authorities (September 2019)

EIP-AGRI Operational Groups **are groups of people who work together in an innovation project funded by Rural Development Programmes** (RDPs). They bring together partners with complementary knowledge. The composition of the group can vary according to the theme and specific objectives of each project. Farmers, advisers, scientists, businesses or other relevant partners work together to find practical solutions for specific problems facing people in the European farming and forestry sectors. Farmers and foresters need to be closely involved throughout the project to ensure that the innovative solutions are relevant and likely to be quickly applied in the field.

Find out more in the **EIP-AGRI brochure on Operational Groups**. The brochure on Operational Groups is available in English, Bulgarian, Czech, French, German, Greek, Hungarian, Portuguese, Romanian, Slovak, Slovenian and Spanish

Operational Groups can benefit from networking and collaborating with organisations from outside their partnership and from other regions and countries, such as other Operational Groups, research projects, farmers' organisations or local authorities and European knowledge networks. Read the **EIP-AGRI Brochure 'Operational Groups – Collaborate to innovate'**. It shows some examples of successful collaboration. It provides Operational Groups with inspiration and tools for further knowledge exchange within the EIP-AGRI network. This brochure is available in English, Latvian, Romanian and Slovenian.

Check out the **'Operational Groups'** dedicated section on the EIP-AGRI website, including:

- More than 900 Operational Groups are available in the database
- detailed information on how to set up Operational Groups, on supporting networks and relevant EIP-AGRI seminars and workshops
- links to results and contact details of ongoing Operational Groups in the **EIP-AGRI database**
- a **list of all RDP Managing Authorities**

Contact information

Ina Van Hoye
Communication officer
EIP-AGRI Service Point
ina.vanhoye@eip-agri.eu
+32 486 90 77 43

funded by European Commission