

AgriTexSil



Co-financed by Greece and the European Union

On Monday, January 25, 2021, the web conference AGRITEXSIL was successfully completed as part of the research project "AgriTexSil".

Based on the number of participants and interest showed, it is clear that theme of the conference is interesting to a significant number of researchers, business executives and the academic community.

During the opening ceremony, the host of the web conference, Professor Nikolaos Katsoulas, welcomed everyone, and introduced the project partners and the members of his research team that are based at the University of Thessaly in Volos.

Professor Nikolaos Katsoulas pointed out the importance of using protective insect nets in the greenhouse, presenting their main characteristics. He, then, presented the project goals with a brief reference to the work packages, the timetable and the deliverables. At the end of his speech he presented photographic material from the partners meetings and extra actions that were taken in the context of disseminating the results of the project, such as publications in international scientific journals, participation in conferences, etc.

The following presenters were Sofia Faliagka (UTH), Christopher Schulte (Powder and Surface P&S), Mark Pätzel (Institut für Textiltechnik der RWTH Aachen University) and, last but not least, Panagiotis Xydas (THRACE NG) who discussed their experimental results, so far.

The project Partners from Greece and Germany presented their actions during the implementation of the Project, emphasizing the most important parts of it and their results in regards to the overall objectives, as described below:

- Results of the evaluation of silicon powders and nets coated with silicon nanoparticles against greenhouse and storage insects
- Results of the evaluation of the permeability of three nets with different holes opening after their coverage with SiO₂
- Presentation of a new net coating method based on the application of cold plasma technology in combination with dust nanoparticle technology and its mode of operation
- Evaluation results of a suitable fiber shape to retain the greatest possible amount of silicon on the net surface

- Characterization of the mechanical properties of silicon coated nets

The ultimate aim of the "AgriTexSil" (<http://www.agritexsil.eu/>) project is to increase the growers' profitability with minimum impact on the environment. The project aims to develop a net covered with silicon dioxide, which is known to damage insects as it causes dehydration after it is absorbed by their protective shell. This, will contribute to (a) crop production in an environmentally friendly way and (b) protection from the insects without the use of pesticides.

We would also like to inform you that:

In the following link you will find the presentations made by the speakers:

University of Thessaly: [UTH 1](#) [UTH 2](#) [UTH 3](#)

Thrace NG: [Thrace NG](#)

Institut für Textiltechnik der RWTH Aachen University: [ITA 1](#) [ITA 2](#)

Powder and Surface GmbH: [P&S](#)

You can watch the web conference on the channel of the Agricultural Construction Laboratory and Environmental Control at the following Link: [YouTube video](#).

Please follow our facebook page @agritexsil and visit the official page of the program <http://www.agritexsil.eu/> for more updates and news.

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