D6.3 Report on dissemination and outreach activities

1

Version: M48

The research project was supported by the Hellenic Foundation for Research and Innovation (H.F.R.I.) under the “1st Call for H.F.R.I. Research Projects to support Faculty Members & Researchers and the Procurement of High-and the procurement of high-cost research equipment grant” (Project Number: 50).

Beneficial Microbes to Optimize pest control in Sustainable Tomato production

BeMOST

HFRI-FM17-50

Category	**Category I**
Scientific area:	**Agricultural Sciences – Food Science & Technology**
Principal Investigator (PI):	**Maria Pappa**
Host Institution:	**Democritus University of Thrace**
Cooperative Organizations:	**1. University of Thessaly** **2. University Hohenheim** **3. German Centre for Integrative Biodiversity Research**
Project duration:	**48 months (08/01/2020-07/01/2024)**

Deliverable:	**D6.3**
Work Package	**WP6. Dissemination and Communication**
Month of Delivery:	**M48**
Dissemination Level:	**Public**
Version:	**100%**

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Contents

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Summary

D6.2 is a deliverable of WP6 which objectives are:

6.1. To develop and implement the plans for effective dissemination of the project, its activities and results employing a range of communication and dissemination tools;

6.2. To raise public awareness in the project aims and results;

6.3. To coordinate communication activities aiming at the scientific community and stakeholders.

In the context of the WP6 objectives, the present version of D6.3 presents the dissemination and communication activities of the project from M1 to M48.

The research project was supported by the Hellenic Foundation for Research and Innovation (H.F.R.I.) under the "1st Call for H.F.R.I. Research Projects to support Faculty Members & Researchers and the Procurement of High-and the procurement of high-cost research equipment grant" (Project Number: 50).

Dissemination activities

During the project, BeMOST members contributed to the following publications.

Publication #1	
Title	Pappas M.L., P. Baptista, G.D. Broufas, A. Dalakouras, W. Djobbi, V. Flors, M. Msaad Guerfali, S. Khayi, R. Mentag, V. Pastor, J.A. Pereira, P. Sánchez-Bel, K. Papadopoulou (2020). Biological and Molecular Control Tools in Plant Defense. In "Plant Defence: Biological Control", Eds Jean-Michel Mérillon and Kishan Gopal Ramawat. Springer, 3-43.
Dates	21/10/2020
Type	Book chapter

Publication #2	
Title	Samaras K., Mourtiadou S., Arampatzis T., Kakagianni M., Feka M., Wäckers F., Papadopoulou K.K., Broufas G.D., Pappas M.L. (2023). Plant-Mediated Effects of Beneficial Microbes and a Plant Strengthener against Spider Mites in Tomato. Plants, 12 (4), art. no. 938, doi: 10.3390/plants12040938
Dates	18/02/2023
Type	Journal article

Publication #3	
Title	Pappas M.L. (2022). Microbes enhance tomato defences. AGRO.TECH Magazine, 48-49 (in Greek).
Dates	July-August 2022
Type	Journal article

Publication #4	
Title	Pappas M.L., Samaras K., Ntalia P., Broufas G.D. (2023). Spider mites perform worse on soil microbe-inoculated plants: from the lab to the greenhouse. In Proceedings of the 8th Meeting of the IOBC-WPRS Working Group "Integrated Control of Plant-Feeding Mites", Broufas G., Le Hesran S., Marčić D., Palevsky E., Simoni S., Vangansbeke D., Walzer A., Zemek R. (eds.).
Dates	09/2023
Type	IOBC Bulletin article

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Publication #5	
Title	Pappas M.L. (2023). Beneficial soil microbes and zoophytophagous predators as plant 'vaccination' agents against arthropod pests. In: Proceedings of the joint Meeting of the Working Groups Integrated Control of Protected Crops, Temperate and Mediterranean Climate, Rapisarda C., Dreux L., Gobin B. and Messelink G. (eds).
Dates	08/2023
Type	IOBC Bulletin article

Publication #6	
Title	Samaras K., Ntalia P., Bechtsoudis A., Broufas G.D., Pappas M.L. (2023). Plant-mediated effects of beneficial soil microbes on natural enemies. In: Proceedings of the joint Meeting of the Working Groups Integrated Control of Protected Crops, Temperate and Mediterranean Climate, Rapisarda C., Dreux L., Gobin B. and Messelink G. (eds).
Dates	08/2023
Type	IOBC Bulletin article

and worked on the following manuscripts which are planned to be submitted for publication:

Publication #	
Title	Arampatzis Th., Mourtiadou S., Zamioudis C., Papadopoulou K., Broufas G.D. & Pappas M.L. Plant-mediated effects of soil bacteria against thrips, whiteflies, aphids and *Tuta absoluta* in tomato (e.g. *Pest Management Science*)
Dates	To be submitted
Type	Journal article

Publication #	
Title	Mourtiadou S., Arampatzis Th., Kakagianni M., Feka M., Broufas G.D., Papadopoulou K. & Pappas M.L. Plant-mediated effects of soil fungi against thrips, whiteflies, aphids and *Tuta absoluta* in tomato (e.g. *Frontiers in Plant Science*)
Dates	To be submitted
Type	Journal article

The research project was supported by the Hellenic Foundation for Research and Innovation (H.F.R.I.) under the "1st Call for H.F.R.I. Research Projects to support Faculty Members & Researchers and the Procurement of High-and the procurement of high-cost research equipment grant" (Project Number: 50).

Publication #	
Title	Samaras K., Weinhold A., van Dam N., Broufas G.D. & Pappas M.L. Plant-mediated effects of soil microbes on natural enemies of pests (e.g. *Frontiers in Plant Science*)
Dates	To be submitted
Type	Journal article

Also, BeMOST participated in the following scientific conferences and meetings.

Conference *#1*	Entomology 2020
Title	Mourtiadou S., Arampatzis T., Kakagianni M., Feka M., Papadopoulou K., Broufas G. & Pappas M. L. (2020). Plant-mediated effects of beneficial soil microbes against arthropod pests. Entomology 2020 Virtual Annual Meeting, Entomological Society of America (ESA).
Dates	11-25/11/2020
Type	Oral presentation
Place	Online

Conference *#2*	BES Annual Meeting 2021
Title	Samaras K., Ntalia P., Mourtiadou S., Arampatzis T., Broufas G. & M.L. Pappas (2021). The hidden role of beneficial soil microbes against spider mites, whiteflies and thrips in tomato.
Dates	12-15/12/2021
Type	Poster
Place	Liverpool, UK & Online

Conference *#3*	IHC 2022
Title	Samaras K., Ntalia P., Broufas G. & M.L. Pappas (2022). Beneficial soil microbes to enhance tomato resistance against arthropod pests.
Dates	14-20/08/2022
Type	Oral
Place	Angers, France

Conference *#4*	19th Panhellenic Entomological Congress
Title	Samaras K., Ntalia P., Bechtsoudis A., G.D. Broufas & M.L. Pappas (2022). Effects of beneficial soil microbes on the biology of natural enemies.
Dates	23/5-27/5/2022
Type	Poster
Place	Agrinio, Greece

The research project was supported by the Hellenic Foundation for Research and Innovation (H.F.R.I.) under the "1st Call for H.F.R.I. Research Projects to support Faculty Members & Researchers and the Procurement of High-and the procurement of high-cost research equipment grant" (Project Number: 50).

Conference *#5*	19th Panhellenic Entomological Congress
Title	Ntalia P., Samaras K., Bechtsoudis A., G.D. Broufas & M.L. Pappas (2022). Effects of beneficial soil microbes on the behavior of natural enemies.
Dates	23/5-27/5/2022
Type	Poster
Place	Agrinio, Greece

Conference *#6*	19th Panhellenic Entomological Congress
Title	Pappas ML., Samaras K., Ntalia P., Feka M., Papadopoulou K. & G.D. Broufas (2022). Effects of beneficial soil microbes against herbivorous pests.
Dates	23/5-27/5/2022
Type	Oral
Place	Agrinio, Greece

Conference *#7*	British Ecological Society Annual Meeting 2022
Title	Pappas ML, Avramidou M., Samaras K., Ntalia P., Kakagianni M., Papadopoulou K. & G.D. Broufas (2022). Beneficial soil microbe-mediated tomato responses against spider mites.
Dates	23/5-27/5/2022
Type	Oral
Place	Online

Conference *#8*	European Congress of Entomology ECE2023
Title	Pappas M.L., Samaras K., Ntalia P., Mourtiadou S., Arampatzis T., Avramidou M., Feka M., Kakagianni M., Weinhold A., Steppuhn A., van Dam N.M., Papadopoulou K., & G.D. Broufas (2023). Beneficial microbes to optimize pest control in sustainable tomato production
Dates	16-20/10/2023
Type	Oral
Place	Heraklion, Greece

The research project was supported by the Hellenic Foundation for Research and Innovation (H.F.R.I.) under the "1st Call for H.F.R.I. Research Projects to support Faculty Members & Researchers and the Procurement of High-and the procurement of high-cost research equipment grant" (Project Number: 50).

Conference *#9*	8th Meeting of the IOBC-WPRS Working Group “Integrated Control of Plant-Feeding Mites”
Title	Pappas M.L., Samaras K., Ntalia P., Broufas G.D. (2023). Spider mites perform worse on soil microbe-inoculated plants: from the lab to the greenhouse.
Dates	4-7/09/2023
Type	Oral
Place	Belgrade, Serbia

Conference *#10*	Joint Meeting of the Working Groups Integrated Control of Protected Crops, Temperate and Mediterranean Climate
Title	Pappas M.L. (2023). Beneficial soil microbes and zoophytophagous predators as plant ‘vaccination’ agents against arthropod pests.
Dates	27-31/08/2023
Type	Oral
Place	Brest, France

Conference *#11*	Joint Meeting of the Working Groups Integrated Control of Protected Crops, Temperate and Mediterranean Climate
Title	Samaras K., Ntalia P., Bechtsoudis A., Broufas G.D., Pappas M.L. (2023). Plant-mediated effects of beneficial soil microbes on natural enemies.
Dates	27-31/08/2023
Type	Poster
Place	Brest, France

Conference *#12*	10th International Conference Mikrobiokosmos
Title	Pappas M.L., Samaras K., Ntalia P., Broufas G.D. (2023). Plant-mediated effects of beneficial soil microbes on herbivore populations in the greenhouse.
Dates	30/11-02/12/2023
Type	Poster
Place	Larissa, Greece

The research project was supported by the Hellenic Foundation for Research and Innovation (H.F.R.I.) under the “1st Call for H.F.R.I. Research Projects to support Faculty Members & Researchers and the Procurement of High-and the procurement of high-cost research equipment grant” (Project Number: 50).

BeMOST results were presented to the following scientific meetings.

Meeting *#1*	Soildatiry Horizon EU project meeting (invitation: Prof. Cristina Cruz)
Title	Presentation of the BeMOST project, objectives & results
Dates	25/11/2022
Type	Oral
Place	Online

Meeting *#2*	Acarological Society of America (invitation: Dr. Emilie Demard)
Title	Presentation of the BeMOST project, objectives & results
Dates	15/11/2023
Type	Oral
Place	Online

Meeting *#3*	Koppert NL meeting (invitation: Dr. Susanne Lommen)
Title	Presentation of the BeMOST project, objectives & results
Dates	28/11/2023
Type	Oral
Place	Online

The research project was supported by the Hellenic Foundation for Research and Innovation (H.F.R.I.) under the "1st Call for H.F.R.I. Research Projects to support Faculty Members & Researchers and the Procurement of High-and the procurement of high-cost research equipment grant" (Project Number: 50).

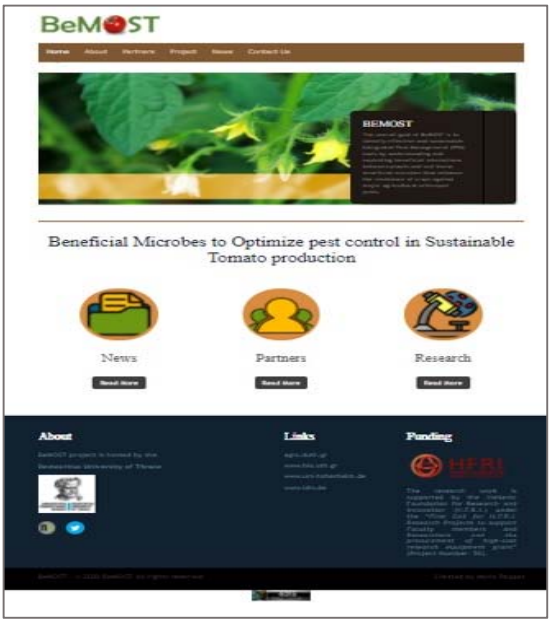
Communication activities

During the reporting period, BeMOST communication activities include the development of the project's website and logo as well as social media pages.

BeMOST Website & Logo

The project's website (https://bemost.agro.duth.gr) is available since month 3. It is hosted by Democritus University of Thrace server and updated by the PI.

The main page (print screen below) provides direct access to the News, Partners description and Research activities. HFRI funding is acknowledged in a prominent position, links to partners Institutions, the project's logo and icons to the social media accounts are provided in all pages.



The main menu provides access to the general aims and objectives of the project ('About'), to the different partners of the research team ('Partners'), to the WP, deliverables and dissemination activities ('Project') and to the project's news ('News'). In addition, the website includes a contact form that is connected to the project's email address. Hits (i.e., visits to separate pages) are recorded. To date, 4015 visits to the main page from different countries have been recorded.

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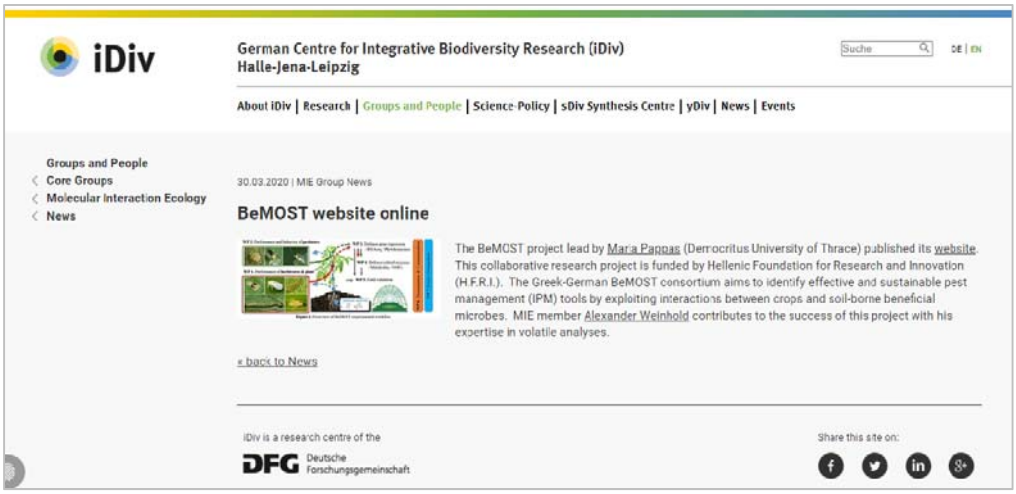
The project's logo (see in the right) was created during the first month of the project. It features the project's acronym and the tomato fruit. It is placed on the project's website and social media pages. In addition, it is used in all documents of the project (vacancy announcements, letters etc.).

Announcement of partners webpages

The launch of the project's website was announced on the 'News' section of the Molecular Interaction Ecology group at iDiv:

https://www.idiv.de/en/groups-and-people/core-groups/molecular-interaction-ecology/news/mie-news-single-view/1687.html

and below:



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In addition, BeMOST is included in the webpage of our partner from the University of Hohenheim, under the 'Projects' section:
https://botanik.uni-hohenheim.de/en/molecular-botany_projects

Social Media

Dissemination and communication with the scientific community and the general public are also performed by means of social media (Twitter and Facebook) accounts. The PI is the administrator of BeMOST social media accounts that are updated regularly to raise awareness about the project itself but also about scientific advancements and environmental challenges. Social media are used to

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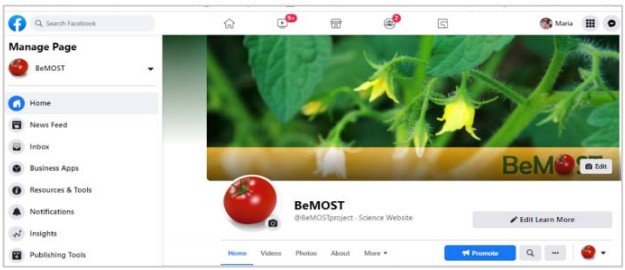
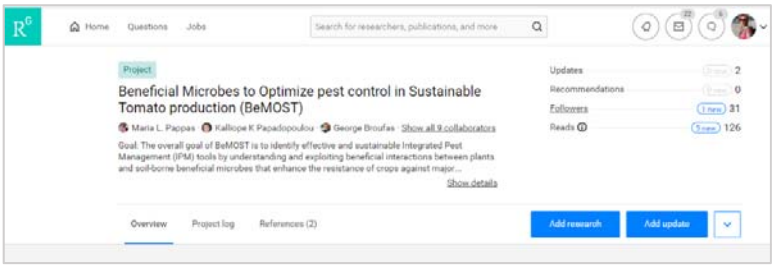
announce publications, project news and partners achievements and participation to conferences. A dedicated Twitter page (https://twitter.com/BeMOST_project) has been created that is regularly updated by the PI. Currently, it has 125 Followers and has hosted more than 70 posts.

BeMOST runs a Facebook page (https://www.facebook.com/BeMOSTproject) with the aim to communicate the project's news and outcomes in English and Greek.



A ResearchGate page (https://www.researchgate.net/project/Beneficial-Microbes-to-Optimize-pest-control-in-Sustainable-Tomato-production-BeMOST) has been created to disseminate the project's scientific publications.



BeMOST participates in the Dissemination and Communication activities of HFRI with regard to the '1st Call for H.F.R.I. Research Projects to support Faculty Members & Researchers and the Procurement of High-and the procurement of high-cost research equipment grant'

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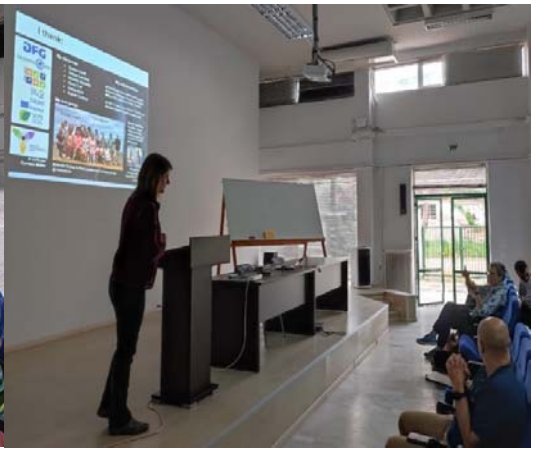
https://www.elidek.gr/ereynitika-erga-melon-dep-ereyniton-trion/meli-dep/e-p-4-geoponikes-epistimes-kai-trofima/

Workshop

A workshop was held during the visit of our collaborators, Prof Nicole van Dam (iDiv) and Prof. Anke Steppuhn (University of Hohenheim) in Orestiada, Greece (21-23/05/2023). Dr. Alexander Weinhold attended the meeting online due to health issues. More than 30 students and faculty members attended the workshop and had the opportunity to discuss with the speakers.



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Delays & Difficulties

Main delays and difficulties faced during the project are related to the covid-19 pandemic, the travel restrictions and the cancellation or postponement of physical conferences. In addition, because of the pandemic, planning and organizing any physical meeting was not possible.

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