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## COST Action CA16107 EuroXanth: integrating science on *Xanthomonadaceae* for integrated plant disease management in Europe

## Minutes of the Zoom Meeting "First steps towards a COST Innovators Grant"

9 December 2020, 11:00 - 12:30

## Minutes of the Zoom meeting written by R. Koebnik and reviewed by all participants.

Attending: Miroslav Baránek (CZ, WG1), Pavel Beran (CZ, WG1), Jens Boch (DE, WG3 Leader), Saul Burdman (IL, WG4), Daiva Burokienė (LT, WG1), Bart Cottyn (BE, WG1), Edyta Đermić (HR, WG4), Katarina Gašić (RS, WG1), Marie-Agnès Jacques (FR, WG1, Internal and Financial Monitoring Reporter), Monika Kałużna (PL, WG1, STSM Coordinator), Ralf Koebnik (FR, WG2, Action Chair), Roland Kölliker (CH, WG3 Vice Leader), Judit Kolozsváriné Nagy (HU, WG1), Jordan Merkuri (AL), Inga Morocka-Bicevska (LV, WG1), Aleksa Obradović (RS, WG4), Hatice Özaktan (TR, WG4), Joël F. Pothier (CH, WG2 Leader), Guido Sessa (IL, WG2), and Joana Vicente (GB, WG1, Science Communication Manager).

On December 9, twenty MC Members from 15 countries met via Zoom in order to discuss the opportunity of submitting a COST Innovators Grant (CIG) proposal. After a brief welcome, Ralf explained what a CIG is, how one can apply and how it is evaluated. Importantly, Ralf highlighted that this is not a typical research grant but a grant that uses the same instruments and networking tools as a regular COST Action does.

In preparation of the meeting, Ralf had invited all MC Members to contribute ideas for possible CIG proposals. Expressions of interest had been obtained from Jan van der Wolf (NL, WG2), Hatice Özaktan (TR, WG4), Jaime Cubero (ES, WG2), Alexandre de Menezes (IE, WG1), Ralf Koebnik (FR, WG2), and Monika Kałużna (PL, WG1). Except for the one from Jan, who was prevented from attending at short notice, all ideas were shared and discussed with all participants:

- 1. Hatice Özaktan: "Microbiome Applications from Lab to Field"; or "Microbiome Engineering".
- 2. Jaime Cubero (presented by Ralf): "Improvement and development of new strategies for disease diagnosis and *Xanthomonas/Xylella* detection based on virulence targets (effectors)"
- 3. Alexandre de Menezes (presented by Ralf): "XylellalXanthomonas infection VOC profiles (volatinome) for disease monitoring and early detection"
- 4. Alexandre de Menezes (presented by Ralf): "Linking plant microbiome (root, shoot, leaf) data to plant/crop disease resistance/susceptibility risk"
- 5. Ralf Koebnik: "Bacteriophages from Research to Application"
- 6. Ralf Koebnik: "Social Media and Databases for an Informed Community"
- 7. Monika Kałużna: "Development of quick diagnostic/commercial kits for pathogen detection, based on e.g. LAMP or other primers, together with an external company"

Proposals (2) to (4) will be explained by the initiators in more detail during the next meeting on December 17. This will then allow to see whether these proposals intend to make use of the COST instruments or if they are rather research proposals, which seemed to be the case for proposal (4). Here, direct interaction with the initiators will certainly help to understand the ideas behind these concept notes.

Discussions allowed identifying overlap between different proposals. For instance, proposals (1), (4) and (5) all address **microbiota**, their analysis and their manipulation to the benefit of the plant. Such a proposal could and should also address questions of acceptance and legislation. Similarly, proposals (2) and (7) are complementary, both aiming at **molecular diagnostics**, and may also incorporate parts of proposal (6), such as the effector DokuWiki and/or databases on effectors and molecular

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markers. Diagnostics and diversity were topics that were well addressed during the WG1 Meeting in Zagreb (<a href="https://euroxanth.eu/events/wg-meetings/wg-meeting-2">https://euroxanth.eu/events/wg-meetings/wg-meeting-2</a>); and resources from this meeting could help in draftimg and developing a CIG proposal. It was briefly discussed if CRISPR/Cas12-based detection tools, as used in some SARS-CoV-2 diagnostic tools, should be an option for future developments. agdia<sup>®</sup> (<a href="https://www.agdia.com">https://www.agdia.com</a>) could be a candidate partner company for diagnostic tools since they have already participated in the EuroXanth COST Action during the 1st Training School at Crete (<a href="https://euroxanth.eu/events/training-schools/training-school-1">https://euroxanth.eu/events/training-schools/training-school-1</a>). Proposal (3), although also aiming at pathogen detection, appeared to rather stand alone.

In conclusion, two major topics were identified as candidate projects for a CIG proposal, (i) microbiota, and (ii) diagostics and diversity. Initiators were invited to further develop their ideas, maybe starting with smaller core groups, which can then be enriched by other interested partners and their specific expertise. It was suggested by Miroslav that the different proposals should be summarised on a 1-page datasheet so that one can easily grab the message and evaluate whether it makes sense to participate and how to bring in extra expertise to the benefit of the project. Ralf suggested a minimum content for these datasheets, which should clearly define (1) the challenge, (2) the expected output, (3) the implementation, i.e. how the networking tools will be used, and – if possible – (4) already identified or candidate CIG members.

This first exchange about the CIG finished after ~90 minutes of fruitful discussion. Everyone was cordially invited to the second meeting on December 17 at 2 PM.



Participants at the Zoom meeting. From top left to bottom right: J. F. Pothier, J. Vicente, M. Baránek, G. Sessa, H. Özaktan, R. Koebnik, R. Kölliker, M.-A. Jacques, A. Obradović, K. Gašić, S. Burdman, P. Beran, J. Kolozsváriné Nagy, E. Đermić, J. Boch, D. Buriokienė, B. Cottyn, I. Morocka-Bicevska, M. Kałużna, and J. Merkuri