



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

Minutes on WG2-WG3 Meeting

Banyuls-sur-Mer, France, 12 September 2017

Minutes on WG2-WG3 Meeting written by J. F. Pothier, E. Bosis, J. Boch, and R. Koebnik and reviewed by all participants

Attending: Jens Boch (DE, WG3 Leader), Frederik Börnke (DE), Eran Bosis (IL, WG2 Vice Leader), Joana Cruz (PT), Jaime Cubero Dabrio (ES), José Gadea Vacas (ES), Manuel Gonzalez Fuente (FR), Ralf Koebnik (FR, Action Chair), Laurent D. Noël (FR), Alvaro Pérez-Quintero (FR), Joël F. Pothier (CH, WG2 Leader), Pasquale Saldarelli (IT), Guido Sessa (IL).

On 12 September at 9:00 am in Banyuls-sur-Mer (France), a special task force meeting between participants of WG2 "Pathogen Biology" and WG3 "Resistance and Defence" of the COST Action CA16107 EuroXanth was organised. A total of 13 scientists (7% female and ITC members) working in the field of *Xanthomonadaceae* and plant resistance took part in this one-day meeting. The goals of this special task force meeting were to organize COST activities for the upcoming grant period and to launch preparatory work for tangible deliverables of WG2 and WG3. These latter correspond to:

- Deliverable 9 "Protocols for resistance and pathogenicity screening of the most important crop species and bacterial strains covered by the EuroXanth COST Action" due at month 30 and involving WG2 and WG3 participants,
- Deliverable 10 "Repertoire of important candidate bacterial factors in the microbe-eukaryote interaction at different steps of the infection dissemination cycle" due at month 36 and involving WG2 participants,
- Deliverable 11 "Inventory of plant resistance genes, allelic variants and quantitative trait loci (QTL) in crop species that are effective against infection by members of the *Xanthomonadaceae* family" due at month 36 and involving WG3 participants.

This meeting was organized back to back with the first joint EFFECTOME-RESISTANCE network meeting, which took place from 12-15 September. On this occasion attendees were able to participate in this network meeting and contributed in total eight oral presentations and six posters, which promoted the EuroXanth Action, the research performed in this network, and which generated a lot of questions, fruitful discussions and collaborations.

Thanks to the initiative of the Action Chair, R. Koebnik, several of the attendees already met on the evening before the meeting took place in order to have dinner together. Aside from being a very good icebreaker opportunity this allowed to prepare the meeting and also discuss different aspects of the Action.







After a welcoming and quick opening of this WG2-WG3 meeting by the Chair, all attendees were asked to introduce themselves briefly.

R. Koebnik chaired the first part of the meeting and presented a slideshow with the latest update of the Action, including already achieved deliverables (Del. 1, Del. 2 and Del. 3) and upcoming Action's activities (STSM call, ITC Conference Grant call, Annual and MC meeting). Some attendees informed about the necessity of having some dissemination material concerning the Action such as a flyer in an electronic and/or printed form.

The second part of the meeting was chaired by the WG2 and WG3 Leaders, J. F. Pothier and J. Boch, respectively. They presented briefly the parties involved in the Action and the core group functions and associated persons with a slideshow. This introduction was more relevant for non-MC Members and participants that are not familiar with COST Action functioning. J. F. Pothier gave a quick overview of the interdependencies with other working groups, especially between WG2 and WG3, before specifying the objectives of WG2 and also WG2 participants. J. Boch exposed subsequently the objectives of WG3 and also WG3 participants. Both WG Leaders presented the COST networking tools available to achieve the objectives with a particular emphasis on Training Schools and Local Organiser Support. Upcoming conferences and dissemination activities relevant for the Action and more specifically to the WG2 and WG3 were also presented and discussed briefly.

The special task force meeting attendees discussed possible activities for the upcoming grant periods. These included possible training schools on plant genome editing (WG3) and on bacterial virulence factors (WG2). Opportunities to organize trans-COST Actions Training School(s) were also mentioned and will be further explored with the COST Office. The participants agreed on the necessity to organize small and short (1-2 days) meeting(s) dedicated to specific deliverables in an easy to reach location (e.g. COST office in Brussels) during the second reporting period.

WG2 and WG3 Chairs also identified clearly the need to use the 1st Annual and MC Meeting in Coimbra (PT) to organize the work in their respective WG and to especially assign a person or a group of persons to the tasks required to fulfil the deliverables. A first requirement to collect all the relevant literature for the deliverables in a shared online space was expressed by the participants. Additionally, the need to reinforce the links between scientists working on *Xanthomonas* and the ones working on *Xylella* was clearly perceived and was also highlighted by the small number of attendees working on *Xylella*. Special attention should be paid to increase the number of participants working on *Xylella* in coming activities.

The participants finally discussed about the different tools available for collaborative work and for sharing information in order to realize and valorise efficiently the WG2-WG3 deliverables. These includes mainly online tools such as reference manager groups, academic social networks and enhanced websites on which users collaboratively modify content and structure (for example, wiki website). The possibility to implement *Xanthomonadaceae* in a dedicated online resource tool, based on the RALSTOT3E (https://iant.toulouse.inra.fr/bacteria/annotation/site/prj/T3Ev2/), developed by the LIPM in Toulouse (FR) for type III effectors of the plant pathogen *Ralstonia solanacearum* was also discussed and will be further explored by L. D. Noël. Possible peer-reviewed publications and journal special issues for valorisation were also discussed.

The participants wrapped up the morning session by summarizing the outcome of the different topics that had been discussed.







In the afternoon, all attendees of the special task force meeting followed the presentations and studied the posters of the EFFECTOME-RESISTANCE network meeting. This was an ideal opportunity to discuss the latest findings that were presented in the context of our COST Action. Moreover, the COST Action CA16107 was introduced to the audience by G. Sessa, and the COST Action was also promoted by a poster, thus increasing its awareness level. The EFFECTOME-RESISTANCE network meeting, which continued over the next three days, was also an excellent opportunity to exchange knowledge and share technical knowhow, methods and tools (labwork, bioinformatics, etc.), not only with respect to *Xanthomonadaceae* but also other plant pathogens.

A strong cohesive effect within the 13 WG2-WG3 participants could be clearly perceived throughout the whole meeting. This result can certainly be attributed to this first COST CA16107 activity, which contributed highly to the "small family/network feeling" and can thus be considered as a very positive and valuable output of this COST CA16107 special task force meeting.



Special task force in front of the conference center in Banyuls-sur-Mer. From left to right: L. D. Noël, A. Pérez-Quintero, J. F. Pothier, J. Cruz, J. Gadea Vacas, G. Sessa, J. Boch, R. Koebnik, F. Börnke, J. Cubero Dabrio, and E. Bosis (M. Gonzalez Fuente and P. Saldarelli missing due to early departure).