Report on the Bacterial Plant Diseases Programme Stakeholder Workshop, Thursday May 13th, 2-3.30pm (virtual, Zoom)

Agenda:

- Brief introduction to the Bacterial Plant Diseases (BPD) programme and role of the coordination team, Sarah Green, Coordination Team (2 min)
- 'Why funded research should have impact', Debbie Harding, BBSRC (5 min)
- 'Horticultural perspectives on bacterial plant diseases', Pippa Greenwood, Horticultural Trades Association (15 min)
- 'IPM strategies for managing bacterial pathogens', Cathryn Lambourne, Agriculture and Horticulture Development Board (15 min)
- 'Risks of bacterial pathogens to the potato sector & how science is helping reduce these risks', Gerard Croft, British Potato Trade Association (15 min)
- 'Making research deliver for industry can we create the 'virtuous circle'?', Bill Parker, Agriculture and Horticulture Development Board (10 min)
- 'Stakeholder engagement: experiences and reflections from the BRIGIT project', Gerard Clover (10 min)
- Panel discussion on research contributing to practice and planning stakeholder engagement through the Bacterial Plant Diseases Programme, facilitated by Mariella Marzano and Laura Meagher, Coordination Team (20 min)

Sarah Green, Forest Research, Bacterial Diseases Coordination Team (CT) lead

Sarah gave a brief outline of the Bacterial Plant Diseases Programme and introduced the Coordination Team and its role. <u>Please see the full powerpoint presentation here</u> and watch the short introductory video to the nine bacterial projects <u>https://www.youtube.com/Bacterial Plant</u> <u>Disease projects</u> for more information.

Debbie Harding, UKRI/BBSRC

Debbie's presentation was from the perspective of research funders; defining impact and outlining the necessity for impact. <u>See the full presentation here</u>.

Pippa Greenwood, Horticulture manager for the HTA (representing growers and retailers)

Pippa explained the challenges faced by growers from the horticultural sector due to bacterial diseases. She talked about how such challenges limit the varieties grown and increase costs. She outlined growers' concerns for the future, as well as areas of research that they would like to see input into, and ways in which information could be disseminated to them.

Comments from the audience included acknowledgement that we haven't thought about ornamentals but that we will now, and Pippa was thanked for bringing awareness of her industry's problems to us. The BPD-programme wants all the projects to have useful outputs, and such stakeholder interactions will help us. We were reminded that the newly elected Scottish Government has made a manifesto commitment to ban the sale of peat-related gardening products and the question was asked about how much awareness of this there is across the industry?

Catherine Lambourne, AHDB

Catherine set the context by outlining examples of crops and the losses (in amount of crop and loss of revenue to the growers) due to bacterial diseases. She reviewed integrated pest management (IPM) control measures as a way of thinking and acting and by using different crops as examples illustrated the particular difficulties with bacterial diseases. She highlighted key projects showing how working together can provide mutual benefits: scientists helping industry and vice-versa. See the full presentation here.

Gerard Croft, British Potato trade Association

Gerard spoke about the main bacterial diseases posing risks in the UK potato industry and, with practical examples, described how science is helping to reduce these risks. He also mentioned additional problems, not currently being addressed, that the sector would like help with. <u>See the full presentation here</u>.

Comments from the audience included information that the pathogen causing zebra chip was first characterised in New Zealand - the disease had been observed in Mexico and the USA previously but the cause wasn't known making it difficult to develop measures to prevent its movement in trade. This was an example of the importance of accurate early diagnosis and determining aetiology. It was noted that chlorine treatment was used in the past as well for bacterial diseases. One of the BPD programme projects is working on control of *Ralstonia* by phages, funded by Innovate UK.

Bill Parker, Head of AHDB technical programmes

Bill discussed how research findings move into implementation with almost all the major funding bodies currently. For most research there is little involvement of the end-user at the start and most of the funding goes into the initial discovery process. He challenged us to make research deliver for industry, with involvement of industry at the start and with a shared vision, goals and timescale, and funds directed towards translation of research and further feeding back into subsequent research.

This resonates with the UKRI/ Bacterial Plant Diseases programme and CT who are working to improve impact for the nine projects under their remit. For the full presentation, see here.

Comments from the audience included a mention that five-year grants would be better for this kind of work, but funders generally have to work to a three-year spending review cycle. Another commented that policy changes are needed.

To the problem of ensuring that change is effective, it was asked how do you ensure objectivity in industrial prioritisation and how would this differ from the current AgriTech model? Bill replied: I think the AgriTech strategy was actually a missed opportunity - leaving aside the creation of the AgriTech centres, it wasn't a strategy from the point of view of R&D, it was a purely reactive process and didn't set any industry goals that needed to be achieved and consequently made no attempt to steer the research in the right direction.

Gerard Clover-BRIGIT project

Gerard described a cross-section of the BRIGIT project activities, from setting up the *Xylella*awareness board, training inspectors on spittlebug ID, video tutorials, public engagement activities, press releases, to citizen science spittlebug surveys that had proved successful in engaging stakeholders. <u>See Gerard's presentation here</u>.

Mariella Marzano (CT) posed questions to the panellists (comprising all speakers as well as Ian Toth (JHI) and Fiona Highett (SASA)) for discussion:

- 1. What has been the ONE most memorable engagement you have taken part in which has brought together scientists and stakeholders?
- 2. From that experience, what is the ONE most important lesson you would share with other researchers and stakeholders hoping to engage effectively and build a community of knowledge sharing, knowledge exchange and dialogue?

Fiona Highett: Our work with beekeepers in 2018 had very balanced engagement-a partnership. If the beekeepers hadn't been involved in planning, the project wouldn't have been successful. The beekeepers were very engaged in it, it has produced lasting partnerships and is still growing.

Ian Toth: Best communication with stakeholders is always the last one. Keep communicating, communicate again, and again. Talk to each other.

Mariella Marzano-How do you do that without creating fatigue?

Cathryn Lambourne- Best interactions were where we could talk about a problem at grower meetings; a lot of work may have been done but nothing was really working. We re-visited it. Get a couple of growers and a couple of researchers together and bounce ideas off each other. Scientists really understand the need, and the client feels the researcher is invested.

Mariella Marzano -Intention is to bring smaller groups together.

Gerard Croft- Listen and learn to the 'on ground experience'. Ask about the field conditions, not of the farmer but of the man ploughing it.

Mariella Marzano - How do we get those conversations?

Gerard Clover- Also engagement with public. Spittlebugs survey gave us 25000 records, 100X previous coverage. Working with media is mixed blessing, must check messages have been properly understood during the communications with them.

Debbie Harding- from funding perspective. Top lesson is that it's difficult, hard work, no easy solutions to engaging stakeholder. I was involved in an insect pollinators event, trying to find stakeholders was hard, take random opportunities where you can. But it's really rewarding to get a huge range of stakeholders involved.

Bill Parker-I agree, it's not easy and achieving consensus requires a lot of careful thought. Difficult to get a consistent view, it needs a lot of work. Talk to and work with the end user - the most effective projects I have been involved with are those where work has been designed in close consultation with farmers/growers, and done as large scale experiments using 'real' farm machinery - not cheap or easy to do!

Pippa Greenwood-Talk to one another! 'Ornamentals' get side-lined! It was refreshing and productive to be involved in the Xylella project. Growers would like to be consulted!

Laura Meagher, CT- post-workshop commentary on continuing to move forward in stakeholder engagement

During Plant Health Week, the Coordination Team of BPD UK held a Stakeholder Workshop on 13 May 2021, 2-3:30. Inclusion of stakeholders was woven into the framing of the BPD programme from the very start, as described by speaker Debbie Harding of the BBSRC, who reminded the audience that impacts can take many forms. Furthermore, the Stakeholder Workshop aligned naturally with several members of the Coordination Team who share with the BPD-funded projects their professional expertise in knowledge exchange and generation of real-world impacts. As well as providing masterclasses on these important dimensions to the overall programme and to individual projects, the sub-team has also generated a guidance document on stakeholder engagement and impact generation for projects to use at beginning, middle and end of their grants. They have also conducted a survey of programme stakeholders, whose advice corresponded with guidance given by speakers and panellists at the May workshop.

At the May workshop, six presentations provided perspectives on stakeholder needs from research on plant bacterial diseases and on how needs can be met. Usefully, speakers identified particular challenges to the plants of concern to them, along with hopes for how research could help. For example, Gerard Croft of the British Potato Trade Association described bacterial diseases challenging the potato industry, some for which scientific research has already helped to reduce risks and some which still need to be addressed. Pippa Greenwood relayed a number of problems experienced by retail growers, who often feel left out of research programmes. Cathryn Lambourne of AHDB summarised a range of impacts of bacterial diseases on horticultural crops. Speakers including Bill Parker as well as both researcher and stakeholder panellists encouraged researchers in plant bacterial diseases to: engage early and often with stakeholders; maintain ongoing two-way conversations to stay up-to-date with stakeholder needs and to communicate findings as early as possible; and to use readily accessible dissemination/communication vehicles, avoiding jargon.

Key steps going forward will include:

- Continuing to facilitate conversations between programme researchers and stakeholders, including their specific stakeholder partners and also those (such as the speakers at this workshop) who have 'big picture' perspectives. (One of the programme researchers is already contacting one of the speakers regarding the potential for extending the relevance of their work to problems described at the workshop.)
- Holding additional, targeted workshops bringing researchers and stakeholders together. (A similar stakeholder workshop, with more of an explicit emphasis on bacterial diseases in trees is in the planning stages.)
- Encouraging projects to ensure they are considering stakeholder needs through each stage of their project. (The CT sub-team has met with projects at the beginning stage and will visit periodically to act as critical friends encouraging this.)
- Assisting projects in the development of accessible, useful, clear dissemination outputs (briefing papers/summary updates, short articles in stakeholder-relevant periodicals) to share findings with stakeholders throughout. (The Coordination Team is in the process of refilling a communications officer post.)
- Promoting visibility of the programme and projects (through website, contributions to conferences, social media) so that stakeholders can find both researcher contacts and information readily. (The Coordination Team is in the process of re-filling a communications officer post.)

Other useful links:

Bacterial plant diseases (BPD) website->https://www.bacterialplantdiseases.uk/

BPD project on Blackleg -> https://www.bacterialplantdiseases.uk/blackleg-des-bl.html

Ralstonia phage BPD project-> <u>https://www.bacterialplantdiseases.uk/ralstonia-phage-biocontrol.html</u>

BPD BRIGIT project -> <u>https://www.bacterialplantdiseases.uk/brigit.html</u>

BRIGIT video -> https://www.youtube.com/watch?v=2xnsdASNvzQ

If you would like to receive updates and news about the BPD UK Programme, please fill in this short registration form <u>https://www.smartsurvey.co.uk/s/TNCGOT/</u>

Alternatively email the following information to Alaina.paterson@forestresearch.gov.uk

- 1. I would like to be kept informed about news and or events relating to the Bacterial Plant Diseases UK Programme
- 2. My name is:
- 3. I work for:
- 4. My email address is:
- 5. Other methods for communicating with me are listed below: (e.g. Twitter, LinkedIn)

Personal information will be treated and stored in line with the requirements of the Data Protection Act (2018)

