



## COMMISSION ON PHYTOSANITARY MEASURES

### SIDE SESSION ON EFSA PLANTIBIO PROJECT:

#### **Reduce risk assessment uncertainties: data collection on antibiotics for control of plant pathogenic bacteria!**

**28 March 2023 13:00-14:40 (Rome time)**

RED ROOM (A121), FAO Headquarters, Rome, Italy

### Concept Note

#### Background

- [1] Plant pathogenic bacteria (PPB) cause devastating losses to crop worldwide, estimated over one billion dollars every year. Several of these PPB constitute a major concern as plant quarantine agents, such as the Pierce's disease of grapevine caused by *Xylella fastidiosa*, the Huanglongbing or Citrus greening disease caused by *Candidatus Liberibacter asiaticus* or the Potato Zebra chip disease caused by *Candidatus Liberibacter solanacearum*, or the numerous *Candidatus Phytoplasma* evidenced so far. The analysis of the global trends in emerging infectious diseases reveals an increasing number of infections linked to PPB which are systemic bacteria highlighting the urgent need for effective control solutions.
- [2] Antibiotic resistance is recognized as a major crisis in relation to human health and strategies are developed in order to avoid losing antibiotics as an efficient treatment of human and animal diseases. The European Commission has developed an action plan against antimicrobial resistance in the context of a One Health initiative aiming at making the EU a best practice region, boosting research, extension and innovation, shaping the global agenda ([https://health.ec.europa.eu/antimicrobial-resistance/eu-action-antimicrobial-resistance\\_en](https://health.ec.europa.eu/antimicrobial-resistance/eu-action-antimicrobial-resistance_en)).
- [3] The use of antibiotics in plant protection could be one of the potential causes of an increase in antimicrobial resistance genes in the environment. A growing use of antimicrobial substances as pesticides could undermine the efficiency of antibiotic therapy in humans. As a matter of fact, streptomycin-resistant strains of *E. amylovora* were isolated in pear orchards where streptomycin was applied. In addition to *E. amylovora*, streptomycin-resistance genes were found in other PPB: *Pseudomonas syringae* and *Xanthomonas campestris*. However, other studies did not find a significant sustained increase of resistance genes recovery after antibiotic treatments in orchards.
- [4] The European Food Safety Authority (EFSA) has launched a project for a global data collection on the use of antibiotics and the emergence of antimicrobial resistance in plant pathogenic bacteria (PPB), with a particular focus on PPB causing systemic plant diseases. Emerging and re-emerging systemic PPB are nowadays a growing concern due to the difficulties to control them and because of their capacity to rapidly spread into new areas through the global trade of infected plants. Countries are invited to contribute by providing information on antibiotics used as plant protection products or by participating in the concurrent session of the International Congress of Plant Pathology (ICPP) in August 2023 in Lyon (France), entitled 'One health: impact of resistance to antibiotics and fungicides in plant pathogens'.

## Expected Out comes

- [5] The Side Session on EFSA PLANTIBIO project is expecting to achieve the following outcomes:
- (1) raise awareness on the specific objectives (SO) of the PLANTIBIO project such as;
    - SO1: collection and review of data and information on the use of antibiotics for the control of plant pathogenic bacteria;
    - SO2: collection and review of data and information on resistance to antibiotics in plant pathogenic bacteria;
    - SO3: collection and review of data and information on alternative and innovative treatments for the control of systemic plant pathogenic bacteria;
  - (2) explain the process on how to contribute to the PLANTIBIO project;
  - (3) encourage the collection and exchange of data on;
    - use of antibiotics for controlling plant pathogenic bacteria;
    - antibiotic resistance in plant pathogenic bacteria; and
    - alternative measures for controlling plant pathogenic bacteria, with an emphasis on data gaps and key questions for improving risk assessment.

## Programme

<b>Venue:</b> Red Room, FAO HQ <b>Facilitator:</b> Giuseppe Stancanelli (European Food Safety Authority) & Roman Vagner, European Commission DG SANTE		
Time	Description	Speakers
<b>13:00-13:10</b>	Welcome to the participants and presentation of the PLANTIBIO event	<b>Giuseppe Stancanelli</b> , European Food Safety Authority <b>Roman Vagner</b> , European Commission DG SANTE
<b>13:10-13:25</b>	Addressing Antimicrobial Resistance through One Health: Insights into European Food Safety Authority's Activities	<b>Ernesto Liebana</b> , European Food Safety Authority
<b>13:25-13:45</b>	Antibiotic use as plant protection products – a global search for information via scientific literature and grey literature searches	<b>Claude Bragard</b> , UCLouvain
<b>13:45-14:05</b>	Overview on resistance to antibiotics in plant pathogenic bacteria – a global search for data	<b>Marie Verhaegen</b> , UCLouvain
<b>14:05-14:15</b>	Work ongoing (search on alternatives to antibiotics as plant protection products) and next steps of the PLANTIBIO project	<b>Claude Bragard</b> , UCLouvain
<b>14:15-14:45</b>	General discussion	<b>All</b>

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