



HUPLANTcontrol

COST Action 16110 Control of Human Pathogenic Micro-organisms in Plant Production Systems



COST is supported by the EU Framework Programme Horizon 2020



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HUPLANTcontrol:

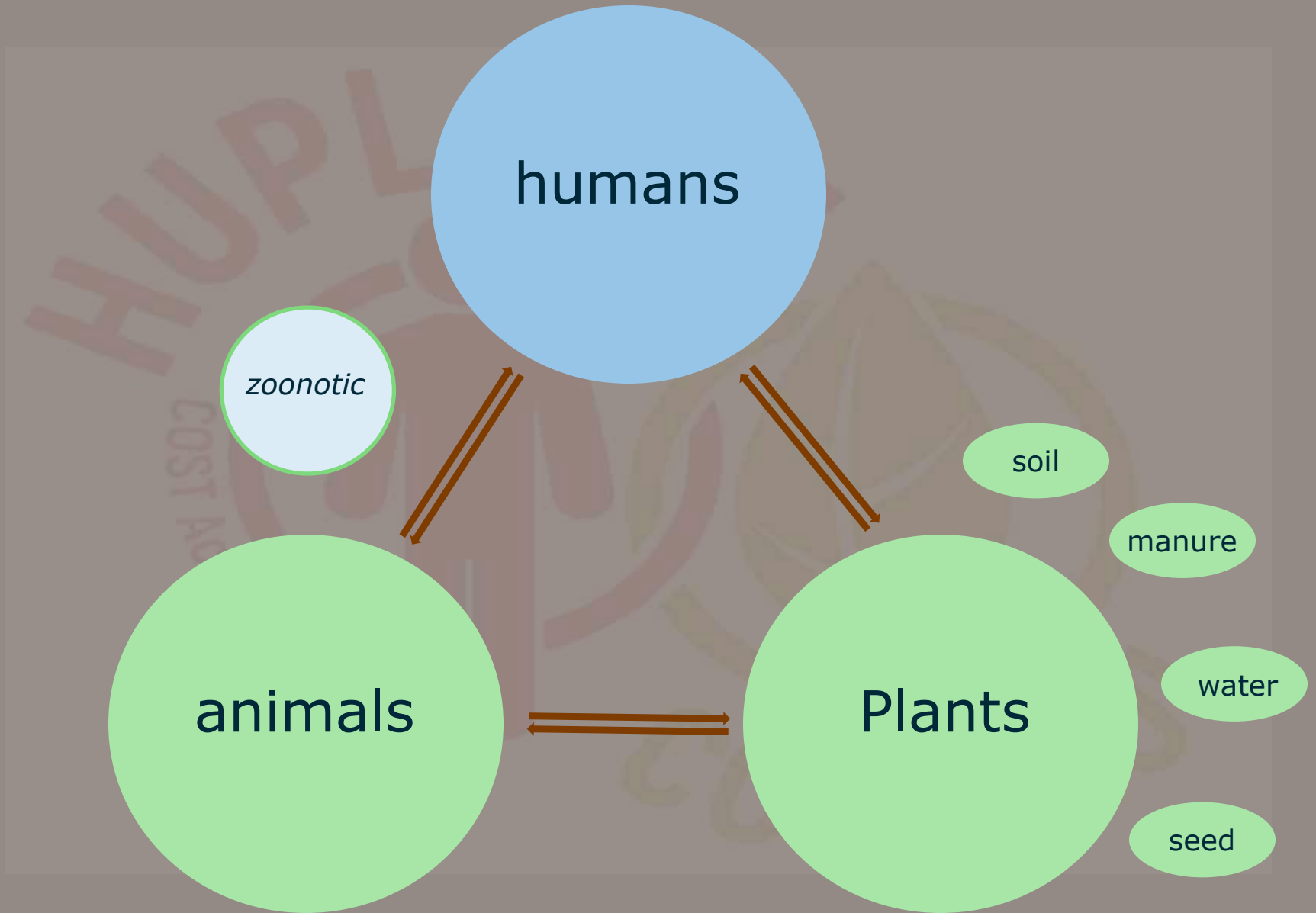
- ▶ "to promote open communication on science, agricultural practice and behaviour of food borne pathogens in plant microbiomes"

<https://huplantcontrol.igzev.de>

MC2 in Amersfoort



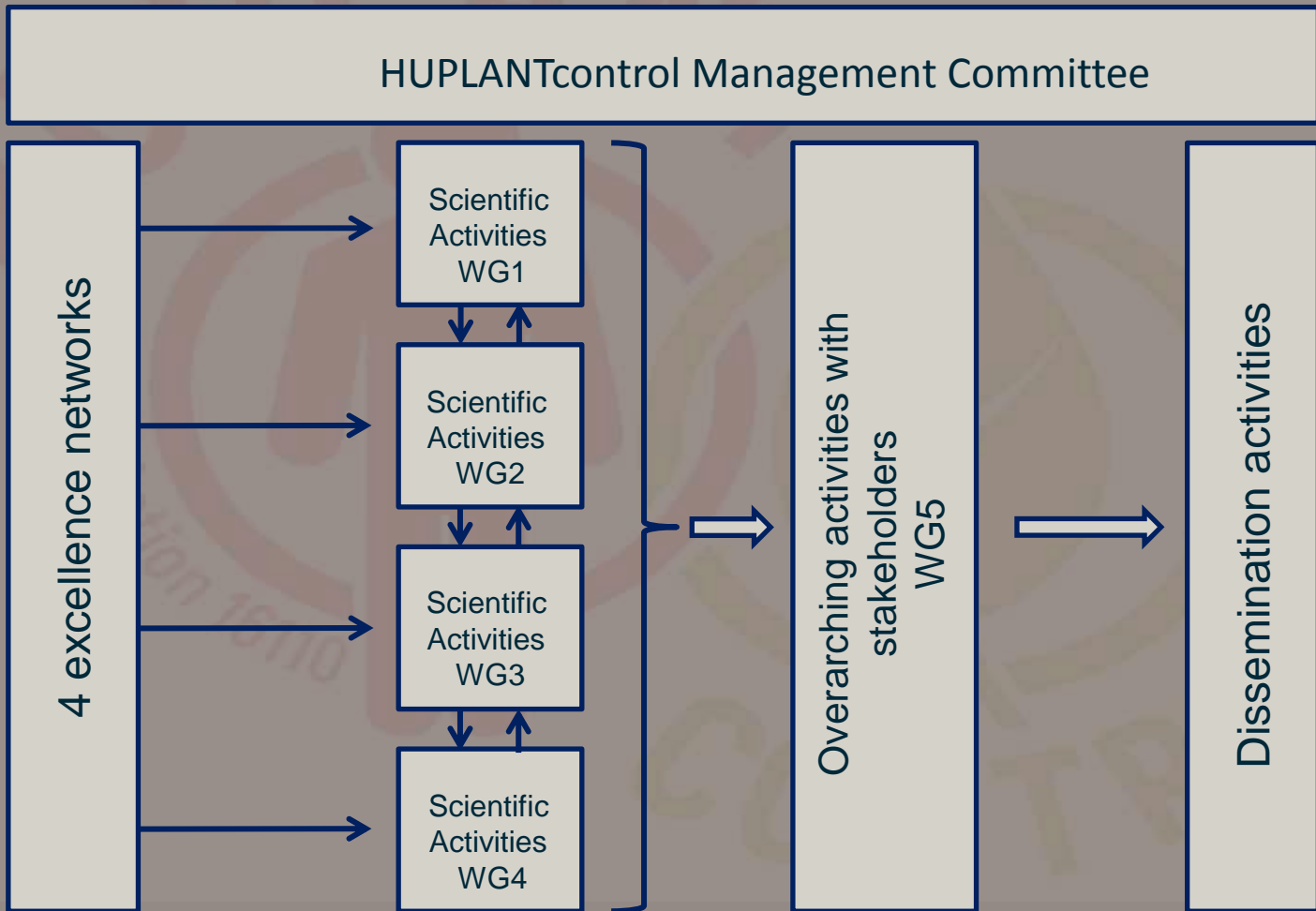
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Five pillars of the Action

1. Identification of origins and sources of HPMO in plants.
2. Improvement and intensification of taxonomical characterization of plant microbial identities suspected to be HPMO.
3. Evaluation, improvement and novel design of human proxies and other test systems useful for identifying the human health-threatening or pathogenic nature of plant isolates.
4. Evaluation, improvement and novel design of sanitary measures and agricultural practices for control of HPMO in plants.
5. Overarching; communication to stakeholders, scientific integration.







HUPLANT control coordination

WG leaders

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WG leaders

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Bottom up

top down

Representing 30 EU countries



Workshop HU Berlin

Scientific workshop

WG 1



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Wrap up of scientific challenges

- Role of `omics technologies in the Action (WG1, 2, 4)
 - Amplicon sequencing in plants
- Buffering capacities of plants against HPMO (WG1, 4)
 - Role of disinfection procedures in post-harvest products
- Role of the plant mobilome in emergence of new HPMOs (WG 1-4)
 - Kosakonia example
- Persistent/ VBNC/ Biofilm incorporated HPMO cells (WG1, 3, 4)
- How to communicate with each other in the Action
 - Plant Microbiology vs Food Microbiology
- Plant Colonization by HPMO; role of internalization
 - Reason for large variation in plant colonization in practice (Jasper & Sven)

What can we do with this information?

- Regular COST instruments
 - Workshops, training schools, (co)-organization of symposia, young scientist exchanges, symposia attendances (ITC)
- Session in IAFP Stockholm (Food safety)
- Training school on Bacillus identification (B. cereus group!); Niels Bohse Hendriksen
- Roundtable ISME Leipzig
- Co-organization Plant Microbiome Symposium in Edinburgh 2020 (organized by Davide Bulgarelli; follow up of the Amsterdam symposium, Febr. 2018)
- TE symposium 2018-interaction with human microbiome



What can we do more

- Organization of Training Schools
 - Next generation sequencing
 - Test assays for human proxies (WG3)
- Workshop on terminology; opinion paper as deliverable
- Workshop/ symposium on fungal HPMO (Fusarium)

