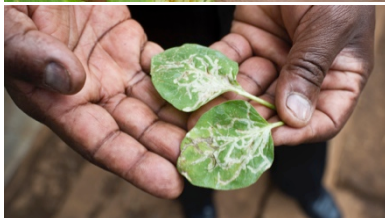




British Ecological Society



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A British Ecological Society Symposium

The Ecology and Evolution of Emerging Plant Pests and Pathogens: Challenges to Global Food Security and Ecosystem Resilience

13-14 July 2015

Penryn Campus, University of Exeter, Cornwall, UK

This Symposium will bring together experts in genetics, cell biology, ecology, evolution, plant pathology, modelling, microbiology, climate change, remote sensing, agriculture and forestry to synthesize recent research into emerging plant pests and pathogens (EPPPs) and share findings across disciplines. The aim is to describe the threat that EPPPs pose, the mechanisms by which they evolve and spread, the ecological and environmental factors that influence emergence, and the management strategies that can be used for control.

Draft themes

13 July

AM. The Current Threat to Agriculture and Forestry.

1. Overview: past and present impacts of plant pests and diseases.
2. Current distributions and impacts on agriculture.
3. Current distributions and impacts on forests.
4. Case studies of the most dangerous EPPPs.

PM. The Emergence of Dangerous EPPPs.

5. The evolution of virulence and pathogenicity in EPPPs.
6. The molecular basis of plant-enemy interactions.
7. Host selection, host specificity, and host jumps.
8. Trade-offs between virulence and host specificity.

14 July

AM. Environmental Interactions

9. Vectors, co-infection, and host-antagonistic interactions.
10. Endophytes, predators, and host-beneficial interactions.
11. Weather and climate change.
12. Roles of biological and environmental factors in dispersal

PM. Detection and Management

13. Molecular methods for detection and identification.
14. Remote sensing of EPPPs and their effects.
15. New horizons in plant protection.
16. International monitoring networks and capacity building.

Organizers

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