

# REVIEW OF JOINT INTER-DEPARTMENTAL EMERGENCY PROGRAMME TO CONTAIN AND ERADICATE PHYTOPHTHORA RAMORUM AND PHYTOPHTHORA KERNOVIAE BY THE CENTRE FOR ENVIRONMENTAL POLICY, IMPERIAL COLLEGE LONDON

## FERA RESPONSE TO RECOMMENDATIONS

(Responsibility for action to control and eradicate *Phytophthora ramorum* and *Phytophthora kernoviae* transferred to the Food and Environment Research Agency (Fera), an Executive Agency of Defra, on 1 April 2009.)

**Recommendation 1:** An increase in the number of staff tasked with pro-active surveying, monitoring and testing for new *P. ramorum*/*P. kernoviae* outbreaks. The possibility for staff from other land-based organisations, who are already working in susceptible habitats, taking on these roles, should be explored.

Under the new Defra Phytophthora Project Fera staffing levels (addressing pro-active surveying, monitoring and testing for new outbreaks of *P. ramorum* and *P. kernoviae*) have been increased from 9 to 19, with a view to further appointments being made as work needs and regional locations are identified by new findings. In addition, staff working with the Defra Project from other land-based organisations have also been increased from 1 to 4, again with the intention of keeping the need for further support under continuous review during the life of the new Project.

**Recommendation 2:** Garden management plans for infected gardens, and gardens considered at high risk from *P. ramorum*/*P. kernoviae* in the future, are developed in a co-operative manner between garden owners and/or head gardeners, and the plant health authorities.

Under the Behavioural Change Workstream of the new Phytophthora Project the development of joint codes of practice on garden management have been identified as a high priority. A delivery group has been established involving garden owners/managers, local authorities, etc. to develop and draft these codes and to promulgate them throughout the sector. In addition, research is being commissioned to improve the scientific basis and tools available for use in garden management plans (see Recommendation 3). Immediate action is being taken in known infected gardens and those considered at high risk from *P. ramorum* and *P. kernoviae* through agreed/collaborative activities between Fera, garden owners, head gardeners, etc., ensuring that effective management plans are agreed, implemented and refreshed. Management of habitats surrounding, but outside, these gardens is also adjusted to ensure optimal responses.

**Recommendation 3:** Research to inform disease management in the gardens is carried out.

Research to inform disease management in gardens has been identified by Defra and its *Phytophthora ramorum* and *P. kernoviae* Science Advisory Group as one of the priority areas and a competitive call was launched in August 2009 inviting research proposals to address (a) the development of management approaches, (b) an improved understanding of the comparative epidemiology of both pathogens in park and heritage gardens to inform management decisions, and (c) to perform research that guides sustainable re-planting, including determination of suitably resistant plant genera and species.

**Recommendation 4:** Clearance of *R. ponticum* continues to occur at infected sites, but that the Programme ensures that clearance occurs on all land-types where it is necessary, and that the pattern of clearance does not leave reservoirs of inoculum to build up. It is also

recommended that there is pro-active clearance of *R. ponticum* focused on sites which are particularly valuable for biodiversity, or in cultural terms, and in particular in areas where there is *R. ponticum* in conjunction with high levels of *Vaccinium*.

Defra recognises the importance of this recommendation and will respond fully under the new Phytophthora Project. To address knowledge gaps relating to the geographical distribution of *P. ramorum* and *P. kernoviae* in various habitats, surveys of infection of *Vaccinium in woodland and heathland*, and work to gather information on distribution in *Rhododendron ponticum* and Japanese Larch, are underway in conjunction with other land-based organisations. Further survey work is planned. To collate the information gained from these geographically distinct habitats and identify risks of reservoirs of inoculum building up, or risks to scientifically or culturally important sites, mathematical modelling work will be commissioned. This will be used to inform and guide all aspects of the new Defra Project, including prioritisation of disease management/clearance of infected host material in all habitats, and proactive management actions in uninfected areas.

**Recommendation 5:** Resources are focused on research into *Vaccinium myrtillus* infection, as outlined in Section 9.4, as a matter of urgency. In this context, a national policy on protecting heathland ecosystems and disease management should be developed.

Defra agrees with the recommendation and it is being addressed. Research on vaccinium is considered a high priority and work has been commissioned that (a) further determines the epidemiology of impacts of both pathogens on vaccinium in various habitats (e.g. woodlands and heathland), (b) determines management approaches for both pathogens on vaccinium, and (c) determines the biodiversity impacts of the pathogens and of control approaches in heathland habitats. The research will therefore inform risk assessment and risk management for protecting heathland ecosystems in a national context.

**Recommendation 6:** Other research suggestions listed in Section 9.5 are given serious consideration and action taken when deemed necessary.

Defra will consider the report's recommendations for research via its *Phytophthora Science Advisory Group (SAG)*. This group has been established to advise on strategic research planning for the *Research Workstream* of the Defra-funded *Phytophthora Disease Management Programme*. This *Research Workstream* directly supports the other two workstreams of the Programme, namely the *Disease Management Workstream* and the *Awareness and Behavioural Change Workstream*. A commissioning plan has been agreed and is being implemented. It covers many of the research suggestions outlined in the report's recommendations though a few of the proposed areas of research are likely to be beyond the scope and budget of the research programme. Research has to be prioritised and commissioned against a limited budget and an agreed Defra ROAME document which lays out the research programme's rationale and its policy and science objectives; the ROAME is overseen by the SAG.

**Recommendation 7:** Further funding is made available for the micro-propagation unit at Duchy College to continue its work, but that a clear plan of where the new, disease-free plant material will be placed in both the short, and long-term, is decided.

Defra agrees with this recommendation and is addressing it through the behavioural change and research workstreams of the new Defra Programme. Funding has been made available to allow the valuable work of the micro-propagation unit of Duchy College to continue. In addition, the work of the behavioural change workstream relating to garden management plans and joint codes of practice incorporates consideration and development of clear guidance on where the new disease free plant material produced will be placed in the long

term, with decision making on short term interim placement being an early priority of the work area.

**Recommendation 8:** An education programme focused on generic plant and tree biosecurity risks, and targeted at specific sections of the general public (e.g. garden visitors, rambles, dog walkers) and at particular stakeholder groups (e.g. professional gardeners, landscape architects) be developed and implemented.

Defra agrees with this recommendation which is being implemented under the behavioural change workstream of the new project. The education programme is focused on at least three actions, including the development of joint codes of practice for garden management (see recommendation 2), and equivalent codes of practice being developed in collaboration with the horticultural nursery and retail industries. In addition, an awareness campaign aimed at a wide range of relevant professional groups and the general public is being implemented, in coordination with similar activities run by other land-based organisations (e.g. the Forestry Commission, etc.), seeking their engagement and involvement with addressing relevant issues.

**Recommendation 9:** Suggestions for new stakeholders to be brought on board under the new programme of work (as listed in Section 9.8) are given consideration and action taken when deemed necessary.

Defra accepts this recommendation. Consideration has been given to engaging with additional stakeholder groups. For example, Natural England and CCW are both represented on the project board responsible for managing the new programme of work against *P. ramorum* and *P. kernoviae* launched on 1 April 2009. The board is also addressing how to better engage other stakeholders in managing risks from the diseases.

**Recommendation 10:** Consideration is given to how responsibility for *P. ramorum*/*P. kernoviae* management between Fera (Defra) and PHSI can be more effectively distributed and co-ordinated, particularly in relation to scientific research and survey work. It is suggested that a single survey database is created. It is also suggested that the responsibilities of the different agencies are always clearly explained to stakeholders and the public to avoid confusion.

Responsibility for action to control and eradicate *P. ramorum* and *P. kernoviae* transferred to the Food and Environment Research Agency (Fera), an Executive Agency of Defra, on 1 April 2009. Fera brings together in one organisation Defra's Plant Health and Seeds Inspectorate and Plant Health Division and the Central Science Laboratory, all of whom have a significant role to play in managing the diseases under the new project.

**Recommendation 11:** Suggestions listed in Section 9.10 on the future structure of the programme board be considered and changes made where deemed necessary.

Defra accepts this recommendation. Representation on the project board managing the new programme of work against *P. ramorum* and *P. kernoviae* has been extended to include representatives from all sectors affected. Stakeholder involvement and input by science advisors continues through Industry Liaison and Science sub-groups. A formal meeting and attendance structure is in place. A Project Manager has been appointed with responsibility for managing and prioritising resources.