Improving the performance of Horticultural Crops and Potatoes

Proposal for Collaborative Research

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Insecticide crystal image courtesy Rothamsted Research, supermarket copyright Noel Hendrickson/Digital Vision/Thinkstock 2010
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Working with Industry: the Research Technology Club concept

- Define generic research challenges of interest to a range of companies
  - Opportunities for high quality research
  - Of real industrial relevance (shared risk)
- Build networks, skills and capacity
- Facilitate generation of economic impact from bioscience research base

Benefits to Company Members

- ✓ Influence research areas of economic value (through a significant amount of public funding)
- ✓ Participate in research funding decisions
- ✓ Up to date knowledge on the progress of research and early access to results
- ✓ Opportunity to work with academics, post-docs and post-grads
- ✓ Opportunity to identify the best potential industry recruits
- ✓ Information and advice related to research council activities e.g. training and KT schemes
- ✓ Public promotion through the Club

Improving the performance of horticultural crops and potatoes

Aims

- Support high quality, innovative, basic research to underpin the UK horticulture industry in addressing challenges of food security
- To strengthen the research community in the areas of crop breeding, production and processing through interdisciplinary research and the provision of training
- To ensure the exchange of knowledge between the science base and industry through effective networking between academic groups and companies

Scope

- Understanding underlying molecular and biochemical mechanisms behind important crop traits
- Progress genetic and genomic understanding of model organisms to horticultural crop plants
- Understanding crop-pest/pathogen interactions
- Exploiting omics technologies

All supported research must have a clear relevance to the industry and an understanding of the likely route to achieving impact.

Potential Research Challenges

- Improving resource use efficiency
- Biological approaches to crop protection
- Adapting to climate change
- Understanding the biological processes associated with maturity and post harvest quality
- Seed quality and vigour

Mechanism

- Collaborative research grants
- Projects focused on areas which are of interest to more than one crop and /or one element of the supply chain – large collaborative projects
- Projects must have at least 10% contribution from industry partners – 5% cash
- Projects will be assessed on industrial relevance in addition to scientific excellence
- Likely to fund a handful of larger projects across two calls
- Dissemination meetings for funded projects to support networking and knowledge exchange
- Studentships may be awarded alongside research projects

Process

- Industry meeting to raise awareness, agree challenges and operation – Today!
- Consortia building workshop – Spring
- Outline applications – assessed by academic/ industry panel
- Full applications – assessed by external peer review and academic/industry panel
- Grants awarded
- Dissemination Events organised at 6-monthly intervals