The Benefits of Sustainable Agriculture

Wyn Grant
University of Warwick
Working with life scientists
Competing or complementary?

- We want food security – affordable, nutritious food in sufficient quantities without interruption of supply.

- But we want it to be produced in a way that does not have harmful side effects on human health and the environment – sustainable crop production.
Retaining trust

- The reputation of an industry or firm can easily be damaged, incurring losses of business and substantial financial costs.
- Any suspicion that food is not being produced in a way compatible with a healthy lifestyle quickly attracts media attention.
- Food is a product unlike others, e.g., cultural significance.
The EU response

- The EU has endeavoured to respond to the concerns of its citizens
- Basic principles of prevention, monitoring and suppression
Principles of IPM

- Prevention: agronomy (e.g., crop rotation), selection of varieties, conservation biocontrol
- Monitoring: good warning and early diagnosis systems
- Suppression: biological and other non-chemical methods must be preferred to chemical methods if they provide satisfactory control
Biocontrol

- Still only 2-3 per cent of global market
- But growing rapidly, 12-15 per cent a year compared with 3-5 per cent for synthetics
- Forecast to be worth $6bn worldwide by 2019
- Highest growth in Europe, expected to pass North America by 2018
- Big companies move in
Some challenges

- Registration of products still taking too long – about 5 years in EU
- 5 low-risk substances approved
- New zonal system in EU (Reg. 1007/2009) not really working
- Is more knowledge intensive, requires great input by farmers
- Absence of advisory services
Some challenges (2)

- Involves managing and working with complexity, products affected by environmental conditions
- Good links between industry and academia – even social scientists!
- But reliant on back catalogue, cutbacks in basic research could lead to a dip in innovation
The elephant in the room

- The CAP
- Is it sufficiently targeted on good agronomic practice to back up sustainability programmes like IPM?
- Too much still goes in blanket subsidies, ‘greening’ of last reform unsatisfactory
- Early abandonment of third pillar on climate change
Thanks for your attention

- Visit our website:
  - [http://www2.warwick.ac.uk/fac/soc/pais/research/clusters/cpd/biopesticides](http://www2.warwick.ac.uk/fac/soc/pais/research/clusters/cpd/biopesticides)