

## THE FUTURE OF IPM: Spreading the word and future opportunities

### How can farmers find out more about IPM?

To enable successful uptake of IPM, in the first instance LEAF and the Voluntary Initiative will be supporting farmers with the requirements of the Sustainable Use Directive. However, knowledge exchange on the subject together with understandable and accessible information is vital, especially if the UK National Action Plan requirements for IPM uptake is to remain voluntary. The main avenue for successful communication in this area is via demonstration farms and on farm research. Seeing IPM in action will help validate practicability of strategies and the spread of the most convincing ones into practice (Endure, 2013). In addition farmers need regularly updated information on local best practice for each crop and for each pest.



### DEMONSTRATION FARM

LEAF has 40 Demonstration Farms across England and Scotland, which are able to share their experiences, expertise and thoughts on how IPM works in practice within their business. To find out more and arrange a visit see: <http://www.leafuk.org/leaf/farmers/demofarm.eb> Alternatively look out for the technical events that we hold throughout the year which are often held on farm to ensure practical relevance.

Across Europe some farmers have taken this exchange of ideas a step forward and begun cooperatives to share knowledge in the area and exchange expertise. In the Lake Geneva region of Switzerland, fruit growers together with researchers founded their own group under the acronym GALTI as early as 1976 (Endure, 2013). A social sciences study conducted by Endure showed the value of such membership to an IPM farmer group. In these groups, farmers learn from one another, from advisers and from invited speakers such as researchers. The interviews showed that sharing individual decisions within a group and discussing the range of opinions of other farmers and of the advisors generated the confidence needed by farmers to innovate (Endure, 2013).

LEAF is also part of a pan-European network, EISA (the European Initiative of the Sustainable development in Agriculture) and together we run events on Demonstration Farms which form great opportunities to exchange ideas and discuss new practices in an informal but structured setting.

### What can other players in the food chain do to promote IPM?

There is a lot more that can be done by the government and industry to further promote the uptake of IPM, with further research and developing new technologies and innovations.

Additionally, there is discussion that retail chains could go a long way towards achieving reduced reliance on pesticides and advanced forms of IPM for example through relaxed visual standards and acceptance of resistant varieties of produce. This would need to be supported by educational campaigns to create favourable conditions for the marketing of IPM produced food (Endure, 2013).

Consumer attitudes to IPM are also changing especially for higher value products such as wine and fresh fruit, where pesticide residue issues are most sensitive. Current research shows the importance of traceability and clear labelling for consumers to support the higher prices of sustainability produced premium products (Birch *et al.*, 2011). Furthermore the continual growth of LEAF Marque demonstrates support for fully integrated IFM approaches in the market place.

Research into IPM continues to grow with the full breadth of IPM techniques being constantly pushed and investigated to their full boundaries. Much of this is still academic but will soon be tested in the field and with increased interest they will soon be evident on farm. LEAF is involved in this area with its network of LEAF Innovation Centres to help ensure this link from scientific progression is available for farmers on the ground.



Some of the current interesting themes out there at the moment can be seen below and for further details on any of these see the James Hutton Institute website or Birch *et al.*, 2011: <http://www.hutton.ac.uk/research/themes/delivering-sustainable-production-systems/ipm>

- Managing weeds – the seedbank as an indicator of farming intensity
- Weeds as biodiversity
- The role of weeds, volunteer and ferals in geneflow and persistence
- Impacts of GM herbicide tolerant cropping on farmland biodiversity
- Plant breeding for pest and disease resistance in IPM
- Optimising agricultural food webs for biocontrol in IPM:
- Dealing with heterogeneity in IPM
- Reinstating diversity in the crop
- Engineering large-scale heterogeneity

### Where next?

IPM has been practiced for many centuries and in most cases is just 'good farming built around common sense'. LEAF has been advocating IPM within a wider IFM setting for over 22 years and we will actively support our members in meeting the requirements of the Sustainable Use Directive and the UK NAP. However, there are business opportunities with the increased uptake of IPM and the wider appreciation of techniques alongside more situation specific advice.

From a more academic perspective the current aim is to combine these IPM tools in an organised way and to optimise them in IPM toolbox packages for specific agro-ecosystems (Birch *et al.*, 2011) for dissemination to farmers. Scientists are currently designing and testing farmer friendly IPM packages which work together at farm scale to decrease pesticide inputs (Birch *et al.*, 2011).

LEAF will continue to ensure that as we develop Integrated Farm Management and IPM we communicate practical, realistic and achievable solutions, while working with others to seek new innovations and technologies to improve farm productivity, environmental enhancement and social acceptability.

### References

Birch ANE, Begg GS, Squire GR. (2011) How agr-ecological research helps to address food security issues under new IPM and pesticide reduction policies for global crop production systems. *Journal of Experimental Botany*. 62 (10): 3251-3261

ENDURE (Bàrberi P, Moonen C, (SSSA), Zijlstra C, van den Ende E, Boonekamp P (DLO), Barzman M, Ricci P, Messéan A (INRA), Sattin M (CNR), Jørgensen N, Kudsk P (AU), Jensen J (VFL), Dachbrodt-Saaydeh S, Hommel B (JKI), Ratnadass A, Sarah J (CIRAD), Graf B (Agroscope), Kiss J (SZIE), Birch N (JHI). (2013) On the implementation of the eight principles of IPM: A paper on research and development needs and opportunities.