PSD gets credit for positive UK biopesticide future

A positive shift in the attitude of the Pesticide Safety Directorate (PSD) in recent years has put UK growers in a strong position to take advantage of biopesticide products in future, reports Michael Barker.

Speakers at a Warwick HRU-organised event in Stoneleigh, Warwickshire, last week, praised the PSD for its support of biopesticides, but stressed that there was still some way to go before the UK adds to its total of just four microbial products, which was some way behind the sum of 1,400 biocontrol products that are listed as being available worldwide.

A project is currently ongoing led by Professor Wyn Grant (above) of the University of Warwick which aims to put natural and social scientists together to address problems affecting the rural economy, and specifically, examining the sustainability of biopesticides. In particular, it hopes to move towards greater regulatory innovation for biopesticides, and undertake further work on the ecology of microbial agents.

Biopesticides are mass produced biologically based agents used for the control of pests. They can be living organisms in the shape of natural enemies or naturally occurring substances in the form of biochemicals.

Their use is becoming more popular among growers around the world due to problems of widespread disease resistance and dwindling availability of chemical pesticides. They are also relatively inexpensive to develop ($10-15m compared to $150-200m for chemical products), and can be quicker to get to market. In addition they are seen as being popular with retailers who are seeking to promote a more environmentally-friendly approach.

However, as Dr David Chandler (below right) of the University of Warwick pointed out, the difficulty is getting biopesticides commercialised and getting them out to growers, a problem that he said needed to be addressed.

Professor Grant added: "Public money has been invested in discoveries that never reach the market. We need a system that sees more product reach that market."

That view was endorsed by entomologist Dr Mark Whittaker of consultants JSC, who explained: "Historically millions went into biopesticide research, but none went into commercial development or funding registration. Growers need government to rethink its funding priorities, with a bit less on research and a bit more on implementation and offsetting the cost of registration."

He added the caveat that money was still needed for further research into understanding the field application, efficacy and reliability of biopesticides.

Above all, Dr Whittaker said that what growers needed was "a more comprehensive armoury" of products than was available at present, with microbial products needing to be more robust and covering a wider range of crops. Growers also sought an unambiguous policy on biopesticides from the Government.

As far as supermarkets were concerned, Dr Whittaker called for a recognition that biopesticides provided consumer benefits in terms of residue reduction, but also that it cost growers more to use these products than traditional chemical options. His wish list included higher prices for food produced using biopesticides, and a more stable market for IPM produce.

Dr Whittaker directed clear praise at the PSD for its support of the sector, citing the biopesticide pilot that had led to the introduction of the Biopesticide Scheme. There was also now agreement on data requirements in advance, data waivers based on scientific evidence, pre-meetings and the provision of a biopesticide champion. And a PSD/IBMA (International Biocontrol Manufacturers Association) liaison group had been established as a forum for mutual information exchange.

"PSD are leading the field in this area in Europe. We are in a very fortunate position now in the UK," he stressed, adding that the UK now needed an international biopesticide industry to respond to these UK regulatory changes by bringing products to market.

One of the problems with biopesticides has been that people continue to associate them with conventional pesticides, and Professor Grant called on environmental organisations to get involved in promoting the products, as has been the case in the Netherlands.

Meanwhile Dr Don Edgecomb of US firm AgraQuest said that growers had been reluctant to switch over to biopesticides without "compelling reasons" to do so, with the testing protocols used often not demonstrating the full potential of the products. He also warned that as biocontrol companies were often much smaller than firms producing chemical agents, they had fewer resources to put into product development and bringing them to market.

However there was a general feeling that following many years of little discernible progress, the UK was now in a position to bring products to market and for biopesticides to become a more prominent tool in growers' armouries, though most likely alongside conventional chemical products rather than in place of them.