

Opportunities abound for bio-pesticides

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By Andrew Arbuckle

RECENT moves by the European Union to remove older and more toxic chemicals from the armoury in the battle against crop pests has opened up opportunities for new bio-pesticides, according to one of the companies leading that branch of science.

Marcus Meadows-Smith of AgraQuest, which is based in California, described Europe as "the perfect market" for promoting a number of new pesticides produced by his company because there was a need to fill the gap brought about by the withdrawal of agrichemicals.

Theoretically bio-pesticides do not need to go through the rigorous testing scheme for new pesticides because they are deemed to be no more than strains of existing bacteria that have special inhibiting effects on certain pests and diseases; in this, they are unlike agrichemicals which are specially formulated compounds.

But Meadows-Smith said his company would be following the complete testing route so that they would be able to stand alongside approved chemicals.

He preferred the kudos the EU approval gave a new crop protection product. This was better than approval in the US where, he claimed, the efficacy of several products was questionable.

Currently the market for bio-pesticides is quite small with most of the existing products being used in controlled atmospheres such as polytunnels and greenhouses.

However, the upcoming generation are intended for use on a field scale and they are compatible with agrichemicals so that growers can use them in tank mixes to give as broad a layer of protection as possible.

Sales of bio-pesticides worldwide currently amount to around \$1 billion annually which is small beer compared with the agrichemical market which is 30 to 40 times larger than that.

Meadows-Smith believed the bio-pesticide market would increase gradually and he predicted it could be worth \$10bn in ten years time. Part of the growth would come with relatively small companies such as his own, linking up with the multinational organisations that now dominate the world agrichemical scene.

AgraQuest have already signed an agreement with one of the world's big five, BASF, on the distribution for one of their new fungicides, Serenade.

This product uses a patented strain of bacillus which inhibits the growth of mould, or blight on plants.

Other bacterial strains are in the pipeline for use as insecticides and nematicides, the latter being particularly urgently needed with the withdrawal of most of the main products currently available on the European market.

However, the one area where, the new science is unlikely to come up with answers in dealing with pests and diseases is in herbicides.

Meadows-Smith admitted there was nothing looking likely in this area.