

Linuron and monolinuron in EC Review programme

One of the casualties of the European Commission's review of older active ingredients is monolinuron, but according to Aventis, linuron which is used widely by potato growers, is being strongly defended. Monolinuron and pyrazophos are the two latest actives failing to achieve Annex I status under European Commission Directive 91/414/EEC. There was never any plan to defend the latter at EU level. With monolinuron's market limited principally to the UK and the Netherlands, supporting it with an updated data package was not commercially justified.

GM report slated

A series of reports by the Organisation for Economic Cooperation and Development (OECD) which conclude that already approved genetically modified (GM) crops are as safe as other foods have been criticised by environmental groups. The OECD undertook the project at the request of the G8 group of industrialised countries who wanted a study of the implications of biotechnology and other aspects of food safety. Monsanto says that since the reports say the products on the market are now safe there should be increased consumer acceptance. The company says that even if consumers do not trust what industry says, they may trust source like the OECD. Novartis Seeds says the reports confirm what industry has been saying all along. According to Greenpeace, OECD has no basis for saying that approved GM crops are as safe as other foods and that the reports contradict other findings.

European Commission and GM crops

The European Commission has said that its current moratorium on new GM crops was illegal and proposed kick-starting its stalled approval process. The Commission plans to apply tough new rules governing the labelling and traceability of GM crops as soon as they are agreed by EU governments and the European Parliament but before they legally enter into force. This could be as soon as the end of the year, and would avoid waiting for the legislation to be transposed into national laws, a process that can take a further 2 years. The EU's authorisation process for GM crops has been in deadlock since mid-1998, when environment ministers imposed a de facto moratorium on new approvals until new laws were drafted.

GM report

A report entitled 'Transgenic Plants and World Agriculture', published jointly by the science academies of Brazil, China, India, Mexico, the USA, the UK Royal Society and the Third World Academy of Sciences, says that GM plants could help to feed the growing number of hungry people, but emphasises that the GM industry must be ready to share its technology for the common good and that high priority should be given to research into the possible long-term effects of GM plants on human health, wildlife and the environment. It is imperative, the report says, that public funding of research in this area is maintained at least at its present level in both the Consultative Group on International Agricultural Research (CGIAR, a network of 16 international research centres) and national research institutions since it would be foolish for a technology with so much potential to be ignored. English Nature and Christian Aid have welcomed the report emphasis on the concept of collaboration for the benefit of the poor, as long as both the risk and benefits are recognised.

Biocide market prepares for change

In May 2000 the harmonisation of European biocide regulations through the European Biocidal Product Directive (BPD) took place. The BPD is expected to have a major impact on the future of the biocides market since it will affect the number of active ingredients and formulated products that will remain available on the market. Whilst the BPD was due to be implemented in all member states on 14 May 2000 only one member state (Denmark) achieved this. Since this date Finland and Sweden have implemented and a few others, including the UK, plan to have implemented the Directive by the end of this summer. The complexity of the BPD is a major reason for these delays in implementation together with a lack of precision in key areas such as the scope and the specific data requirements. These areas are currently being worked on by expert groups established by the European Commission and the Commission has also started work on the review programme. The review programme will be by far the major way in which the annex I list will be completed and the BPD requires a Regulation to administer this and allows a ten year period for it. The first part of the Review Regulation has been

agreed by Member States and is expected to be published in the *Official Journal of the European Communities* (OJ) in September. The second part of the Review Regulation will list those actives which are to be reviewed and with what priority – this will be dependant on data submitted by industry but it has already been agreed that those actives used in wood preservatives and rodenticides will be given priority. Work is yet to start on this second review Regulation but it is planned to be published early in 2002. It is expected that the high costs associated with the provision of data to assess whether or not active substances can continue to be used will result in a reduction in the number of available active substances from about 1500 currently to as few as 300-400 by 2010. Many companies will probably withdraw from the biocides market altogether. The effect of this may also be to restrict the development of new, environmentally acceptable biocides. For more information on the Biocides Directive see *Pesticide Outlook*, 1999, 10(1), 6 and <http://ecb.ei.jrc.it/biocides/>

Chlorpyrifos limitations in the USA

Dow AgroSciences has reached agreement with the US Environmental Protection Agency (EPA) on changes in the use of insecticides containing chlorpyrifos. The agreement includes a voluntary cancellation of most in- and around-the-home uses of chlorpyrifos in the US including use of the product as a full-barrier termiticide treatment in existing residential structures. Use of products affected by this agreement will be allowed until existing stocks are depleted. Use of chlorpyrifos in the US as a termiticide for spot and local treatment will be allowed until 31 December 2002. Chlorpyrifos will remain available in the US for uses as a termiticide for new residential construction (pre-treat) until 31 December 2005. This date may be extended, however, based on the results of an exposure study specific to this application. Retail sale of chlorpyrifos products in the US will be allowed until 31 December 2001. Chlorpyrifos will remain available for various US non-residential uses such as golf courses and ornamental nurseries as well as for all US crop uses except tomatoes. The agreement includes refinements in agricultural applications that result in a reduction of chlorpyrifos residues in the US on apples and grapes. This agreement is specific to the US sale and use of chlorpyrifos.

OP sheep dips in the UK

...call for OP ban to be lifted

A cross-party group of MP's has informed the UK government that organophosphate (OP) sheep dips should be allowed back onto the market as soon as possible and a plan of action devised in case there is an outbreak of scab. The House of Commons Agricultural Select Committee said it did not dismiss the suffering of people of whose ill-health has been associated with sheep dips, but it believed that OPs should be restored to the market in appropriately designed containers as quickly as possible. The Committee believes that without the treatment of their choice and with no suitable alternatives farmers will be faced with severe economic, environmental, and animal welfare implications as a consequence.

...call for the ban to stay

According to anti-organophosphate (OP) campaigners, new research linking OPs and nerve system damage means the government must think again before re-introducing OP sheep dips. Scientists at Imperial College, London, say they now have evidence that long term low level exposure to OP dips damages the brain and nervous system. Separate research at University College, London, indicates evidence of verbal memory impairment. According to the Pesticides Action Network UK, formerly the Pesticides Trust, the new research proves that any plans for re-introduction should be abandoned. The National Office of Animal Health says the precautionary principle already applies to OPs and that is why they have been withdrawn until containers could be modified. Because of continued pressure on safety, even if OP dips are re-licensed they will be probably not be making a long-term comeback. In June 2000, Bayer and Novartis Animal Health confirmed that they will not be selling OP dips because of the cost of redesigning containers to make them safer for farmers.

Human carcinogenicity of atrazine

Following detailed scientific studies into the carcinogenicity of atrazine, the US-EPA recently produced a report which concluded :

- cancer is limited to the mammary glands (plus earlier pituitary tumors).
- only female SD rat are affected; no

cancer in males or in Fischer rats or mice of either sex.

- there is an increased incidence and/or decreased latency of adenocarcinomas and fibroadenomas.
- there is probably a hormonal mechanism (hypothalamus/pituitary).
- there is probably a threshold mechanism.

Overall the US-EPA concluded (based on the possibility of unknown/unspecified tumors arising from a similar endocrine disruption in humans) that *atrazine is a "likely" human carcinogen*.

The studies behind this report were carried out following a 1986 chronic dietary study in the Sprague-Dawley (SD) rat indicated that atrazine was a "possible" human carcinogen; in 1988, a FIFRA Science Advisory Panel (SAP) agreed, and raised the issue of a possible endocrine imbalance causing the (mammary) tumors observed.

The report was discussed at another FIFRA SAP held June 27-29. Although the panel members liked the report and commended the US-EPA for a fine effort, they disagreed with the final conclusion that atrazine is a 'likely human carcinogen'; most of the SAP members felt that atrazine was either unlikely to be a human carcinogen or else the data were insufficient to make a classification possible.

According to representatives from Novartis, some of whom were present at the SAP meeting, more than 700 scientific studies – 100 of those conducted since 1995 – confirm atrazine's safety to human health and the environment. Novartis disagrees with the EPA's default cancer classification for atrazine, because it is based on an incorrect interpretation of the EPA's preliminary draft cancer guidelines and is inconsistent with the weight of the scientific evidence. Studies of a single strain of laboratory rat show that high doses of atrazine are associated with an earlier onset of the rat's naturally occurring mammary tumors – an effect which, according to independent scientists, is not relevant to humans (http://www.cp.us.novartis.com/products_atrazine_frame.html).

It is noteworthy that in 1998 the International Agency for Research on Cancer (IARC) changed its classification from "probably carcinogenic in humans" to "not classifiable regarding cancer in humans." Similar conclusions have been reached by the EU and the Australian government regulatory authorities (see IACR

Monograph No. 73; <http://193.51.164.11/htdocs/monographs/Vol73/73-03.html>)

Fairer implementation of FQPA

As a consequence of the combined efforts of grass-roots lobbyists, farmers, agrochemical manufacturers, and other agribusiness interests, half of the members of the US House of Representatives have agreed to support a bill (the Pombo Bill) that would force the EPA to alter the way it is implementing the requirements of the Food Quality Protection Act (FQPA) of 1996. The legislation does not alter any of the new and more rigorous safety standards, but rather it establishes a fair process. It is aimed at directing the EPA to use sound science, not the whim of the Washington bureaucracy, in implementing the FQPA. The proposed legislation would slow the EPA's review of about 9000 registered pesticide uses and give producers time to generate new data for the EPA's risk assessments. According to its critics, EPA is relying on worst-case computer predictions, instead of the best available information, in making pesticide registration decisions. Since FQPA was enacted, EPA has been roundly criticised by farmers and the agrochemicals industry for circumventing Congress' original intent and moving too quickly to ban some pesticide products. The Pombo bill, however, is opposed by the Clinton Administration and environmental groups, and the House Commerce Committee's chairman believes it has no chance of becoming law during 2000.

Pesticide container disposal

The highly successful and effective on-farm incinerator (see *Pesticide Outlook*, 1998, 3(3), 46) for pesticide container disposal developed by the Crop Protection Association (CPA) has fallen foul of the Department of the Environment, Transport and the Regions (DETR) and its interpretation of the new European Directive on waste incineration, expected to pass into community law in the next few months and to be included in UK law in 2004 at the earliest; the new Directive sets stringent controls on emissions. The DETR will not seek any European exemptions for the simple, practical and much-applauded incinerator, despite representations from the CPA and the National Farmers Union.

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