

The UK Expert Committee on Pesticides (ECP)

Advice to Ministers

Application for an emergency authorisation for the use of 'Poncho Beta' and 'Cruiser SB' as seed treatments on sugar beet

Introduction

This paper provides advice to Ministers relating to two applications from the British Beet Research Organisation seeking an emergency authorisation for the use of 'Poncho Beta' and 'Cruiser SB' as seed treatments on sugar beet to provide protection against the virus yellows complex transmitted by the virus vector, peach-potato aphid (*Myzus persicae*).

Background

The EU changed the approval conditions for three neonicotinoid active substances, clothianidin, imidacloprid and thiamethoxam, so that they could not be used on a number of crops attractive to bees, such as oilseed rape, from December 2013. Following a detailed review of data by the European Food Safety Authority (EFSA) at the Commission's request, further EU regulations were introduced in May 2018 to restrict the same three neonicotinoids to use on plants which spend their life-cycle in glasshouses. The UK Government supports these restrictions.

'Cruiser SB' contains thiamethoxam and 'Poncho Beta' a pyrethroid/neonicotinoid combination (beta-cyfluthrin/clothianidin). Regulations (EU) Nos. 2018/784 and 2018/785 prohibit the application of clothianidin and thiamethoxam to seeds from 19 September 2018 and sowing treated seed from 19 December 2018 for all remaining crop groups, including sugar beet. This means that although the products are currently authorised, they would not be available for sugar beet sowings in 2019.

Discussion

The Committee noted requests for emergency authorisations are assessed against a number of criteria, including: whether use is limited and controlled; the case for need; and understanding of the risks associated with the proposed use. ECP noted that:

- It is not currently possible to limit treatment on a risk basis to a proportion of the crop when treating *Myzus persicae*. The decision on whether to treat seeds would

depend on whether a virus risk prediction model exceeded a defined threshold. The model, however, is claimed to be robust only to regional level (though work is underway to improve its granularity). Fields with treated seed tend to be located relatively close to the four sugar beet processing plants. The treatment of seeds would take place in late February 2019 - this is later than usual – when results of a national aphid monitoring survey become available and can be combined with the modelling work. HSE would review the monitoring data.

- All UK sugar beet is grown under commercial contracting arrangements. This provides an effective mechanism for controlling the distribution and use of the treated seed and, for example, any restrictions on the planting of following crops.
- The case for need was based on:
 - There being no alternative authorised insecticides (foliar pyrethroids are largely ineffective due to widespread resistance of *Myzus persicae*).
 - A current lack of cultural and physical controls providing effective control of *Myzus persicae* (though industry has invested significantly to address this, including a £1.1m plant breeding project).
 - The proven effectiveness of these seed treatments in preventing yield losses ranging from 0-17%, with an average loss of 7.9% (this estimated by Government to be worth approximately £18m).
- There were a number of unacceptable environmental risks associated with the use of these products and they would be concentrated in areas planted to sugar beet, namely:
 - The persistence and mobility of clothianidin and thiamethoxam in soils could result in residues with the potential to cause unacceptable effects to bees in following crops and flowering plants in field margins. ECP noted that no evidence was presented as to whether the applicant's proposed 16 month restriction on planting a flowering crop following the drilling of the treated seed would mitigate potential impacts.
 - Birds and mammals eating seedlings from treated seed and birds consuming pelleted seed. The Committee recognised that these risks had been determined on a conservative basis, but that no higher tier data were available to refine the assessment.
 - In some soil types the highest concentrations of thiamethoxam and clothianidin in surface waters were assessed as adversely impacting populations of aquatic insects.

The Committee was requested by Government to provide advice on a number of aspects of the environmental risk assessments. ECP concluded that when assessed against current guidance insufficient evidence was provided to conclude acceptable risks to bees,

birds and mammals, aquatic organisms and from residues in following crops/immediate environment.

Committee advice

The Committee recognised the importance of these seed treatments to sugar beet cultivation and that such uses are currently authorised. However, ECP advises that on the basis of the evidence presented, particularly in relation to the potential degree of environmental risk, the case has not yet been made to grant an emergency authorisation for this use.

**UK Expert Committee on Pesticides
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