Integrated Pest Management

Methyl Bromide Critical Use Exemption – Worthwhile Process or Exercise in Futility?

Opinions on the continued production and use of methyl bromide (MeBr) fumigants in the US agricultural industry are as far ranging as the types of crops for which it is used – whether regarded as an extreme environmental hazard requiring a global ban or as an on-going necessity for agricultural production. Although the forest nursery industry universally acknowledges the effectiveness of MeBr, opinions are divided on whether bareroot crop production can continue at its current levels without this fumigant.

Research on alternatives to MeBr has been conducted over the past 15 years, partly in response to the ratification by 183 countries of the Montreal Protocol in 1988 on Substances that Deplete the Ozone Layer. This 1988 report identified MeBr as an ozone-depleting substance and scheduled its complete phaseout by January 2005 in these countries. This research has yielded viable options. The effectiveness of the options, however, is highly dependent on the target pest, the crop type, and, in particular, the regional location of the nursery. In the US, southern forest nurseries find themselves far more dependent on MeBr than either eastern or western nurseries due to growing conditions and the wider variety of pests.

In 2002, the US Environmental Protection Agency solicited applications for a Critical Use Exemption from the phaseout of MeBr, providing users of the fumigant with the opportunity to submit technical and economic information to support this exemption (EPA 2002). In response, 9 applications for the use of MeBr for forest seedling nurseries were submitted to the EPA by 9 different consortia (Finman 2003). These consortia were comprised of Federal, State, and private nurseries and spanned the production of a variety of crop types and forest species. In February 2003, following an extensive review process by the EPA and the US Department of Agriculture, the US submitted a two-year exemption request to the International Technology and Economic Assessment Panel (TEAP) of the Montreal Protocol. The proposed exemption would begin in 2005, with MeBr use at 39% of current baseline consumption and declining to 37% in 2006.

In May 2003, the TEAP recommended that the Parties to the Protocol approve less than 10% of the amount of MeBr requested by the United States, determining that the US government had not submitted sufficient information to substantiate their request (Riggs 2003). Although the information submitted by several of the forest nursery consortia was extremely detailed, the jury is still out on the reasons behind the determination.

The EPA is currently formulating responses to the Methyl Bromide Technical Option Committee and the TEAP. In addition, they are once again soliciting applications for a further Critical Use Exemption (EPA 2003). So in other words, it's not over yet folks. Stay tuned.

Information on EPA's Critical Use Exemption for methyl bromide is available at: http://www.epa.gov/ozone/mbr/

Sources

EPA. 2002. Protection of stratospheric ozone: process for exempting critical uses of methyl bromide. Federal Register 67(91): 31798-31801.

EPA. 2002. Protection of stratospheric ozone: process for exempting critical uses of methyl bromide. Federal Register 67(91): 24737-24740.

Finman H. 2003. Personal communication. Washington (DC): US Environmental Protection Agency.

Riggs D. 2003. TEAP rejects EPA's application – the CUE process run amuck. The Crop Protection Coalition Memorandum 5/25/03. 3pp.