

Methyl Bromide Q & A

How important is methyl bromide to the milling industry?

The Montreal Protocol of 1992 as well as the U.S. Clean Air Act require that methyl bromide use be gradually reduced until complete phase-out in 2005.

The U.S. uses about 60 million pounds of methyl bromide per year, according to the U.S. Department of Agriculture Agricultural Research Service (ARS).

About 11% of that is used to fumigate harvested commodities during storage and export, and about 6% is used to fumigate structures such as food processing plants and transport vehicles. A majority of methyl bromide is used for soil fumigation.

Scientists nationwide are studying alternative fumigants, heat and cold, and modified atmospheres for replacing methyl bromide.

In 2000, researchers at Kansas State University, the primary site for methyl bromide alternative research for flour mills and food processors, surveyed millers to determine the impact of the upcoming methyl bromide phase-out on the milling industry. Researchers received responses from 44 out of 77 milling companies surveyed in the United States and Canada. Here's what they found out.

Which of the following responses best describes your likely use of methyl bromide in the next 12 months?

Nearly 61% of the companies that responded reported that they will likely use some methyl bromide and are satisfied with it. About 25% of the companies indicated that they do not use methyl bromide. Fourteen percent said they will likely use some methyl bromide, but they would prefer to use alternatives.

What is your opinion about the current status of potential alternatives?

About 68% of the companies felt that some potential alternatives have been identified, but they are not viable at the present time. About 25% of the respondents felt that potential alternatives have not been identified, whereas 7% felt that satisfactory options exist today.

Which of the following statements best describes your opinion about the need for identifying additional treatment options?

Overwhelmingly, 89% of the milling companies mentioned that additional alternatives are needed to replace methyl bromide. Nine percent responded that additional alternatives

are not needed, and 2% reported that no viable alternatives have been identified.

Which areas of methyl bromide research would be most valuable to your operation?

The effectiveness of treatments was identified as the most critical area in which research is needed, according to 61% of the companies, while 30% felt that such research would be valuable.

Conducting research on how pest populations rebound after a fumigation or intervention was identified as a valuable area of research by 52% of the companies.

The susceptibility of insects to chemical or non-pesticide treatments, monitoring pest populations, and insect activity level required to trigger a large-scale treatment were selected by 34-46% of the milling companies as valuable but not critical areas of research.

How willing would you be to provide research assistance such as scientists, mill sites, funding, and lobbying?

About 3-18% of the companies were completely willing to help provide assistance in designing research to study topics in the previ-

ous question, provide mill sites for testing, assisting in funding research and in lobbying efforts to secure private or federal funds.

However, 39-50% of the companies said they were somewhat willing, and 9-23% of the companies were not willing to assist at all.

In the absence of methyl bromide, what pest management techniques and methods would you use?

Responses to this question were varied. About 55% of the companies said they would use heat, followed by phosphine gas (50%), sanitation (43%), inspection (23%), and fogging/carbon dioxide (14%).

Awareness of alternative fumigants like sulfuranyl fluoride (Profume) was limited when researchers conducted the survey. Profume is a potential methyl bromide alternative for flour mill fumigation.

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New Columnist Joins *Milling Journal*



Dr. Subramanyam (Subi) Bhadriraju, associate professor, Department of Grain Science and Industry, Kansas State University, Manhattan, has joined *Milling Journal* as a regular columnist.

He will cover pest management topics including sampling/trapping insects, managing insect pests with pesticide alternatives or reduced-risk pesticides, and IPM programs for insects in stored grain and processed foods.