

Alternatives to methyl bromide for stored grains

Tests involving three alternatives to methyl bromide for controlling pests affecting both indoor and outdoor grain stacks have yielded 100 per cent efficacy against the highly tolerant rice weevil (*Sitophilus oryzae*) when tested indoors. These results were presented by researchers at the Central Science Laboratory, the United Kingdom, at a workshop in Syria. The alternative fumigants studied include conventional solid phosphine formulations (aluminium phosphide sachets), cylinder-based two per cent phosphine in carbon dioxide, and cylinder-based carbon dioxide. Phosphine tests also showed total efficacy when tested outdoors.

Of the three alternatives, it was observed that phosphine treatments were more promising than carbon dioxide for outdoor storage in Syria. Though phosphine is already being used in Syria, it has been known to cause fire at some storage sites. Researchers have now devised new methods to prevent phosphine sachets from coming into contact with water and thereby causing fire. They also recommend the use of cylinder-based phosphine to eliminate any possibility of fire hazards. *Contact: Dr. Chris Bell, Pest Management Group, Central Science Laboratory, Sand Hutton, York YO41 1LZ, the United Kingdom. Tel: +44 (1904) 462 104; Fax: +44 (1904) 462 104; E-mail: c.bell@csl.gov.uk; Website: <http://www.csl.gov.uk/> (Website: <http://www.uneptie.org/ozat/pub/rumba/00mar.htm>)*