

ABSTRACT

CARBONYL SULPHIDE FUMIGANT AND METHOD OF FUMIGATION

The gaseous chemical compound, carbonyl sulphide, has hitherto been unknown as a fumigant for the control of insects and mites. Experiments have shown conclusively that carbonyl sulphide can be used as such a fumigant, with fumigation properties comparable to those of phosphine and methyl bromide. The effectiveness of carbonyl sulphide against insects (both adult and immature stages), mites, termites and moulds is demonstrated. In addition, its low absorption by grain, lower flammability than phosphine, lack of influence on seed germination, and apparent environmental safety make carbonyl sulphide particularly beneficial as a fumigant of stored grain. It may also be used to fumigate other stored produce (including perishable foodstuff), soil, timber and spaces (such as buildings) and any material likely to be infested by insects or mites, or act as a source of such infestation.

(No Figure in the drawings can appropriately accompany the Abstract when published)