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THE USE OF CONTROLLED ATMOSPHERES AS REPLACEMENT FOR METHYL BROMIDE, PH3 AND SULFURYL FLUORIDE

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Insects and other pests in commodities need to be controlled to meet customer requirements. Methyl bromide and Phosphine fumigants that have been widely used in the past as disinfestations agents have well-documented environmental and other problems. These problems are solved in the Netherlands through the commercialization of controlled atmospheres, heat and heated controlled atmospheres. These treatments that can be accommodated within the logistical requirements of many import products are safe, affordable, effective, residue-free, and environmentally-friendly alternatives to MB. The treatments are available all over the world to meet the requirements for decentralized disinfestations of food and non-food items. Importers and exporters are under intense pressure to find safe and effective alternatives to control insects in commodities that replace the use of MB and other toxic chemicals.

Key words: Stored product pest control, controlled atmospheres, heat, disinfestations, post harvest, environmentally-friendly, methyl bromide, phosphine, sulfuryl fluoride