USE OF LOW OXYGEN ATMOSPHERES IN QUARANTINE APPLICATIONS TO ERADICATE *MUS MUSCULUS*, THE HOUSE MOUSE.

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The feasibility of using low oxygen atmospheres to eradicate infestations of mice (*Mus musculus*) to meet quarantine standards was investigated. Drilling equipment and portable buildings were enclosed within standard plastic fumigation sheets, with and without floor sheets. The enclosures (ranging from 45-189m^3) were dosed with a high nitrogen atmosphere (oxygen 1.5%) supplied by a membrane system.

Atmospheres containing less than 2.5% oxygen were obtained and maintained within the enclosures for a minimum of six hours. This regime was found to provide 100% mortality against mice exposed to it. Work is continuing to establish a cost effective exposure period.

The potential application of this treatment as a quarantine measure against rodents is discussed and its costs compared with conventional disinfestation using methyl bromide.