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World Wide Alternative Pest Elimination Services Inc.

POST HARVEST TREATMENT OF GRAIN & STORAGE / MILLING FACILITIES WITHOUT THE USE OF METHYL BROMIDE.

The World leader in the cost effective and time efficient treatment of insects in grain and grain storage facilities.

Methyl Bromide Can Be Successfully Replaced.

Prior to grain storage.

Bins and/or silos can be HEAT TREATED.

Introduced and circulated air at temperatures between 135F and 160F exhausted under controlled conditions kills all stages of insect life. Concrete silos take 6-8 hours for a complete kill of egg larvae and adult pupae.

Metal bins: 4-6 hours for a complete kill of eggs, larvae, adult, and pupae.

Thorough cleaning can take place prior to or after heat treatment.

Mite infestations in silos and bins can be controlled by a heat treatment. A heat treatment is recommended prior to cleaning.

Mite problems in the silos and bins can be treated in less than 2 hours at temperatures between 125F and 135F.

Stored Bulk Grain

Designed ducts allow for heated air to be circulated throughout stored grain to eliminate stored product pests. Temperatures are circulated between 117F and 125F for a period of between 6 to 12 hours. Product type, moisture content and the ability to circulate air determine the time line. Hardwired thermocouples are used to monitor temperature movement. Exhaust fans are used to remove and distribute the forced air.

Pallet Stored Goods

Designed ducts allow air circulation through pallets and pallet stacks allowing for the treatment of stored product and pallets. Stored product pests are controlled at ambient temperatures of between 135F and 155F product temperatures are held between 117F and 125F. Hardwired thermocouples monitor temperatures within storage sacks or totes. Treatment periods vary and are determined by temperature alone.

Specialized air displacement ducts, air bags and in line fans ensure a safe, effective, heat treatment.

Successful heat treatment of insects in stored products include the control of, weevils, beetles, moths, wood infesting beetles, rodents, mold, fungi and pest born pathogens

Grains and products currently treated by heat include: coffee, cocoa, rice, wheat, flour, corn, and oats.

Heater Types

Propane/Natural Gas/Steam Units

No variation in grain structure or suitability for processing has become evident when temperatures are maintained between 117F and 125F; temperatures that exceed 125F are not advised. Cocoa beans show signs of oil separation and taste loss, wheat and rice appear to suffer no damage at temperatures of between 125F and 130F.

Prepared and presented by R.J. (Ron) GRINHAM. BSc.