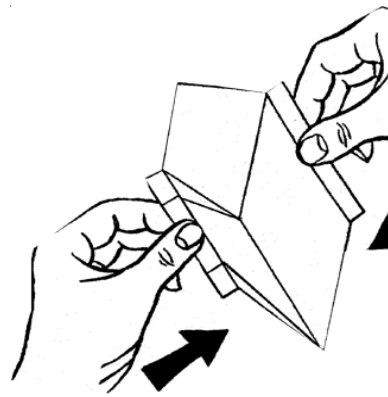


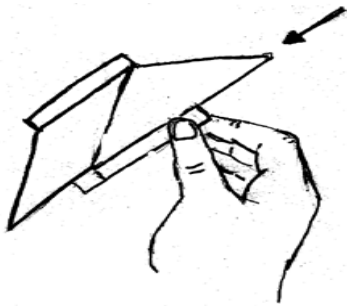
 **GREAT LAKES**



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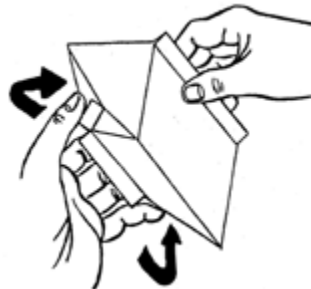


Hold trap at top with one hand and grasp bottom with other hand and pull apart.

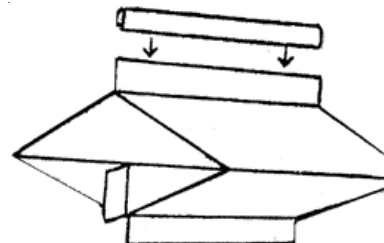


Align bottom edge in a straight line. Grasp end tab and move upward just enough to break crease. Repeat on other side.

Once crease is made, squeeze ends in with fingers and thumb while pulling bottom down at crease. Do not over extend.



Pull downward on trap bottom to set side creases, otherwise side panels may pop out allowing bottom to drop.



Remove lure from foil packet. Drop in bottom of the trap making sure lure is placed on its side.

INDIAN MEAL MOTH AND MEDITERRANEAN FLOUR MOTH

LIFE CYCLE:

Mediterranean flour moth adults have brownish gray forewings and hindwings which are dirty white (wingspan 0.7-1.0 inch). Larvae are creamy white caterpillars that leave food webbed together in a mat. The entire life cycle is 8-10 weeks. They prefer flour and meals but are sometimes found on bran, grain, and cereal.

Indian meal moth adults are reddish brown on the outer 2/3 of the forewing with the rest of the forewing and hindwings a whitish gray (wingspan about 0.8 inch). Larvae are dull white caterpillars, which leave conspicuous masses of loose webbing clinging to the food. The entire life cycle takes 6-8 weeks. They prefer grain, cereal, dried fruits, nuts, peas, and beans. Some items which commonly have infestations are birdseed, dog food, ready mix biscuit, and cake products.

MONITORING:

At least 1 trap should be used for every 40,000 square feet of space in warehouses, food processing, and packaging areas. At least 1 trap/storage unit is recommended for grain storage facilities. Additional traps should be added to high risk areas, and areas where newly received goods are held.

Locate traps so that the entire storage area will be monitored. More traps should be placed near those areas with items at risk of infestation. Avoid placing traps where they will be damaged by lifts or other warehouse operations. Suspend traps from ceiling above areas to be monitored. A string run over rafters from the floor level will enable you to raise and lower trap from the floor level for easy inspection and servicing of the traps. These moths can often be found in dark areas and corners which make these areas good areas for trap placement. In grain storage units, place traps in the airspace above the grain.

Frequent trap inspections along with good record keeping will produce the greatest benefits from the system. Weekly inspections are sufficient for some situations, but daily inspections should be made in low to zero tolerance situations. Insects and other debris should be removed from the trap at each inspection. Trap bottoms should be replaced when the adhesive becomes too dusty to be effective. Lures should be replaced every 6 weeks.

Trapping provides an effective means for detecting both the Indian meal moth and mediterranean flour moth. Traps and lures have proven useful to sanitation officers and pest control operators as an early warning of existing infestations before they become large enough to be found by other survey methods. Each monitoring station consists of a trap baited with a synthetic sex pheromone lure that mimics the odor produced by female moths to attract male moths. Male moths are attracted to the trap by the potent odor and are caught in the adhesive section of the trap.

Common uses include:

Monitoring for infestation: Pheromone traps often give the first indication of an infestation. By using pheromone baited traps and inspecting them often, infestations can be discovered and controlled early. This helps contain the damage and prevent the insects spread to uninfested nearby materials.

Locating an infestation: The pheromone baited traps closest to the site of the infestation will capture more moths than those farthest away. This narrows the search area that sanitation personnel must inspect and increases the likelihood that the source of the infestation will be located and removed.

Timing control measure: Situations where some insects can be tolerated, a monitoring station will indicate an increase in population by increased trap catches. Trap catches can be indexed to other sampling methods and used as a signal to initiate control measures or other actions such as further sampling. In some low tolerance situations, fogging normally performed at set intervals have been suspended and foggings are now based instead on trap catches.

Monitoring the efficacy of control measures: After infested material has been removed or other control treatment implemented, the traps will indicate the effectiveness of the treatment by the reduction in the number of moths captured.

Trapping will provide valuable information on IMM and MFM infestations, but it is not intended to replace existing survey and inspection programs, nor will it provide information on other food storage pests. These guidelines should be supplemented by advice of qualified pest management personnel to best adapt the program to your situation. The manufacturers make no warranty expressed or implied of fitness or marketability and will not be liable for consequential or special or indirect damages resulting from the use or handling of their products.