

# IQ MM MD

Mating disruption for Indian Meal Moth

- IQ P&E MD is a powerful system used to combat food moths present in food processing, storage and manufacturing facilities.
- IQ P&E MD is a curative and preventative replacement to Methyl Bromide fumigation with no downtime.
- A cost-effective solution to the problem of moth infestation in food industries.

**BIODEGRADABLE  
LONG LASTING: 365 DAY**



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Integrated Management of SPI



[www.cropiqtech.com](http://www.cropiqtech.com)

Non-toxic, safe, and effective.

## MATING DISRUPTION SOLUTION FOR:

Indian meal moth (*Plodia interpunctella*).



Tobacco moth (*Ephestia elutella*).



Raisin moth (*Cadra figulilella*).



Almond moth (*Cadra cautella*).



Mediterranean flour moth (*Ephestia kuehniella*).



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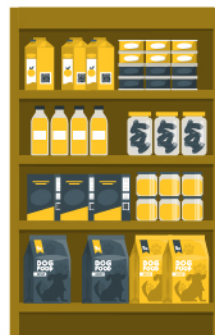
Raw materials storage



Food processing



Distribution center



Grocery and pet supply storage

**UNIQUE LONG-LASTING PRODUCT  
LASTS FOR 365 DAY  
LASTING TWICE AS LONG COMPARED  
TO OTHERS  
WHICH ONLY LAST FOR 90-180 DAYS**



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# IQ MM MD

- **Outstanding results in food processing, commodity storage and retail facilities.**
- **A cost effective solution you can use for prevention and control of P&E and related moths.**
- **Use of IQ MM MD has consistently reduced or even eliminated IMM abundance, and cut down the use of related insecticide applications.**
- **A successful control of Ploda and Ephestia has been demonstrated in several large scale scientific trials.**



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**IQ MM has been specifically designed to assist the following commodities/facilities:**

- Large scale commercial factories
- Bakeries
- Nuts and Dried Grain Storage
- Breakfast cereal Manufacturers
- Cocoa bean storage
- Chocolate manufacturers
- Birdseed manufacturers
- Coffee bean storage
- Edible bean storage
- Feed mills
- Flour mills
- Grain Silos
- Pasta manufacturing
- Peanut processing and storage
- Pet food plants
- Popcorn processing and storage



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# IQ MM MD

is an innovative solution to the problem of moth infestations in food processing and storage such as:

- Dried food cereals, nuts, seeds, dried fruit, cocoa beans, chocolate, tobacco, etc.
- Wheat ( grain, bran, flour mill, semolina), maize, rice, sorghum, oats, barely, date palms, carb pods, fruits, flowers, biscuits, human food and animal feed.



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# Monitoring with IQ MM pheromone lures in combination with IQ MM MD



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# Key Benefits:

- **A non-toxic, safe and effective, all-year-round system that disrupts mating without the use of harmful chemicals or fumigation.**
- **Completely biodegradable which provides a sustainable, less toxic and easy-to-use solution.**
- **A steady release of pheromones for over a WHOLE ENTIRE YEAR.**
- **The pheromones cause sensory overload in the male moth antennae and compete with pheromone plumes produced by female moths, rendering males unable to locate females for mating.**
- **A preventative and curative solution without the need for a downtime every 3-6 months.**
- **Custom-designed to specifically target the main moth species that devastate the food and grain storage industry**



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# Where to use:

Apply IQ MM MD in and around storage and manufacturing facilities containing raw grains and bean seeds and products including but not limited to wheat, barley, rye, oats, corn, popcorn, rice, all edible bean varieties, soybeans, cocoa beans; tobacco; birdseed; all spices; nuts including but not limited to peanuts, walnuts, almonds, pecans, hazelnuts, Brazil nuts and pistachios; dried commodities including but not limited to all fruits, vegetables, spices, nuts, and herbs, all animal and/or pet food, such as dog and cat food, cattle, hog, sheep and other animals in and around storage and manufacturing facilities including but not limited to raw, intermediate/in-process goods and finished goods facilities; mills, bakeries, drying areas.



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# Assembly:

Take the dispenser, wall bracket and metal detectable cable tie out of the foil packaging.

Place the cable tie through the hole in the dispenser and loop it through the hole in the wall bracket, pulling the cable tie to secure together.

Once you have identified where you wish to place the dispenser, remove the sticky paper from the back of the wall bracket and position the wall bracket in place.



## Where to place/distance:

- **Suspend one dispenser approximately 1.5-4 metres high from the floor.**  
Depending on the infestation dispensers need to be placed 7 metres apart e.g. one dispenser every 49-50 metre squared.
- **In rooms smaller than 50 square metres, one dispenser will provided sufficient coverage.**  
If the building is more than 10 metres high then a second layer is required.
- **When installing IQ MM MD, take into consideration the position of air exchange systems, air cleaning systems or air systems.**
- **Full training can be provided by your supplier.**



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## **IQ MM MD IS:**

**Not a replacement for hygiene.**

**It is very important to maintain the cleanliness of the building to avoid encouraging breeding grounds.**

**Performance should be monitored weekly using IQ MM MONITORING.**

**Ensure that any monitors are placed at least two metres away from the MM MD dispenser.**

## **Replacement:**

**Dispensers need to be changed every 12 Months.**

**If a new wall bracket is not required, cut the existing cable tie and dispose of the old dispenser and tie.**

**Add a new dispenser using the new metal detectable tie provided.**



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# Timing:

- Apply prior to moth emergence in early spring or between any generation, in year round programs.
- Monitor moth activity using IQ MM MONITORING traps and lures.
- Begin monitoring in early spring and continue throughout the season to assess treatment effectiveness.
- Depending on temperature, IQ MM MD dispensers will release pheromone for 365 days.
- In areas with long field season, make a second application based on monitoring results.

## Note:

like all available mating disruption solutions, IQ MM MD will not prevent stored commodity damage from immigration of mated female moths into treated buildings.

Nearby (460 meter) untreated buildings can be a source of these mated females.

Treatment with pheromone is recommended only when all buildings within or near treated buildings have been treated with IQ MM MD.



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# Treatment guide:

- **IQ MM MD suppresses mating of target insects.**
- **Immigration of mated female moths from adjacent, infested buildings can reduce the level of control.**
- **Area- wide treatment of entire sets of related buildings is the most effective strategy.**
- **To supplement IQ MM MD, use insecticides to control high populations.**
- **Monitor all pest populations to determine timely use of insecticides.**

## To manage immigration and high population pressures, consider:

1. **Treatment of external sources of infestation with IQ MM MD**
2. **Treatment of external sources of infestation with an insecticide.**
3. **Treatment of pheromone treated buildings with insecticide.**



## Operational Recommendations:

- **Continuous monitoring of moth population using pheromone traps.**
- **CropIQ recommends the IQ MM Monitoring for the most accurate results Maintain good level of hygiene at food processing premises.**
- **Maintain a good level of hygiene in food storage areas.**
- **Evaluation of monitoring by hygiene and food safety officers.**

## Storage:

- When sealed in the packet keep IQ MM MD in a cool dry place to ensure a shelf life of 12 months.
- If longer storage is required keep in the fridge or freezer.



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# IQ MM MD:

- **Almost every area where food is processed will have moths.**
- **Ensure monitoring systems are deployed everywhere, using IQ MM MONITORING, DELTA traps with a pheromone lure.**

Today more and more companies in the food industry are moving away from fumigation and demanding non-toxic solutions.

**IQ MM MD is a BIODEGRABLE effective non toxic and yearlong solution for Plodia and Ephestia.**



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