



# DIACON®-D IGR MALTING BARLEY Q&A



**Q What is Diacon® Insect Growth Regulator?**

**A** Available in two formulations, Diacon® IGR and Diacon®-D IGR help prevent stored product insect larvae from maturing into adults, which helps end infestations and prevent rebound.

**Q What is the active ingredient in Diacon®-D IGR?**

**A** The active ingredient in Diacon®-D IGR is the insect growth regulator (S)-methoprene.

**Q I have bugs in my grain, what do I do?**

**A** If the infestation is severe, first fumigate the grain to kill existing insects, then turn and treat with Diacon®-D IGR as the grain is put into a clean bin.

**Q What about empty bin treatments?**

**A** Clean bins thoroughly and treat the surfaces with an approved adulticide such as Centynal™ Insecticide.

**Q When should I apply Diacon®-D IGR for long-term protection?**

**A** Add Diacon®-D IGR to the grain stream as it moves into storage.

**Q What is the best way to apply Diacon®-D IGR?**

**A** Diacon®-D IGR is a dry formulation that can be applied to the moving grain stream by using a scoop or other calibrated device. An automated delivery system, such as one available from Cyclone Mfg. Company, may be used for Diacon®-D IGR dispensing.

**Q What is the rate of application for Diacon®-D IGR?**

**A** Apply Diacon®-D IGR at 8-10 pounds per 1,000 bushels of grain.

**Q How long will grain be protected at these application rates?**

**A** There are many factors that impact residual activity but typically, under average storage conditions, the 10-pound rate for Diacon®-D IGR should provide continuous control for 12-18 months.

**Q Can Diacon®-D IGR treated grain be used with bin aeration?**

**A** Yes, aeration will not interfere with the efficacy of a Diacon®-D IGR treatment.

**Q Can I treat just the top or bottom of a grain mass, or just the bin walls and get good results?**

**A** For the best results, it is recommended to treat the entire grain mass as well as the bin. By not treating the entire mass, there is a possibility of infestation in the untreated areas of the grain mass.

**Q How soon after treating with Diacon®-D IGR can the grain be used for feed, milling etc.?**

**A** Grain can be used immediately after treatment with Diacon®-D IGR.

**Q Can Diacon®-D IGR be used on malting barley in storage?**

**A** Diacon®-D IGR may be used by MillerCoors™ and Busch Agricultural Resources, LLC growers and other companies' growers supplying barley to MillerCoors™ or Busch Agricultural Resources, LLC. Other malting companies are presently considering usage.

**Q Is there CODEX clearance for Diacon®-D IGR treated grains?**

**A** Yes, CODEX clearance has been established for any grain produced from the grass family (see CODEX website for details).

**Q What is the cost of Diacon®-D IGR?**

**A** Diacon®-D IGR costs range from 3.2 to 4 cents per bushel.

**Q Where can I buy Diacon®-D IGR?**

**A** Please log on to our website [www.bugfreegrains.com](http://www.bugfreegrains.com) to find the distributor/dealer in your area.



# INSECTS CONTROLLED BY



## LESSER GRAIN BORER

SCIENTIFIC NAME

*Rhyzopertha dominica*

COMMON NAME

Lesser Grain Borer, American Wheat Weevil, Australian Wheat Weevil

- **Number of eggs laid** — The female deposits her eggs in clusters of 2 to about 30 on kernels and can produce 200 to 500 eggs during a lifetime.
- **Number of days from egg to adult** — Egg hatch and larval development varies with conditions. The entire cycle would be 25 to 30 days under ideal conditions of 93° F and 12% moisture.



## SAW-TOOTHED GRAIN BEETLE

SCIENTIFIC NAME

*Oryzaephilus surinamensis*

COMMON NAME

Saw-Toothed Grain Beetle. Closely related to the Merchant Grain Beetle.

- **Number of eggs laid** — The female deposits her eggs individually or in small batches in and around a food supply, producing 45 to 285 eggs per year.
- **Number of days from egg to adult** — Eggs hatch within 3 to 10 days, and usually mature into adults within 50 days.



## CONFUSED FLOUR BEETLE

SCIENTIFIC NAME

*Tribolium confusum*

COMMON NAME

Confused Flour Beetle. Closely related to the Red Flour Beetle.

- **Number of eggs laid** — The female deposits two to three eggs per day in flour or other foods and will lay 300 to 400 eggs during a period of five to eight months.
- **Number of days from egg to adult** — Eggs hatch within 5 to 12 days, and mature into adults within 7 to 12 weeks.



## INDIAN MEAL MOTH

SCIENTIFIC NAME

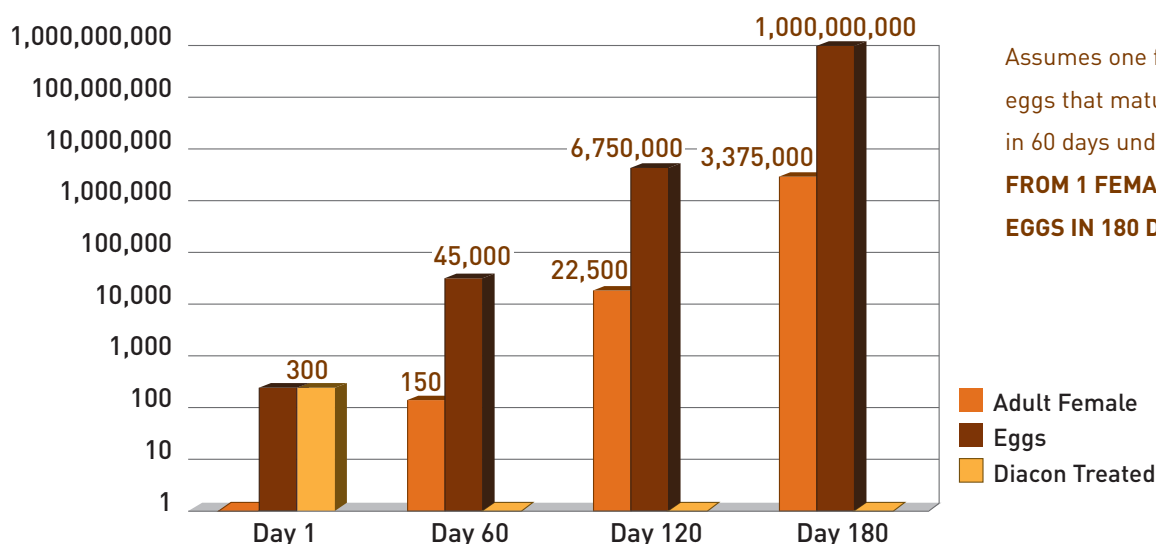
*Plodia interpunctella*

COMMON NAME

Indian Meal Moth, North American High-Flyer, Weevil Moth and Pantry Moth

- **Number of eggs laid** — The female deposits between 60 and 300 eggs, singly or in clusters, on or near the foodstuffs.
- **Number of days from egg to adult** — Eggs hatch in 2 to 14 days. The life cycle depends on temperature, taking two to six months in temperate zones and three to four weeks in warm climates.

## INDIAN MEAL MOTH POPULATION BUILD-UP



Assumes one female lays 300 eggs that mature into 150 females in 60 days under ideal conditions.

**FROM 1 FEMALE TO 1 BILLION EGGS IN 180 DAYS.**