

## Pest Profile



**Photo credit:** by Jim Kalisch, University of Nebraska

**Common Name:** Yellow Mealworm Beetle

**Scientific Name:** *Tenebrio molitor*

**Order and Family:** Coleoptera: Tenebrionidae

**Size and Appearance:** Noted as one of the larger stored product pests, the yellow mealworm beetle is named for the distinct segmented yellow larvae often seen in stored food products. Adults are black or dark brown in color and roughly 13mm in length. The thorax features fine pits or puncture-like indentions and grooved wing covers. Yellow Mealworm beetles have fully functional wings and are often seen flying around light sources. The larvae are yellow, segmented, and resemble wireworms in appearance and size.

	<b>Length (mm)</b>	<b>Appearance</b>
<b>Egg</b>	<b>&lt; 0.05 mm in length</b>	<b>White, bean-shaped, 270+ eggs laid on stored flour, meal or grain waste. Have a sticky glue-like substance to hold them in place.</b>
<b>Larva/Nymph</b>	<b>0.5-15 mm in length depending on instar</b>	<b>Larvae emerge white and quickly turn yellow. About 15 mm long when fully developed and have segmented appearance.</b>
<b>Adult</b>	<b>13-15 mm in length</b>	<b>Black, large, pits on thorax, fully functioning wings.</b>
<b>Pupa (if applicable)</b>	<b>17 mm long</b>	<b>Pupal case formed in stored grain waste from skin of last instar.</b>

**Type of feeder (Chewing, sucking, etc.):** Chewing

**Host /stored food products:** *Tenebrio molitor* consume and reproduce in wastes of most stored grain products.

**Description of Damage (larvae and adults):** While adults are mostly just external grain feeders and easy to remove from material, the larvae can bore into whole grains. This can reduce the weight and therefore the value of the grain, and generate a loss of profits as a result.

**References:**

Smith, E.H. and Whitman, R.C. (2007). Stored Product Pests- Mealworms. In *NPMA Field Guide of Structural Pests*. (9.29.1). National Pest Management Association International.

H., Johnson, N., Borror and Delongs Introduction to the Study of Insects. Brooks/Cole, 7<sup>th</sup> Ed. 2005. Pp. 672 & 729-730.

Jacobs, S. October 1988. Mealworms. Penn State College of Agricultural Sciences. Retrieved from the web on October 30<sup>th</sup>, 2016 from <http://ento.psu.edu/extension/factsheets/mealworms>