

ANGOUMOIS GRAIN MOTH

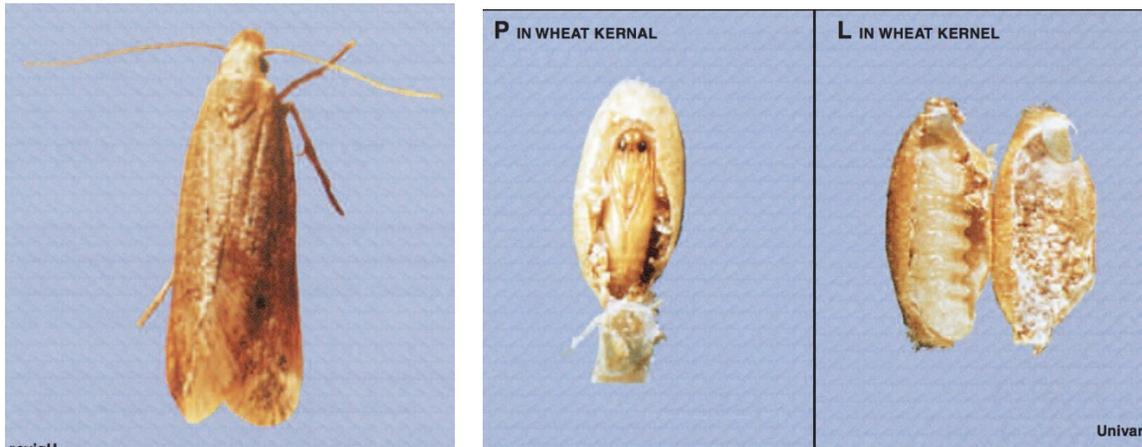
INTRODUCTION

The Angoumois grain moth is so named because it was first reported destroying grain in this French province. It is of worldwide distribution and was introduced into North Carolina in 1728 from Europe. In the United States, it is considered second only to granary and rice weevils as a pest of stored grain.

RECOGNITION

Adults with **wingspread** (wing tip to wing tip) about **1/2-5/8"** (12-17 mm). Color **buff** to pale yellowish brown. **Hind wings abruptly narrowed at tip towards front wing** and fringed/margined with hairlike scales, about as long as wing is wide.

Mature larva up to about 1/4" (7 mm) long. Color white with yellowish head and dark reddish-brown mouthparts. With 5 pairs of rudimentary (poorly developed) prolegs on abdomen, each with only 2 or 3 crochets (hooks). Body with primary setae (hairs) only, lacking tufted or secondary hairs. Perspiracular tubercle (wartlike area between spiracle and front edge of segment) on prothorax with 3 setae (hairs).



BIOLOGY

The female lays an average of 40 (range to 389) white eggs on or near grain. These turn red with age and hatch in 4-8 days. The 1st instar larva bores into a whole kernel and passes through a total of 3 instars in about 3 weeks, but may hibernate before pupation. It pupates within the hollowed-out kernel, and the pupal period lasts about 10-14 days. In warm climates the life cycle (egg to egg) usually requires 5-7 weeks, but may take 6 months in cool climates. In general, there are 2-5 generations per year but in heated buildings there may be as many as 10-12.

HABITS

Adults cause no damage. The larva requires a whole kernel or caked material for development. This pest is active at low temperatures and can cause considerable damage during the winter. Infested grain has a sickening smell and taste which makes it unpalatable. The moths leave a lot of debris on top of infested grain.

Adults are attracted to light.

In the north, it overwinters as a larva and completes its development in early spring. The emerging moths fly out to the field in spring and lay eggs on the developing grain.

The Angoumois grain moth prefers to attack barley, rye, corn, oats, rice, and various seeds. It attacks both grains in the field and grains in storage, but only whole kernels. It prefers damp grain as opposed to old dry grain.