

## Pest Information

For each pest, the following information is provided. Although the information is presented in a uniform format, more information is provided for pests that are more common or more economically important in corn.

**Scientific Classification.** The genus and species of an insect pest is followed by order and family names (family name is in parentheses). Some deviations from this format occur for pests that are not insects.

**Origin and Distribution.** This section indicates whether the pest species is native or introduced and its approximate distribution in North America.

**Description.** Identification details are provided for the stages that injure corn, and sometimes for noninjurious stages such as eggs and pupae.

**Pest Status.** This section explains the economic importance of the insect throughout its range.

**Injury.** The injury caused by the pest is described. If more than one stage of the pest causes injury to corn or if the pest causes injury at more than one stage of corn growth, all types of injury are described.

**Life History.** Details about a pest's life cycle are provided, including, but not limited to, overwintering stage(s), number of generations per year, time of occurrence and location of all stages, and developmental times.

**Management.** All potential and practical tactics for management of the pest are explained. When the information is known, the impact of natural biological control by beneficial organisms is discussed. Widely used economic thresholds or other decision-making tools are identified. Specific insecticides are not listed.

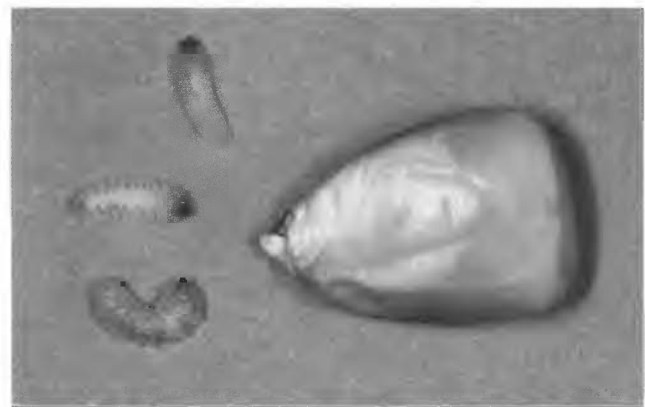
**Selected References.** The numbers of selected references at the end of most sections refer the reader to the list of references near the back of the handbook.

**Distribution Map.** The distribution of the pest in North America is indicated on the map. If the pest occurs throughout North America wherever corn is grown, or if the distribution of the insect is not well known, a map is not

provided. These distributions are approximations for most insects; some pests occur outside of the range indicated on the map. In particular, information at the southern and northern limits of a species' range usually is uncertain.

**Photographs.** Color photographs of the injurious stages of the pest and the injury caused by the pest are included for most species. However, photographs for injury caused by some of the pests were not available. Photographs of noninjurious stages of some of the most economically important pests also are included.

### Angoumois Grain Moth



Angoumois grain moth larvae (Marlin E. Rice).

**Scientific Classification.** *Sitotroga cerealella*, Lepidoptera (Gelechiidae). Related species are the almond moth, *Cadra cautella*, and the Indianmeal moth, *Plodia interpunctella*, both Lepidoptera (Pyralidae).

**Origin and Distribution.** The Angoumois grain moth probably originated in Europe. It is found throughout North and Central America, most commonly in the southern United States.

**Description.** The full-grown larva, found inside corn kernels, is about 1/5 in (5 mm) long and has a white body, yellow head, three pairs of true legs, and four pairs of prolegs on the abdomen. Adults, often found on the surface or in the top 1 ft (1/3 m) of stored corn, are 1/5–1/4 in (5–7 mm) long and pale brown with narrow, sharply pointed fringed wings (wingspan of 1/4–5/16 in [7–9 mm]).

Although both the almond moth and Indianmeal moth are found in stored corn, these moths' wings differ from those of the Angoumois grain moth. The wings of the Angoumois grain moth are buff to gray, and the tips of the hind wings bear a fingerlike projection. The wings of the almond moth and Indianmeal moth are patterned, and the hind wings do not bear fingerlike projections. Additionally,