

COWPEA WEEVIL

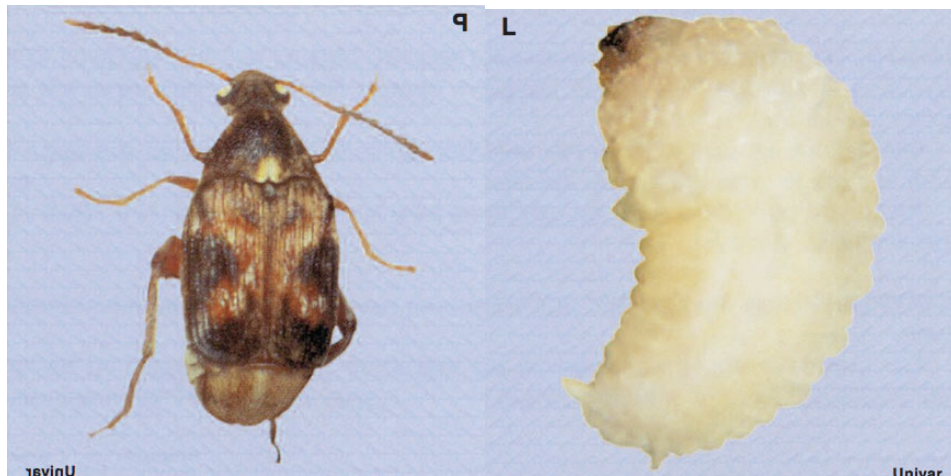
INTRODUCTION

The common name reflects that this weevil feeds primarily on cowpeas. It is thought to be of African origin but is now distributed throughout the warmer parts of the world. In the United States it is found primarily in the southern states but can be found anywhere infested cowpeas are shipped or stored.

RECOGNITION

Adults about 1/16-1/8" (2.5-4 mm) long; elongate oval with **head usually not visible from above**. Color **brownish with** cream and blackish markings, **elytra each with mid area towards outside black and tip/apex black**. **Head with snout short**; eyes emarginate/notched on inner side. **Antenna serrate** (sawlike) in both sexes. **Elytra short, leaving long last dorsal segment (pygidium) exposed**. Abdominal segments 2-5 with dorsal margin (adjacent to elytra, just before pygidium) with diffuse yellowish/whitish hairs, not in dense patch. Hind leg femur with 2 teeth (towards tibial end), tibia with apex lacking movable spurs (spines).

Mature larva up to 1/8" (4 mm) long; C-shaped, legless. Color cream. Body sparsely covered with a few short hairs (setae); most abdominal segments with 2 dorsal folds and these folds without transverse rows of longitudinal ridges (plicae). Note this description also fits some other bean weevils but not coffee bean (*Araecerus fasciculatus* (DeGeer)) or pea (*Bruchus pisorum* (Linnaeus)) weevils or the groundnut bruchid (*Caryedon serratus* (Oliver)).



BIOLOGY

The adult female lays her eggs on the developing pod in the field or on the bean surface in storage, usually with 1-3 eggs per seed; females lay a maximum of 100 eggs. Incubation requires 5-6 days. The

hatching larva bores directly into the seed and eats out a cavity. There are 5 larval instars which require about 20 days. Pupation takes place within the seed and requires about 7 days.

The developmental time (egg to adult) can require only 21-23 days at optimum conditions of 90°F/32°C and 90% RH. However, at 77°F/25°C and 70% RH it takes 36 days. There are usually 6-7 generations per year. Adults may live up to 12 days.

HABITS

The cowpea weevil is primarily a pest of cowpeas but has caused damage to soybeans in storage. The larvae develop within the seed and a seed will support 1-3 larvae to maturity.

Infestations usually start in the field where eggs are laid on the developing pods. Later in storage eggs are laid on the seed surface.

Adults are good fliers and can usually fly up to 3,281 ft (1 km). Adults do not feed and may live up to 12 days.