

Boll Weevil

Anthonomus grandis grandis Boheman

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The Entomology and Forest Resources
Digital Information Work Group



Boll weevil larva in square.
Photo by Dr. Jim Smith,
USDA/ARS, Stoneville, MS.



Boll weevil adults.
Photo by Dr. Jim Smith,
USDA/ARS, Stoneville, MS.



Boll weevil life cycle.
Photo by Herb Womack,
UGA Extension Entomologist - retired.

Order Coleoptera: Family Curculionidae

Description: Adults are small (ca. 12 mm) beetles with long slender snouts and spurs on the upper joint of the front legs. Colors vary from dark, brownish-red to brown or near black. Larvae are C-shaped, legless, cream-colored grubs with brown heads.

Hosts: Cotton

Damage: Adults feed on fruiting forms, leaf petioles and terminal growth. Females oviposit in squares and bolls. Squares containing eggs are aborted. Infested bolls often fail to open properly and may be subject to boll rot. Adult feeding on leaf petioles in young, presquaring cotton causes "black flags", wilted leaves on the damaged petioles.

Life Cycle: Adults overwinter in well drained areas in or adjacent to cotton fields after attaining diapause. Adults emerge and enter cotton fields from March until July, with peak emergence in late May. They feed on cotton terminals until squaring begins. Egg laying starts when squares reach 1/4 inch in diameter (1/3 grown). Each female lays about 200 eggs during a 10 to 12 day period. Usually, only one egg is laid per square. Oviposition wounds produce a small protrusion on the exterior of the flower bud. The bracts of infested squares flare, yellow and the squares drop. Eggs hatch in three to five days. Newly emerged larvae feed within the squares for eight to 10 days, then pupate. The pupal stage lasts five to seven days. The entire life cycle, egg to adult, requires about three weeks during the summer. There may be eight to 10 generations per season.

Control: Boll weevils are now considered "eradicated" in most of Georgia. Traditional boll weevil controls included diapause control (sprays and stalk destruction immediately after harvest to prevent weevils from entering diapause), insecticide application at pin-head square stage (to reduce populations of overwintered weevils prior to oviposition), and four to five mid and late season insecticide applications at 3 to 5 day intervals, beginning as early as first bloom.

¹In: Roberts, P. M. and G. K. Douce, Coordinators. 1999. Weevils and Borers. A County Agent's Guide to Insects Important to Agriculture in Georgia. Univ. of GA, Col. Ag. Env. Sci., Coop. Ext. Serv., Tifton, GA USA. Winter School *Top Fifty Agricultural Insect Pests and Their Damage Sessions*, Rock Eagle 4-H Ctr., Jan. 20, 1999.

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