



## Citrus Longhorned Beetle

*Anoplophora chinensis* Forster (Coleoptera: Cerambycidae)

The Citrus Longhorned Beetle (CLHB) is an exotic invasive pest accidentally introduced into the U.S. on bonsai plants from Korea. CLHB attacks over 100 species of fruit trees, conifers and woody ornamental plants in its native Asia. CLHB infested plant materials intercepted at U.S. ports are promptly destroyed, thus far preventing establishment of the pest. However, increased bonsai imports to the U.S. keeps the risk of accidental reintroductions of CLHB high. CLHB spreads naturally by flight and artificially by people shipping infested live nursery stock or raw wood products throughout the nation.

### IDENTIFICATION:

- Adults are large, stout beetles about 1-1½" long (~2.5-4.0 cm); females are larger than males.
- Adults are shiny black with 10 to 12 irregular white spots on their back.
- Antennae are up to ~2 times the body length, bluish/white at the base with 11 black and bluish/white banded segments.
- The elytra (wing covers) of females are rounded distally; male elytra are tapered distally.
- The ventral surface is pubescent (hairy): the pubescence may be white or blue (below).



Adult CLHB, actual size (above). Banded antennae (below).



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- Eggs are the size/shape of a grain of rice, initially creamy white, gradually turn yellowish/brown prior to hatching.
- Larvae are creamy white, legless, roundheaded grubs up to ~2.0" (60 mm) with amber colored heads, black mouthparts, and yellow patterns on the prothorax (below).



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- Pupae are 1-1½" long (~2.5-4.0 cm).

### What to Look For:

CLHB attacks and kills apparently healthy plants, and can survive in large and small diameter trees, as well as bonsai plants. Adults emerge April to August (peaking May-July) and feed on bark, leaves and petioles of host plants, causing little damage beyond leaf wilt. Adults are most active during the day. Eggs hatch into grub-like larvae that initially feed on the inner bark, then later bore deep into the heartwood, and may girdle the host tree. Larval feeding accounts for most of the damage caused.

### Symptoms of CLHB infestation include:

- About ¼-½” diameter (~ 6-13 mm) round or slightly oval exit holes when adults emerge (below).



- Adult feeding damage: chewed leaves and leaf petioles; leaf wilt; narrow, rectangular strips of scraped bark about 0.8x1.0” (~2x2.54 cm) on stems or branches (below).



- Oviposition slits, beneath bark fissures of living trees near the base of the trunk (within 20”, or 0.5 m) or on exposed roots, are difficult to detect.
- Large amounts of sawdust ejected by feeding larvae from small holes in tree trunk, accumulated at base of tree.

- Larval tunnels in the wood underneath loose or thin bark.



- Rapid tree decline in heavy infestations (leaf wilt, branch dieback); younger trees decline more rapidly.
- Heavily mined trunks and dead branches may break, especially during strong winds.

**CLHB is a regulated pest, so identification of suspect beetles is critical: unknown specimens of large black beetles with white spots should be collected and sent to your state department of agriculture, state university entomology department, or USDA-APHIS for action.**

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<http://hgic.umd.edu/faq/sendAQuestion.cfm>

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