



# America's Least Wanted Wood-Borers

Department of Entomology

## QUETTA BORER, *AEOLESTHES SARTA* (SOLSKY)

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This longhorned beetle is native to Asia and is usually found in semiarid regions. Its rate of natural spread is very slow but immature stages may be moved in solid wood packaging. The broad range of potential tree species used as hosts and its ability to kill healthy trees also make it a concern.

**Distribution:** May have originated in western India and Pakistan. This species has spread into Afghanistan and Iran and is expanding into Central Asia.

**General Description:** Adults have a dark gray-brown body measuring 28 – 47 mm. Fine silvery pubescence is present on the elytra. Two irregular bands formed by shiny silvery spots cross the elytra. The antennae in males are 2.5 times longer than the body whereas in the females they are shorter than the body. Eggs are white in color and 3 – 4 mm in length. Larvae are pale yellowish with golden hairs, 60 – 70 mm long, with black mandibles.

**Biology:** *Aeolesthes sarta* attacks many broad-leaved trees preferring elms, poplars, plane trees, apples and Persian walnut. It has also been known to attack oak, birch, ash, maple, mulberry, honey locust, black locust and other broadleaved trees. Females deposit eggs in slits in the bark of tree trunks and large branches. Usually 1 – 3 eggs are laid per slit and a total of 240 – 270 eggs may be laid. Development takes two years. Every larva makes a tunnel. Feeding starts in the cambium region and waste is thrown out through the entrance hole. After some time the larvae stop feeding below the bark and move to the sap wood. Larvae over-winter in a long gallery protected by a double plug made from fibrous shavings. In spring, larvae start feeding again and construct tunnels deep into the wood. Individuals pupate in late summer and adults remain in the pupation cells over their second winter. Adults emerge in spring. Adults are generally crepuscular and nocturnal in habit. The beetles fly very little and do not appear to feed as adults. Infested trees may survive for several years before eventually dying and thus several generations of these beetles may be present in a single tree.



*Aeolesthes sarta*, adult (Photo credit: Kira Zhaurova, USDA APHIS PPQ, Bugwood.org)

**Source:** Orlinski, A. D. (1999). Exfor Database Pest Report, *Aeolesthes sarta*. Available at: <<http://spfnic.fs.fed.us/exfor/data/pestreports.cfm?pestidval=2&langdisplay=english>>. Accessed: Sept. 13, 2011.

**Molecular Identification:** A DNA barcode for this species has been developed and is freely accessible online at the National Center for Biotechnology Information <[www.ncbi.nlm.nih.gov](http://www.ncbi.nlm.nih.gov)>, and the Barcode of Life Data Systems database <[www.boldsystems.org](http://www.boldsystems.org)>. If a specimen of this species is suspected, DNA analysis could help to confirm the identification even if the material is of a life stage that cannot be identified with morphological identification techniques.

**A. sarta NCBI accession numbers:** JQ015132 - JQ015138

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