

## Biosafety Clearing-House (BCH)

ORGANISM (ORGA)

BCH-ORGA-SCBD-108874-3

LAST UPDATED: 01 OCT 2015

### Organism information

Scientific name

*Diabrotica virgifera virgifera*

Taxonomic Classification

Kingdom Metazoa  
Phylum Arthropoda  
Class Insecta  
Order Coleoptera  
Family Chrysomelidae  
Genus Diabrotica  
Species virgifera  
Species virgifera

Common name(s)

Western corn rootworm

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Type of organism

Insects

Domestication

Wild

### Characteristics related to biosafety

Habitat range

The eggs are deposited in the soil during the summer, and are football-shaped, white, and less than 0.004 inches (0.10 mm) long. Larvae hatch in late May or early June and begin to feed on corn roots. Newly hatched larvae are small, less than .125 inches (3.2 mm) long, white worms. They go through three larval instars, pupate in the soil and emerge as adults in July and August, with one generation per year. Larvae have brown heads and a brown marking on the top of the last abdominal segment, giving them a double-headed appearance. Larvae have three pairs of legs, but these are not usually visible without magnification. After feeding for several weeks, the larvae dig a cell in the soil and molt into

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the pupal stage. The pupal stage is white and has the basic shape of the adult.

#### Known pathogenicity and/or allergenicity

Corn rootworms are one of the most economically significant consumers of maize in the United States. The western corn rootworm, *D. virgifera virgifera*, and the northern corn rootworm, *D. barberi*, are the most significant rootworm species in Iowa, a major corn-growing area. A third species, the southern corn rootworm, *D. undecimpunctata howardi*, causes much economic damage in other regions. Corn rootworm larvae can destroy significant acreage of corn if left untreated. In the United States, current estimates show 30 million acres (12×10<sup>6</sup> ha) of corn, out of 80 million total are infested with corn rootworm. Estimates of economic damage to corn growers from the pest are about \$1 billion.

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#### Additional Information

Other relevant website addresses and/or attached documents

? [Western corn rootworm - Wikipedia](#) ( *English* )

? [Diabrotica virgifera virgifera - European Commission](#) ( *English* )

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## Further Information

Questions about the Cartagena Protocol on Biosafety or the operation of the Biosafety Clearing-House may be directed to the Secretariat of the Convention on Biological Diversity.

#### **Secretariat of the Convention on Biological Diversity**

413 rue Saint-Jacques, suite 800

Montreal, Québec, H2Y 1N9

Canada

Fax: +1 514 288-6588

Email: [secretariat@cbd.int](mailto:secretariat@cbd.int)