



America's Least Wanted Wood-Borers

Department of Entomology

ASIAN AMBROSIA BEETLE, ANISANDRUS MAICHE (STARK)

Jeffrey D. Holland, K. R. Raje, J.T. Shukle, and V. R. Ferris, Entomologists

This ambrosia beetle is native to parts of Asia. Established populations of these beetles were detected in Pennslyvania, Ohio, Illinois, and West Virginia.

Distribution: An *isandrus maiche* is found in North Korea, China (Heilongjiang Province), Eastern part of Russia, Kunashiri Island (South Kuril Islands).

General Description: The adult beetles can be differentiated from other species of *Anisandrus* by the body size, which is less than 2.5 mm. At the junction of the prothorax and the elytra, tufts of hairs that aid in movement of symbiotic fungi, are present. Rows of short and long hairs alternate the elytra. The posterior end of the elytra shows a downward slope. The coxae are almost touching each other.

Biology: The host trees in the beetle's native range in-clude *Acer barbinerve*, *Acer mandshuricum*, *Alnus fruticosa*, *Alnus hirsute*, *Betula dahurica*, *Betula japonica*, *Corylus mandshurica*, *Euonymus* sp., *Fraxinus mandshurica*, *Syringa amurensis*, *Magnolia* sp., *Phellodendron amurense*, *Ulmus* sp., and *Juglans mandshurica*. Many related beetles utilize only those trees whose defenses have been compromised but some will utilize a seedling that has undergone new transplantation or vigorous trees having wounds or broken branches.

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, and the Barcode of Life Data Systems database 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.

Source: Rabaglia, R.J., N.J. Vandenberg, and R.E. Acciavatti. (2009). First records of *Anisandrus maiche* Stark (Coleoptera: Curculionidae: Scolytinae) from North America. Zootaxa. 2137:23-28.





Adult Anisnadrus Maiche (Linnaeus).

T: Dorsal view- B: Side view
(Photo credit: Kyle Schnepp)

A. maiche NCBI accession numbers: JQ015148 - JQ015150

Funding: This project was supported by funding from the 2009 Farm Bill 10201 program, USDA/APHIS grant number 10-8100-1488-CA.

October 2013

It is the policy of the Purdue University Cooperative Extension Service that all persons have equal opportunity and access to its educational programs, services, activities, and facilities without regard to race, religion, color, sex, age, national origin or ancestry, marital status, parental status, sexual orientation, disability or status as a veteran. Purdue University is an Affirmative Action institution. This material may be available in alternative formats.



