



ENTOMOLOGICAL SOCIETY OF AMERICA

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Proposal Form for new Common Name or Change of ESA-Approved Common Name

Complete this form and send or e-mail to the above address.

Submissions will not be considered unless this form is filled out completely.

The proposer is expected to be familiar with the rules, recommendations, and procedures outlined in the “Use and Submission of Common Names” on the ESA website and with the discussion by A.B. Gurney, 1953, *Journal of Economic Entomology* 46:207-211.

October 14, 2008

Esteemed ESA Common Names Committee members,

As the co-Chairs for the Western Forest Insect Work Conference (WFIWC) Common Names Committee (CNC), we are pleased to present the following insect for your consideration. This proposal is part of a current effort to update the important publication [Western Forest Insects](#) and formalize common names used therein not yet recognized by ESA.

Our committee also works with the Entomological Society of Canada and so you will find entries in our form that are in addition to those you require (numbered entries accompanied by a letter are additional). All ESA questions are numbered and worded as found on your form.

If you have any questions or concerns about this or other submissions from our organization, we encourage you to contact us.

Sincerely,

/s/ Brytten Steed

Brytten Steed
WFIWC-CNC co-Chair
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/s/ William Ciesla

William Ciesla
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WFIWC Proposal Form for New Common Name or Change of ESA or ESC-Approved Common Name

The proposer is expected to be familiar with the rules, recommendations, and procedures outlined in the introduction to the current list of names and with the discussion by A.B. Gurney, 1953, *Journal of Economic Entomology* 46:207–211.

I recommend to the WFIWC Standing Committee on Common Names of Insects the adoption of the following common name or name change.

NOTE: SUBMISSIONS WILL NOT BE CONSIDERED UNLESS THIS FORM IS FILLED OUT COMPLETELY.

1. Proposed new common name: [goldspotted oak borer](#)
2. Previously approved common name (if any): [None](#)
3. Scientific name (genus, species, author): [Agrilus coxalis Waterhouse](#)
Order: [Coleoptera](#)
Family: [Buprestidae](#)

Supporting Information

4. Reasons supporting the need for the proposed common name:
Since 2002, extensive mortality of coast live oak (*Quercus agrifolia*), Engelmann oak (*Q. engelmannii*), and California black oak (*Q. kelloggii*) has occurred in southern California. Oak mortality was aerially mapped across 6,447 ha on the Cleveland National Forest over six years. Mortality extends across public, private, state, and Native American lands. In 2008, *Agrilus coxalis* was found by Tom Coleman (USDA Forest Service-Forest Health Protection) attacking coast live oak and California black oak along the main stem. *A. coxalis* is considered the primary or secondary source of the tree mortality. Prior to this discovery, the hosts and larval habitats of *A. coxalis* were unknown. There is also no previous record of any *Agrilus* spp. (or Buprestid) attacking oaks along the main stem in California or nearby Mexico (Furniss and Carolin 1977, Cibrán et al. 1995, Solomon 1995). *A. coxalis* was first detected in southern California in 2004 during a survey for exotic woodborers. The presence of *A. coxalis* is considered an introduction or a range expansion on new hosts. *A. coxalis* was previously collected in southeastern Arizona, Guatemala, and Mexico. Palmerlee, Huachuca Mountains, Arizona was considered the type locality of *A. auroguttatus* (a synonym of *A. coxalis*, Fisher 1928); a female specimen from Juquila, Mexico was designated as the lectotype of *A. coxalis*, whereas another specimen from Juquila, one from Cordova, one from Capetillo (Guatemala), and one from San Jerónimo (Guatemala) were designated paratypes (Hespenheide 1979).

A. coxalis larvae and pupae were hand collected from coast live oak and California black oak. Adults of *A. coxalis* were reared from hand collected pupae and freshly cut logs of coast live oak. In one week of trapping during June, >180 adults were trapped with purple panel traps. Trapping was conducted in Barrett Lake and Descanso, Descanso Ranger District, Cleveland National Forest, San Diego Co., California. The identification of adults reared from trees and collected from panel traps were verified by Charles L. Bellamy (CDFA), Henry A. Hespenheide (UCLA),

and Rick L. Westcott (ODA). Voucher specimens have been given to these specialists and have also been accessioned in the California Academy of Sciences (San Francisco, CA).

A common name is needed to facilitate communication with the interested public. For example, Coleman and Seybold are developing a research note on this insect for *The Pan-Pacific Entomologist* and a USDA Forest Service *Pest Alert*. We plan to use the proposed common name in both of these documents. There are other native wood-boring beetles in oaks in North America, including the oak twig borer, *A. angelicus*, the two-lined chestnut borer, *A. bilineatus*, the red oak borer, *Enaphalodes rufulus*, and the nautical borer, *Xylotrechus nauticus*.. There is a need to distinguish *A. coxalis* from these other taxa for the lay person.

5. Stage or characteristic to which the proposed common name refers:

The proposed common name refers to both the adult and larval stages. Adults of *A. coxalis* can be distinguished from other *Agrilus* spp. by golden yellow pubescence located on the elytra. The pubescence forms six golden spots. A junior synonym for *A. coxalis* is *auroguttatus* Schaeffer, meaning “gold spots.” Previous collection records of *A. coxalis* associated this species with oaks, *Quercus* spp., but the host and larval habitat were confirmed with the 2008 collections in southern California. No other hosts were found with attacks from *A. coxalis*. *A. coxalis* larvae bore into oaks and construct larval galleries at the interface of the sapwood and cambium.

The proposed common name follows similar formats of other *Agrilus* spp. common names which are forest pests, including the emerald ash borer, *A. planipennis*, bronze birch borer, *A. anxius*, and two-lined chestnut borer, *A. bilineatus*.

6. Distribution:

Native:

U.S.: Santa Rita Mountains and Huachuca Mountains (Arizona)

Guatemala: San Jerónimo, Chilasco (Verapaz), and Capetillo (Sacatepéquez)

Mexico: Sierra de La Laguna (Baja California), Juquila, Mitla (Oaxaca), Cordova (Sonora), Comitán, Lagos de Montebello National Park, Ocosingo, San Cristóbal de las Casas, Teopisca (Chiapas), and Jalapa (Veracruz).

A female specimen from Juquila, Mexico was designated as the lectotype of *A. coxalis*, whereas another specimen from Juquila, one from Cordova (Sonora), one from Capetillo (Guatemala), and one from San Jerónimo (Verapaz) were designated paratypes (Hespenheide 1979).

Introduced/Range Expansion:

U.S., San Diego Co. (California) (2004)

Key References:

Bohne, M. and Rios, J. (eds.) 2008. California forest pest conditions-2007. California Forest Pest Council, California Department of Forestry and Fire Protection, Sacramento, California, June, 2008, 61 pp.

Bohne, M. and Rios, J. (eds.) 2007. California forest pest conditions-2006. California Forest Pest Council, California Department of Forestry and Fire Protection, Sacramento, California, July, 2007, 57 pp.

Bohne, M. and Rios, J. (eds.) 2006. California forest pest conditions-2005. California Forest Pest Council, California Department of Forestry and Fire Protection, Sacramento, California, April, 2006, 72 pp.

Cibrian, T.C., Mendez M., Campos B., R. Yates, III, H.O., Flores L., J. 1995. Insectos Forestales de Mexico/Forest Insects of Mexico. (North American Forestry Commission, FAO, Publication no. 6) Universidad Autonoma Chapingo, Chapingo, Estado e Mexico, Mexico, 453 p

- Hespenheide, H.A. 1979. Nomenclature notes on the Agrilinae (Buprestidae). IV. The Coleopterists Bulletin 33: 105-120.
- Fisher, W.S. 1928. A revision of the North American species of buprestid beetles belonging to the genus *Agrilus*. Smithsonian Institution, United States National Museum, Bulletin 145, 347 pp.
- Furniss, R.L. and Carolin, V.M. 1977. Western Forest Insects. USDA Forest Service Misc. Publication 1339. Washington, D.C., 654 pp.
- Solomon, J.D. 1995. Guide to Insect Borers in North America Broadleaf Trees and Shrubs. USDA Forest Service Agriculture Handbook 706. Washington, D.C. U.S. Department of Agriculture, Forest Service, 735 pp.
- Waterhouse, C.O. 1889. *Insecta. Coleoptera. Serricornia*. 62. *Agrilus coxalis*. *Biologia Centrali-Americana*, Vol. III, Pt. 1, April 1889, p. 89.
- Westcott, R.L. 2005. Zootaxa, 1044: A new species of *Chrysobothris* Echscholts from Oregon and Washington, with notes on other Buprestidae (Coleoptera) occurring in the United States and Canada. 1-15.

7. Principal hosts (include references):

Native and Introduced Range: *Quercus* spp., *Q. agrifolia*, *Q. kelloggii*
Collection records from *Q. hypoleucoides* and 'black oak,' possibly *Q. devia*

Westcott, R.L. 2005. Zootaxa, 1044: A new species of *Chrysobothris* Echscholts from Oregon and Washington, with notes on other Buprestidae (Coleoptera) occurring in the United States and Canada. 1-15.

Fisher, W.S. 1928. A revision of the North American species of buprestid beetles belonging to the genus *Agrilus*. Smithsonian Institution, United States National Museum, Bulletin 145, 347 pp. (Note: *A. coxalis* was treated as *A. auroguttatus* in this monograph).

Hosts in California to date as reported by Coleman, Seybold, and Bohne:

Quercus agrifolia, *Q. engelmannii*, and *Q. kelloggii*

8. References containing previous use of the proposed common name:

Coleman and Seybold. *In review*. *The Pan-Pacific Entomologist*. Previously unrecorded damage to oak, *Quercus* sp. L., in southern California by the gold-spotted oak borer, *Agrilus coxalis* Waterhouse, 1889 (Coleoptera: Buprestidae).

Coleman and Seybold. *In review*. Pest Alert USDA Forest Service Pacific Southwest Region. New Introduction in California: The Gold-Spotted Oak Borer, *Agrilus coxalis* Waterhouse.

9. References using common names (give names) other than that proposed: None

10. Other insects or organisms to which the proposed common name might apply: None

11. Steps you have taken to consult with other workers who are familiar with the insect or organism as to suitability of and need for the proposed common name:

Several professionals working with this beetle (listed below) have discussed common name options and have agreed as a group on this submission.

Henry Hespenheide, University of California, Los Angeles, (hahiii@ucla.edu)

goldspotted oak borer
spec-03-08

Agrilus coxalis Waterhouse
(moved to *A. auroguttatus* Schaefer)

10/14/2008

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Andrew Graves, Department of Plant Pathology, One Shields Ave, University of California, Davis, 95616

Rob Venette, Northern Research Station, USDA Forest Service, Biological and Environmental Influences on Forest Health and Productivity, St. Paul, MN 55108

Steven J. Seybold, Chemical Ecology of Forest Insects, USDA Forest Service, Pacific Southwest Research Station, Davis, CA (sseybold@fs.fed.us)

Tom W. Coleman, Forest Health Protection, USDA Forest Service, Southern California Shared Service Area, San Bernardino, CA (twcoleman@fs.fed.us)

12. Proposed by: Western Forest Insect Work Conference group (WFIWC), Common Names Committee co-Chairs – Brytten Steed and William Ciesla

Proposal prepared and submitted to the WFIWC CNC by Tom W. Coleman and Steven J. Seybold

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Date: October 18, 2008



Figure 1:
Photograph of
Agrilus coxalis