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Entomological Society of America Proposal Form for New Common Name or Change of ESA-Approved Common Name

Complete this form and e-mail to pubs@entsoc.org.

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 at https://www.entsoc.org/pubs/use-and-submission-common-names.

1. Proposed new common name:

Three-lined cockroach

2. Previously approved common name (if any):

None

3. Scientific name (genus, species, author):

Order: Blattodea

Family: Ectobiidae

Luridiblatta (Phyllodromica) trivittata (Serville, 1838)

Supporting Information

4. Please provide a clear and convincing explanation for why a common name is needed, possibly including but not limited to the taxon's economic, ecological, or medical importance, striking appearance, abundance, or conservation status:

Luridiblatta trivittata is non-native species, introduced into the United States in the early 2000's. Originally from the Mediterranean region, it is unclear exactly how this species became established in California. It was first observed in Marin County in 2004, but it was not positively identified until it was submitted to CDFA from a home in Contra Costa County in 2009. CDFA gave L. trivittata a pest rating of 'C', stating that much of California is suitable for this species and that there is a strong possibility it will continue to spread throughout the state.

L. trivittata is seen primarily outdoors, but mature females have often been observed wandering into poorly sealed buildings in summer and fall. Almost all submissions of this species to the state or to cooperative extension offices in California have occurred during summer and fall and have been adult female specimens. It is unclear why these insects wander indoors, but they are often misidentified as juvenile German cockroaches, due to their similar appearance. This can lead to unnecessary insecticide applications and potential exposure. Indoor applications targeting cockroaches have the potential to drive pesticide exposure events and should be limited to cases

where they are absolutely warranted, according to proper pest identification, thresholds, and consideration of other tactics.

Because this species population continues to expand, and because there is an increase incidence in misidentification and general insect encounters, we feel a common name is warranted.

blogs.cdfa.ca.gov/Section3162/?tag=three-lined-cockroach: Discussion of pest rating by CDFA.

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

(If the description involves a physical feature, it is strongly encouraged that an image of the organism be provided with this submission.)

Adults are small and possibly flightless, female wings are highly reduced and male wings are slightly short not quite covering the abdomen. Luridiblatta trivittata has three dark bands that run longitudinally along the dorsal side of the thorax, tegmina and abdomen in females and along the thorax and tegmina in males.





6. Distribution (include references):

Luridiblatta trivittata has been primarily recorded in the Mediterranean region, including countries like Morocco, Algeria, Spain, Italy, Libya, and Israel. Despite having such an extensive native range, researchers have not fully described the biology and ecology of this species. Though native to the Mediterranean region, it is unclear exactly how this species became established in California. It was first observed in Marin County in 2004, but it was not positively identified until it was submitted to CDFA from a home in Contra Costa County in 2009. Since then, this species has spread throughout the San Francisco Bay area and other parts of California, reaching as far north as Hugo, Oregon, as far south as Bakersfield and as far east as Davis. In 2018, CDFA gave L. trivittata a pest rating of 'C', stating that much of California is suitable for this species and that there is a strong possibility it will continue to spread throughout the state.

blogs.cdfa.ca.gov/Section3162/?tag=three-lined-cockroach: Discussion of pest rating by CDFA.

California Plant Pest and Disease Report. (2009). CPPDR, 25, 9.

The Global Biodiversity Information Facility (GBIF) https://www.gbif.org/

7. Principal hosts (include references):

Much of the biology and ecology of this species is unknown due to a distinct lack of published material. Much of what we know about this insects host preferences is anecdotal and it is unclear if those preferences change when comparing California to its native range. Within California *Luridiblatta trivittata* has been observed feeding in and around leaf litter, compost bins, fallen fruit from fruit trees, and nectar producing flowers.

Azouilmane, et al. (2016). Biodiversity and population dynamics of litter-dwelling cockroaches in Belezma National Park (Algeria). Turkish Journal of Zoology. 40. 231-240. 10.3906/zoo-1506-37.

<u>ucanr.edu/blogs/blogcore/postdetail.cfm?postnum=14445</u>: Discussion of common incidence in northern SF Bay Area region, some discussion of exclusion tactics.

8. Please provide multiple references indicating clearly that the proposed name is already established and ideally widespread in use. If the name has been newly coined for purposes of this application, please state so:

The California Department of Food and Agriculture produced a pest rating profile in 2018 in which it uses the proposed common name and discusses the currently known ecology and biology of this species. The University of California Agriculture and Natural resources have also published online materials in which the proposed common name is used.

This common name is also in widespread use throughout the internet. The Cockroach Species File, an online taxonomic catalogue of the world's cockroaches, lists the common name 'three-lined cockroach' in conjuncture with *Luridiblatta trivittata*.

If we analyze the already accepted scientific name *Luridiblatta trivittata*, the part of the name that references this particular species can be broken down into two major parts. Merriam-Webster defines 'tri' as have three of something and 'vitta' as a stripe or line. Therefore, we can conclude that the scientific name is referencing three stripes or lines in this species. The common name 'three-lined cockroach' is not only descriptive in nature but directly references the scientific name accepted in the 17th Century.

blogs.cdfa.ca.gov/Section3162/?tag=three-lined-cockroach: Discussion of pest rating by CDFA.

California Plant Pest and Disease Report. (2009). CPPDR, 25, 9.

http://ipm.ucanr.edu/PMG/PESTNOTES/pn7467.html: Educational material on the common cockroaches found in California.

http://cockroach.speciesfile.org/Common/basic/Taxa.aspx?TaxonNameID=1176302: Taxonomic catalogue for cockroaches worldwide.

9. Please identify any common names in use (include references) that have been applied to this taxon other than the one herein proposed. Please justify why each alternate name is inadequate:

A) Three-stripe cockroach

This name is similar to the proposed common name, but is used very infrequently. There are only a few online examples (see link and excerpt below) and none have significant scientific or public impact.

https://meepo.org/water-bugs-vs-smoky-brown-cockroach-and-how-to-deal-with-them/

B) Friendly cockroach:

This is the second most commonly used name for *Luridiblatta trivittata*. This name is often used within the Bug Guide database, but is restricted to image submission posts and the comments section. The site itself has yet to list a common name for this species. It is interesting to note that within the comments section of this website, there are multiple names being used with expressed confusion as to the correct one.

three-stripe roach

Still waiting for an agreed-upon common name, these are called the Three-Stripe Roach, The Friendly Cockroach, and Luridiblatta trivittata is their scientific name. I live in San Rafael, near China Camp State Park. They appeared in my house and yard a little over a decade ago, and seem to have been accidentally imported from somewhere in Southern Europe or Eurasia.

So far they do not seem to be very interested in any of our human foods -- but we do find them near the cat's wet food and kibble all the time, so we infer that is what they like... another contributor said they ate dog kibble.

They are easy enough to kill/crush, but I wish someone had figured-out what best kills them, or what brand of roach trap might be effective -- but I get the impression that

They are easy enough to kill/crush, but I wish someone had figured-out what best kills them, or what brand of roach trap might be effective -- but I get the impression that they are all over the neighborhood and just wander in... so there's likely no way to kill the background population in the area. They also seem to be spreading at a fast rate -- from which I infer that there are no natural predators to keep them in check? We have plenty of birds, lizards, mice... but while we see more and more of the bugs we are not seeing a subsequent increase in predators. Last winter's rains may have added to their population or food resources... our yard is full of cut-down grass clippings (fire control) and maybe that's what they are primary living in, as we don't have a lot of leaf clutter around our house. (plenty up the hill in the forest, but not many trees around the house) BTW, that blue stain you see when you crush some is NOT their blood... It's their egg sacs... so crush-away!

BTW2, someone actually has a web site entitled "Culturing Luridiblatta trivittata" where you can learn some additional factoids about them. Why anyone would want to cultivate roaches in a world full of them is beyond me, but that's what I found while researching this bug.

BTW3: BugGuide is a GREAT site! Thanks for all the info.

... near China Camp, 16 September, 2017 - 2:58pm

login or register to post comments

More info please

https://bugguide.net/node/view/299900: Bug Guide link for excerpt above

http://isfba.bugpeople.org/sites/CAEB150000/html/2016-0814-EB150001-BLA02322-Luridiblatta trivittata[1228h05s,F,A,earth]%7BEOswalt%7D-G.htm: Insects of the San Francisco Bay Area

https://www.projectnoah.org/spottings/7232072: The Noah Project

Even though this name is used within our community it is not an appropriate common name for this species. Little is known about the ecology, biology and future distribution of this species and is yet unclear if this species poses significant pest problems and health risks. Additionally, the name is not appropriately descriptive to assist in identification, or to reference its biology and ecology.

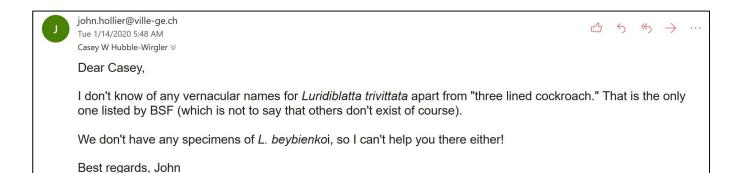
C) Tiny cockroach

This common does not seem to be referenced specifically in any literature online. The species is often referred to as a small or tiny cockroach because its size is in fact much smaller than cockroaches usually encountered in California. Though this name is somewhat accurate, it is not descriptive enough. Many Blattodea juveniles of other species are of similar size and calling this particular species the 'tiny cockroach' may add confusion instead of dispelling it.

(Please see the Bohart Museums letter of agreement in reference to the common name 'tiny cockroach')

10. Please identify any other organisms to which your proposed common name *could* apply, giving careful consideration to closely related taxa. Please justify why the proposed common name is (i) unsuitable for each of those taxa and/or (ii) better suited for the proposed taxon:

Luridiblatta beybienkoi and Luridiblatta trivittata are the only two species within the genus Luridiblatta. L. beybienkoi is not found in the United States and does not have a similar appearance to L. trivittata, so there is no chance of confusion with these two species. Research indicates that this is an uncommon species within its own native range, and again, there is very little published material on this species ecology and biology. Even corresponding with Mr. John Hollier, a taxonomist at the Geneva museum, an institution purported to be housing paratypes of this species, reveals no useful information.



Other than this there is no other cockroach species with the same physical characteristic in the United States. The German cockroach, *Blattella germanica*, is a commonly encountered species with similar color patterns to *L. trivittata* and *L. trivittata* is often confused by the general public as a juvenile of *B. germanica*. The number of stripes along the dorsal side of the insect is a great way to tell the two species apart. *B. germanica* has two longitudinal stripes, while *L. trivittata* has three. This is further evidence that a common name such as the 'three-lined cockroach' would aid in the identification of this species and separation from superficially similar looking species.

http://www.catalogueoflife.org/col/browse/tree/id/92558eccd1077943c8856136f6802eff: ITIS Taxonomic species list for the genus Luridiblatta

11. Please document your efforts to consult with entomologists (including taxonomic specialists), colleagues, or other professionals who work with the taxon as to the suitability and need for the proposed common name. Please note that this is an important element of your proposal; proposals that do not document these steps are less likely to be successful.

In attempts to discover and appropriate common name for the species *Luridiblatta trivittata*, I have corresponded with several entomologists and Blattodea specialists. The three-lined roach is the most widely used common name in the USA and I was unable to discover any common names from its native range.

Dr. George Beccaloni, a UK biologist, is currently working on a study of the taxonomy and systematics of cockroaches (Blattodea) of the tribe Gromphadorhini. He is the creator and editor of the Cockroach Species File Online, a comprehensive online synonymic catalogue of world cockroaches (see http://cockroach.speciesfile.org). And was the curator of Orthopteroid Insects (grasshoppers, crickets, cockroaches and related groups) in the Department of Life Sciences, The Natural History Museum. He is in support of the name 'three-lined cockroach'.



Letters of support have also been received from our local museums. The Bohart Museum at UC Davis and the Essig Museum at UC Berkeley regularly field questions about this species from pest professionals and the general public alike. Both museums contain curators and taxonomists that are in support of the name 'three-lined cockroach' and report that it is in the communities' best interest to unify under a single name (see attachments below).

Proposed by:

Casey Hubble

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1/29/2020

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January 13, 2020

Casey Hubble-Wirgler SF Bay Area Urban IPM Program University of California Cooperative Extension

Dear Casey,

I think 3-lined cockroach is a great name for this tiny insect. The only other name I've heard applied to these roaches is "tiny roach", which seems pretty useless as a name.

Sincerely

Lynn S. Kimsey

Distinguished Professor of Entomology Director, Bohart Museum of Entomology

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January 13, 2020

Casey Hubble UCANR, Cooperative Extension Contra Costa County 2380 Bisso Lane, Suite B Concord CA 94520-4829

Dear Casey,

I am writing to voice my opinion regarding the common name of *Luridiblatta trivittata* (Serville, 1839). As you know, the first sighting of this roach in California was by the Essig Museum's collection manager, Cheryl Barr, and sent to the California Department of Food and Agriculture for identification. So we have been aware of the presence of this roach since its first discover in Calfornia.

Since then it has been found widely throughout the SF Bay Area and beyond, being referred to by various common names. I believe stabilizing the common name will better allow extension agents, pest control operators, and the general public to communicate about identification, distribution, and control efforts.

The name that makes the most sense to me, and seems already to be in common usage, is the "three-lined roach". This name is the most descriptive and separates it from other species with which it might be confused.

Sincerely,

Peter Oboyski

Petu T. Olyhi