ENTOMOLOGICAL SOCIETY OF AMERICA
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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:

This proposal is to remove the common name Eurasian mealworm

2. Previously approved common name (if any):

The Better Common Names Project Task Force has been tasked by the Entomological Society of America with reviewing the ESA Common Names of Insects and Related Organisms List for names that no longer meet ESA's policies for acceptable insect common names, which bar names referencing ethnic or racial groups and names that might stoke xenophobia. The policies also discourage geographic references, particularly for invasive species.

In determining how to address existing common names that fail to meet these guidelines, the Task Force has recommended that common names with minimal documented usage be removed from the ESA Common Names List without replacement.

Removal of common names from the list is not without precedent. Historically, names have been removed on occasion from the ESA Common Names List for a variety of reasons, including confusion or overlap with other similar species, taxonomic updates, consolidation, and more.

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

Opatroides punctulatus

Order: Coleoptera

Family: Tenebrionidae

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:

This request is to remove the common name Eurasian mealworm from the ESA common names list. The common name for *Opatroides punctulatus* was added to the common names list in 2018 and has not gained much attraction since the addition. A Google searched for "Eurasian mealworm" came up with 35 hits, and not many Extension articles were written about "Eurasian mealworm." Most scientific papers written on *O. punctulatus* use the scientific name instead of the common name. Also, geographic descriptors in an ESA common name are generally discouraged. Using "Eurasian" to characterize *O. punctulatus* is not useful as it does not characterize the insect such behavior, appearance, life stage, host, etc. In addition, *O. punctulatus* was mentioned as a household pest in Elverta, California (Foothills-Sierra Pest Control, 2018) and may become a home nuisance pest. If *O. punctulatus* gains attraction and more attention, a new common name that helps distinguish it from other mealworms should be proposed.

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.)

Mealworm refers to the larval stage.

6. Distribution (include references):

Earliest record of *Opatroides punctulatus* in the USA was first noted in the Sacramento area in 2003 – 2008 (Aalbu et al., 2009, Steiner & Swearingen 2015).

Abdulzahra (2020) notes that this species is known to occur in:

- Asia (Lillig et al., 2012)
- Europe: Greece, Italy, Russia, and Malta (Alabu et al., 2009, Sparacio et al., 2024)
- Iraq (Omar et al., 2018)
- Iran (Saeizad et al., 2013) Egypt (Elshewy et al, 2016)

Israel (Kaufmann et al., 1969)One approach to develop a common name is to use the point of origin. However, Eurasia is possibly the point of origin for most of the Tenebrionidae (The Fossil Record of Darkling Beetles (Insecta: Coleoptera: Tenebrionidae) (mdpi.com)).

7. Principal hosts (include references):

This species has been reported to be associated with ants (Aalbu et al., 2009, Bakr et al., 2007, Steiner & Swearingen 2015). Aalbu (2009) mentions *O. punctulatus* can be polyphagous pests of crops such as, cereals, vines, cotton, grapes, melons, mulberry trees, pumpkins, soybean, and tobacco.

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:

This common name is not established:

- Common name: use of a geographic term, Eurasian, in association with a pest insect.
- Web of Science: 0 hits for common name, 6 for scientific name.
- Google: 35 hits for common name.
- Last use of scientific name in a scientific journal: 2015. (Common name has not been used in a scientific journal.)
- Extension: multiple hits due to the word 'mealworm', but no university fact sheets identified for this species.

Foothills-Sierra Pest Control cited Eurasian mealworm for *O. punctulatus* (Foothills-Sierra Pest Control, 2018).

9. Please identify any common names in use, including those used by indigenous peoples in the insect's area of origin, that have been applied to this taxon, other than the one herein proposed, with references. Please briefly describe the methods used to find alternative names and, if necessary, justify why each alternate name is inadequate:

N/A. This proposal is to remove the common name.

However, Aalbu et al., (2009) and Abdulzahra (2020) mentions that the common name for *O. punctulatus* is "cotton beetle."

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:

This proposal is to remove the common name. A common name that better describes this species based on its behavior, physical characteristics, host association, life cycle, etc., should be proposed in the future.

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.

We contacted Aaron Smith at Purdue University to learn about Tenebrionidae's origins and the common name for *O. punctulatus*. Dr. Smith said , "...the common name for all tenebrionid larvae is "mealworm", so ~10,000 known modern species would count as Eurasian mealworms."

We reached out to Kayla Perry at the Ohio State University to learn about her experience and Dr. Perry said, "Looks like it is reported out west and only in a few states. I also did a quick search of the literature, and it doesn't seem like folks are using this common name. Given the geographic restriction in NA and the predominance of the scientific name only in the literature, I would support changing the common name for this beetle."

Finally, we emailed Rob Morrison with the USDA about his experience with this species and common name. Dr. Morrison wrote, "I found that this species typically lives in the soil and free and does not develop well on grains and cereal. It can develop on meat (but I don't know how common this is). There was a report from 1969. A more recent report found an adventive population of this species in California and claims that they are facultative opportunistic ants associated in disturbed habitats. Given this information, it seems like the common name is a very poor fit for them. This is because I don't often expect a mealworm to be 1) free-living in the soil, 2) associated with ants, and 3) not to be able to complete development on grain. The first part of the name obviously is problematic as well! So, in my opinion, best to just get rid of this common name altogether because it is misleading."

Proposed by: Better Common Names Project

Date submitted: 09/19/2024

References:

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