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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:** twice-banded bean thrips
- 2. Previously approved common name (if any):** None. The insect is referred to as ‘Asian bean thrips.’
- 3. Scientific name (genus, species, author):** *Megalurothrips usitatus* (Bagnall)

Order: Thysanoptera

Family: Thripidae

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:

Megalurothrips usitatus was confirmed to be established in south Florida in March 2020, although it was probably causing economic damage to bean fields the previous fall. Prior to the establishment of *M. usitatus*, the primary thrips pests of Florida snap bean were *Thrips palmi* and occasionally *Frankliniella occidentalis*. Florida is the primary producer of fresh snap bean for the US, especially during the winter. *Megalurothrips usitatus* causes damage earlier in the crop’s phenology, resulting in earlier and more frequent applications of insecticide than was customary before its establishment. *Megalurothrips usitatus* has caused significant economic losses in snap bean production in Florida in the counties around Lake Okeechobee down to the Homestead Agricultural Area in Miami-Dade county. It is also a pest of specialty legumes including lablab bean (*Lablab purpureus*), pigeon pea (*Cajanus cajan*) and yardlong bean (*Vigna unguiculata* ssp. *sesquipedalis*).



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Megalurothrips usitatus is routinely discussed by legume growers, university and Extension personnel, and other crop protection professionals. It will also be the subject of Extension publications, industry publications and peer review scientific publications. It would be preferable to have an ESA-approved common name as an alternative to the currently used 'Asian bean thrips' because of the racial and regional aspect of that common name.

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.)

The common name refers to the adult stage, which has two white bands on its grey forewings. An image is included.

6. Distribution (include references):

Megalurothrips usitatus is native to the Asian tropics, 'with a current distribution ranging from Pakistan to Fiji and from Japan to Australia.'

Soto-Adames, F. N., 2020, Pest Alert: *Megalurothrips usitatus* (Bagnall), Asian bean thrips, Oriental bean flower thrips or bean flower thrips, Florida Department of Agriculture and Consumer Services, Gainesville, FL.

It has been reported from **Bangladesh** (Douglas, M. R., J. Chang, K. Begum, S. Subramanian, J. F. Tooker, S. N. Alam, and S. Ramasamy. 2018. Evaluation of biorational insecticides and DNA barcoding as tools to improve insect pest management in lablab bean (*Lablab purpureus*) in Bangladesh. *Journal of Asia-Pacific Entomology* 21: 1326-1336), **Cambodia** (Srinivasan, R., S. Paola, M.-Y. Lin, H. C. Hy, K. Sareth, and S. Sor. 2019. Development and validation of an integrated pest management strategy for the control of major insect pests on yard-long bean in Cambodia. *Crop Protection* 116: 82-91), **China** (Tang, L.-D., K.-L. Yan, B.-L. Fu, J.-H. Wu, K. Liu, and Y.-Y. Lu. 2015. The life table parameters of *Megalurothrips usitatus* (Thysanoptera: Thripidae) on four leguminous crops. *Florida Entomologist* 98: 620-625), **India** (Peter, C., and V. Govindarajulu. 2008. Management of blossom thrips, *Megalurothrips usitatus* on pigeon pea. *International Journal of Pest Management* 36: 312-313), **Malaysia** (Zafirah, Z. and A. A. Azidah. 2018. Diversity and population of thrips species on legumes with special reference to *Megalurothrips usitatus*. *Sains Malaysiana* 47: 433-439), **Pakistan** (Iftikhar, R., I. Ullah, S. Diffie, and M. Ashfaq. 2016. Deciphering Thysanoptera: a comprehensive study on the distribution and diversity of thrips fauna in Pakistan. *Pakistan Journal of Zoology* 48), and **Taiwan** (Chang, N. T. 1987. The preference of thrips, *Megalurothrips usitatus* (Bagnall), for three leguminous plants. *Plant Protection Bulletin, Taiwan*, 30: 68-77),

In addition to the published literature cited above documenting the distribution of *M. usitatus* in Asia and the FDACS Pest Alert documenting its establishment in Florida, it is reported from Cuba and Belize



(according to Laurence Mound), Mexico (in press) and Guatemala (Hugh Smith, personal observation). In the continental United States, *M. usitatus* has not been detected outside of south Florida.

7. Principal hosts (include references): *Megalurothrips usitatus* is a pest of leguminous crops, including common bean (*Phaseolus vulgaris*), lablab, pigeon pea, adzuki bean (*Vigna angularis*), peas (*Pisum sativum*), soybean (*Glycine max*), peanut (*Hypogea arachis*), and others. There are reports in the literature of *M. usitatus* being collected from non-leguminous hosts, but there is nothing in the literature about the species causing economic damage to anything but legumes. Please use the references in the 'distribution' section (question 6) as documentation for host range.

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 proposed name is not in use. People in the US refer to the insect by its scientific name or as 'Asian bean thrips.' I am proposing an alternate to Asian bean thrips.

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:

There are a variety of common names used in the references cited above, including 'bean thrips' and 'blossom thrips.' There are a several thrips associated with legume flowers in Florida and elsewhere, so 'bean blossom/flower' thrips does not help distinguish *M. usitatus* from the other species found in the legume flower. The two white bands on the wing are distinctive, however. I have become familiar with the common names presently in use through searching the literature. 'Bean flower thrips' is probably the most common, but this is also used to refer to *Caliothrips fasciatus*. Since working on this application last fall I have encountered a number of instances in which researchers in Central America believe they have *M. usitatus* whereas they are dealing at least in part with *Frankliniella insularis*, which look similar, but has only one band. I believe a common name that emphasizes the two bands is important.

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:

Caleothrips phaseoli is also a dark thrips with two bands on its forewing. Although *C. phaseoli* is associated with legumes, in south Florida it is very rarely recovered. In over 1,870 adult thrips collected from snap bean in Miami-Dade county between November 2021 and April 2022, almost 50% were *M. usitatus* and none were *C. phaseoli*. We have found one *C. phaseoli* out of several hundred thrips



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identified from snap bean so far in the fall of 2022. We have identified several hundred thrips from lablab, pigeon pea and yardlong bean in south Florida between October 2020 and April 2022. Three of them were *C. phaseoli*. We are not aware of other thrips associated with legumes in the US that have two bands on the wings. *Frankliniella insularis* looks very similar to *M. usitatus* and is common in perennial legumes (lablab, pigeon pea), but it has one band on the forewing.

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.

I asked Tom Skarlinsky, thrips specialist with USDA APHIS Miami, Felipe Soto-Adames, thrips specialist with the Florida Department of Agriculture and Consumer Services, Julien Beuzelin, UF entomologist who has worked with *M. usitatus*, and Bob Hochmuth, UF Extension specialist who works with bean growers, what they thought of 'twice-banded bean thrips.' Dr. Beuzelin thought that 'two-banded' might be more conventional than 'twice-banded,' but there were no objections. [Dr. Soto-Adames consulted with a leading thrips taxonomist who apparently did not see the need for an alternative to 'Asian bean thrips.']

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