



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.

September 30, 2005

Esteemed ESA Common Names Committee members,

As the Chair for the Western Forest Insect Work Conference (WFIWC) Common Names Committee (CNC), I am please to present the following insect for your consideration. This proposal is part of our project to formalize common names of insects not yet recognized by ESA but found in the important publication [Western Forest Insects](#). We are particularly eager to proceed with these efforts as a revision of this book is being proposed for completion in the next 18 months.

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 (any numbers accompanied by a letter). 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, please feel free to contact me.

Sincerely,

/s/ Brytten Steed

Brytten Steed
WFIWC-CNC Chair
bsteed@fs.fed.us

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.

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

I ask that the WFIWC Standing Committee on Common Names of Insects facilitate the submission of the following common name or name change to ESA and ESC.

1. Proposed new common name (English): [Four-eyed spruce bark beetle](#)
- 1b. Proposed new common name in French (optional): [None](#)
2. Previously approved ESA common name (if any): [None](#)
- 2b. Previously approved English ESC common name (if any): [Foureyed spruce bark beetle](#)
- 2c. Previously approved French ESC common name (if any)-include direct translation to English: [Polygraphe de l'épinette \(Polygraphus of spruce\)](#)
3. Scientific name (genus, species, author): [Polygraphus rufipennis \(Kirby\)](#)

Order: [Coleoptera](#)

Family: [Curculionidae](#)

Subfamily: [Scolytinae](#)

- 3b. List important previous scientific names (esp. note if this scientific name is different from that noted in Western Forest Insects or in the literature cited). [Polygraphus rufipennis](#) was, at one time, considered a synonym of [P. poligraphus](#), a European species (Wood 1982).

Supporting Information

4. Reasons supporting the need for the proposed new or changed common name:

[Proposed common name is published in Furniss and Carolin 1977, which is widely used by forest entomologists. Future publication of an updated version of this important publication is expected and should match approved names to minimize any future confusion.](#)

5. Stage or characteristic to which the proposed common name refers: [The term "four-eyed" comes from the compound eyes of members of the genus Polygraphus, which are completely divided by an emargination into dorsal and ventral halves \(Wood 1982\). "Spruce"](#)

refers to the primary hosts of this bark beetle.

6. Distribution (include citations): Canada – Occurs in all provinces. U.S. – Alaska, Arizona, Colorado, District of Columbia, Idaho, Maine, Massachusetts, Michigan, Minnesota, Montana, New Hampshire, New Mexico, New York, North Carolina, North Dakota, Oregon, Pennsylvania, South Dakota, Tennessee, Utah, Vermont, West Virginia, Wisconsin, Wyoming (Furniss and Carolin 1977, Wood 1982; Wood and Bright 1992).

7. Principal hosts (include citations): Primary hosts are spruces: *Picea engelmannii*, *P. rubens*, *P. glauca*, *P. mariana* and *P. pungens*. Also reported from *Abies balsamea*, *A. fraseri*, *Larix laricina*, *Pinus contorta*, *P. flexilis*, *P. strobus* and *Pseudotsuga menziesii* (Browne 1968, Furniss and Johnson 2002, Wood 1982; Wood and Bright 1992) Wood and Bright (1992) note that it has been apparently introduced into South Africa

8. Cite references containing previous use of the proposed common name:

Baker (1972), Brown (1968), Craighead (1950), Drooz (1985) and Keene (1952) use the common name “four-eyed spruce bark beetle.”

9. Cite references using English common names (provide names) other than that proposed:

The Entomological Society of Canada official English common name is “four-eyed spruce bark beetle.

Furniss and Carolin (1977) and Furniss and Johnson (2002) use “four-eyed spruce beetle”

9b. References using common names in a non-English language (give the common name in the non-English language and give the direct translation to English, if possible)

The Entomological Society of Canada official French common name is “polygraphe de l'épinette,” which translates into English as the “Polygraphus of spruce.”

10. Other insects or organisms to which the proposed common name might apply (give scientific name and include citations, if possible):

Brown (1968) also refers to the European species, *Polygraphus poligraphus* as the “four-eyed spruce bark beetle.” According to Wood (1982), some experts have considered the two species to be synonymous, however they are currently considered separate species.

Important related comments from the reviewers include:

- 1) The common name has also been applied to *Polygraphus poligraphus* (L.) in Europe (Händel et al 2003; Kisielowski 1978; Wegsteiner 2000; Weiser et al. 2002; Witrylak 1993) While the two species of *Polygraphus* are considered to be valid species the application of the same common name to both may be problematic. *P. poligraphus* is commonly intercepted in North America thus common names which distinguish the two species are needed. (One solution would be to propose the name Eurasian four-eyed spruce bark beetle for *Polygraphus poligraphus* for use in North America.)
- 2) Concerns were expressed in the proposal re possible common name confusion with *P. poligraphus*, the Eurasian species, especially from the context of interceptions at USA borders. Since *P. poligraphus* was described in 1758 and *P. rufipennis* was described in 1837, it would seem that *P. poligraphus* would have “priority” with regard to the more

generic common name "Four-eyed spruce bark beetle". If that logic is followed, referring to *P. rufipennis* as the "American four-eyed spruce bark beetle" seems appropriate. Modifying a common name for the initially described species, *P. poligraphus*, to "Eurasian..." seems insular, parochial, and ethnocentric. Another possibility, to distinguish *P. rufipennis* from the two other species in North America and based on characters Wood uses in his key, would be "punctured four-eyed spruce bark beetle". Unfortunately, removing "bark" from the common name to simplify it doesn't seem to be an option. Species of the cerambycid genus, *Tetropium*, have four eyes each and attack spruce.

10 b. List references cited in questions 6-10:

- Baker, W.L., 1972. Eastern forest insects. USDA Forest Service, Miscellaneous Publication 1175, 642 pp.
- Brown, F.G., 1968. Pests and diseases of forest plantation trees. Oxford, U.K., Clarendon Press, 1330 pp.
- Craighead, F.C., 1950. Insect enemies of eastern forests. USDA, Miscellaneous Publication 657, 679 pp.
- Drooz, A.T., 1985. Insects of eastern forests. USDA Forest Service, Miscellaneous Publication 1426, 608 pp.
- Furniss, R.L. and V.M. Carolin, 1977. Western forest insects. USDA Forest Service, Miscellaneous Publication 1339, 654 pp.
- Furniss, M.M. and J.B. Johnson, 2002. Field guide to the bark beetles of Idaho and adjacent regions. Idaho Forest, Wildlife, and Range Experiment Station, University of Idaho, Moscow, 125 pp.
- Händel, U., Wegensteiner, R., Weiser, J., and Zizka, Z. 2003. Occurrence of pathogens in associated living bark beetles (Col., Scolytidae) from different spruce stands in Austria. *Anzeiger für Schädlingskunde* 76 (1): 22
- Keene, F.P., 1952. Insect enemies of western forests. USDA, Miscellaneous Publication 273, 280 pp.
- Kisielowski, S. 1978. The four-eyed spruce bark beetle *Polygraphus polygraphus* in montane forests attacked by *Armillaria mellea*. [original title - Czteroooczak swierkowiec (*Polygraphus polygraphus* L.) w gorskich drzewostanach opienkowych. *Sylvan*. 122(7): 25-29
- Wegensteiner, R. (2000): Laboratory evaluation of *Beauveria bassiana* (Bals.) Vuill. and *Beauveria brongniartii* (Sacc.) Petch against the four eyed spruce bark beetle, *Polygraphus poligraphus* (L.) (Coleoptera, Scolytidae).. *IOBC/wprs Bulletin*, 23, 2, 161-166.
- Weiser, J., Handel, U., Wegensteiner, R., Žizka, Z. (2002): *Unicaryon polygraphi* sp.n. (Protista, Microspora)" a new pathogen of four-eyed spruce bark beetle *Polygraphus poligraphus* (Col., Scolytidae). *J Appl Ent* 126:148-154
- Witrylak, M. 1993. Life cycle of the four-eyed spruce bark-beetle - *Polygraphus poligraphus* (L.) (Coleoptera, Scolytidae) in the mountains. [Original title - Cykl rozwojowy czteroooczaka swierkowca - *Polygraphus poligraphus* (L.) (Coleoptera, Scolytidae) w gorach. *Wiadomosci Entomologiczne*. 12(1): 37-39

Wood, S.L. 1982. The bark and ambrosia beetles of North and Central America (Coleoptera: Scolytidae), a taxonomic monograph. Great Basin Naturalist Memoirs 6, 1359 pp.
Wood, S.L. and Bright, D.E. 1992. A catalog of Scolytidae and Platypodidae (Coleoptera), Part 2: Taxonomic Index. Great Basin Naturalist Memoirs. 13: 1-1553.

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:

A number of forest entomologists in the western U.S. were contacted and asked to provide review comments to this proposal. The following individuals responded:

Bobbe Fitzgibbon, USDA Forest Service, Flagstaff, AZ
Dave Leatherman – Colorado State Forest Service, Fort Collins, CO
Ladd Livingston – Idaho Department of Lands, Coeur d'Alene, ID
Iral Ragenovich – USDA Forest Service, Portland, OR
Lee Humble – NRC Canadian Forest Service, Victoria BC, Canada
Brytten Steed – USDA Forest Service-FHP, Ogden UT
Malcom M. Furniss, Research Professor, University of Idaho, Moscow, ID
Jim LaBonte, Insect Program Specialist, Oregon Department of Agriculture, Salem OR

Their comments are incorporated into this proposal.

11b. What type of literature searches/checks did you conduct (e.g. CABI, ESA and ESC web pages, USDA FS library, formal library search engine-list, etc.)

Search on ESA Common Names site
(http://www.entsoc.org/Pubs/Books/Common_Names/search.asp) to determine if this species had a common name, if the common name belonged to another species –

Review of the ESC Common Names publication (pdf at http://www.esc-sec.org/common_names_2005.pdf) to determine if this species had a common name in either English or French, or if the English common name proposed belonged to another species

Search of British Museum of Natural History website (<http://www.nhm.ac.uk/nature-online/biodiversity/nature-navigator/>)

Literature searches included CABI 2004 (Commonwealth Agricultural Bureaux International) data base (includes CAB abstracts, Tree CD, and Forest Science Abstracts), AGRICOLA, Biological Abstracts, and EPPO (European Plant Protection Organization). No additional names appeared.

Search of www using the Google search engine

ALSO: List of citations in #10

12. Proposed by (your name): Western Forest Insect Work Conference group (WFIWC), Common Names Committee (CNC) Chair – Brytten Steed
Proposal prepared and submitted to the WFIWC CNC by William M. Ciesla, Forest Health Management International, Fort Collins, CO.

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