

# Screening Aid for *Trypodendron domesticum*

Author: William Carlson, Identifier (Entomologist) USDA/APHIS/PPQ/Blaine, WA  
Designed for use in CAPS surveys for Exotic Bark Beetles

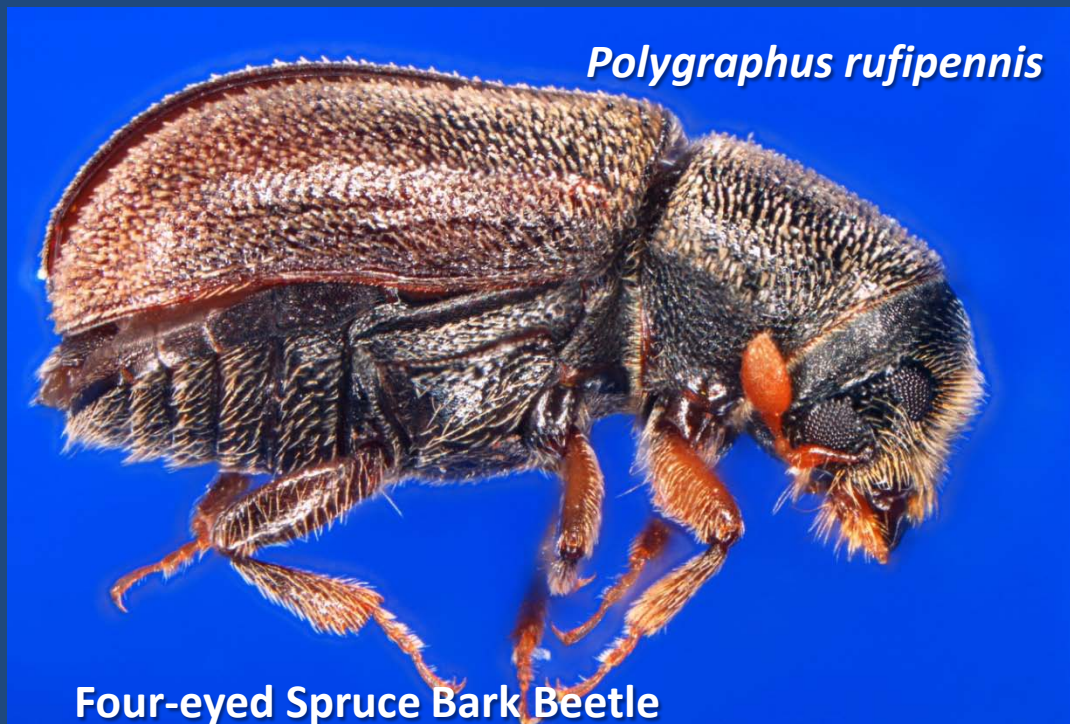
ID difficulty: not difficult except for large numbers (can be in the thousands) of Non-target *Trypodendron lineatum* that are often attracted to the TD lure used west of the Rocky mountains that look very similar that will have to be sorted out under a dissection scope.

Keys: “Brief Illustrated Key to European Bark Beetles”  
By Grune Von Sabine. Verlag M.& H Schaper Hannover  
Germany

“ An Illustrated Key to the Scolytidae, PDC 02/89-01  
updated by D.M. Anderson August 1981”

Use the PDC key to eliminate obvious non-target scolytids

## Non Target Look-alikes



*Polygraphus rufipennis*

Four-eyed Spruce Bark Beetle

USDA Photo by W. Carlson

*Polygraphus rufipennis* (Scolytidae)



Size in mm

USDA photo by W. Carlson

*Polygraphus rufipennis* has some of the characteristics of *Trypodendron domesticum* such as the divided eyes (which *Trypodendron* sp. have) and the pointed last antennal segment, which *Trypodendron domesticum* also has. *Polygraphus rufipennis* differs by having the body covered by scales and a different host, (Spruce). It is also unlikely that it would be attracted to a trap with a TD lure.

## Non Target Look-alikes

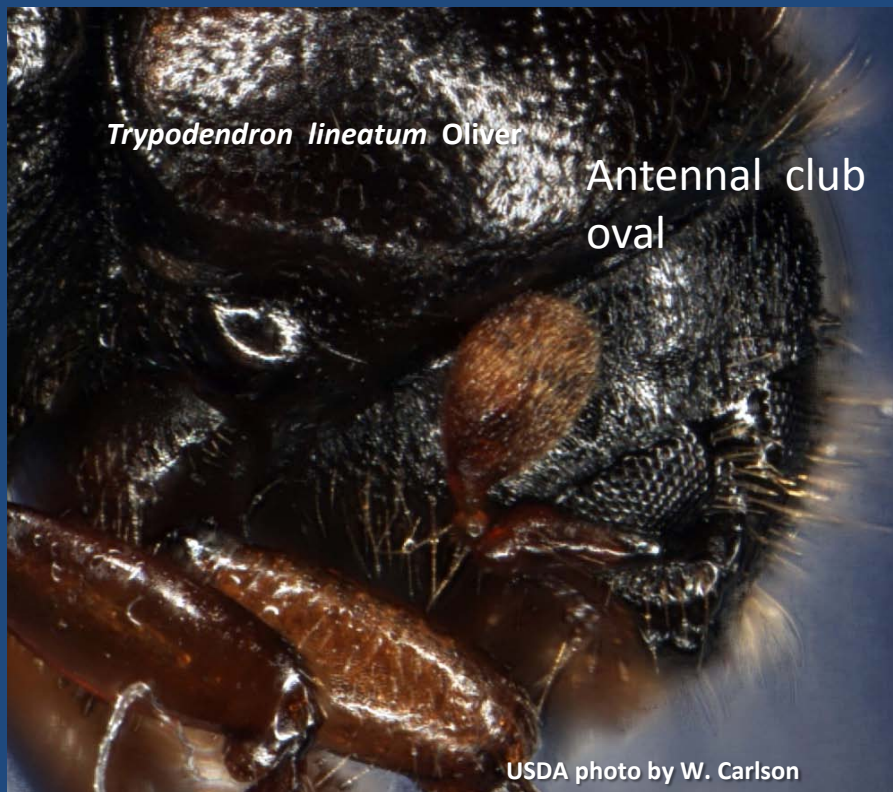
*Trypodendron lineatum* (Scolytidae)



*Trypodendron lineatum* looks like *Trypodendron domesticum* except that the last antennal segment is rounded (oval), not pointed, and the coloration of the elytra shows wide light brown longitudinal stripes, one sub-medially on each elytron. The pronotum also has light brown coloration postero-laterally.

*T. lineatum* is an established exotic in Washington State. It is attracted to TD lures in great numbers.

# Non-Target Look-alikes



# Sorting *Trypodendron domesticum* out of large numbers of *Trypodendron lineatum* in a petri dish.

Typically when observing bark beetle specimens lying in a petri dish most of them will either be lying on their sides or ventral side up. A quick way to sort out the target species is in this case is to look for the black legs. Remove them and check for other characteristics.

**Target: look for Black legs**

This sorting technique comes from PHSS Stacy Herron, USDA/APHIS/PPQ /Blaine, WA

**Non-target: Brown legs**

*Trypodendron domesticum*



USDA photo by W. Carlson

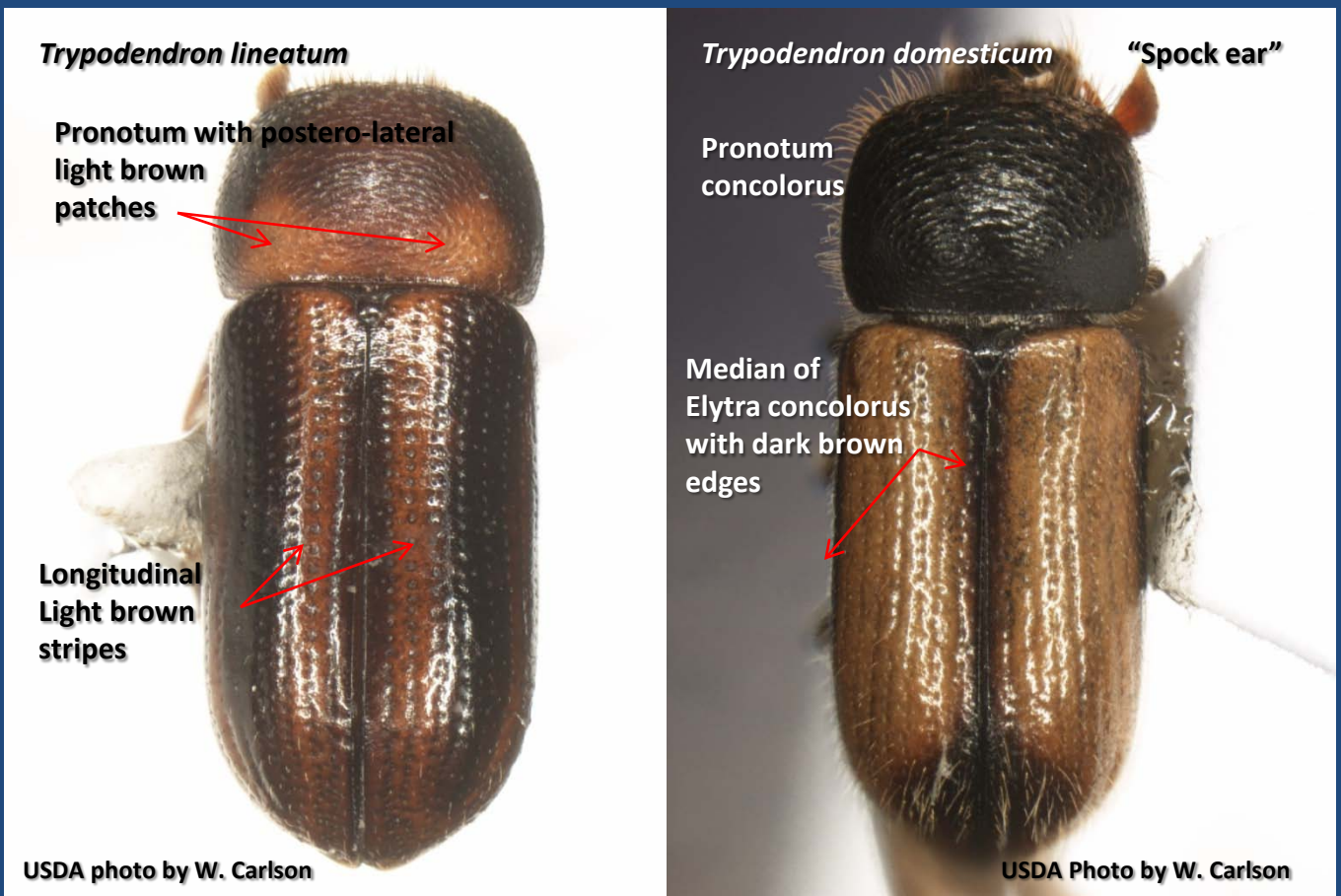
*Trypodendron lineatum*



USDA photo by W. Carlson

## Sorting *Trypodendron* sp. in a petri dish continued.

For those specimens in the dish that are dorsal side up sort by color as described below. Note, if you have other Scolytids than *T. lineatum* you will have to find other separation techniques.



After you have sorted out suspect Targets check for the Trekky "Spock ear" to confirm *Trypodendron domesticum*

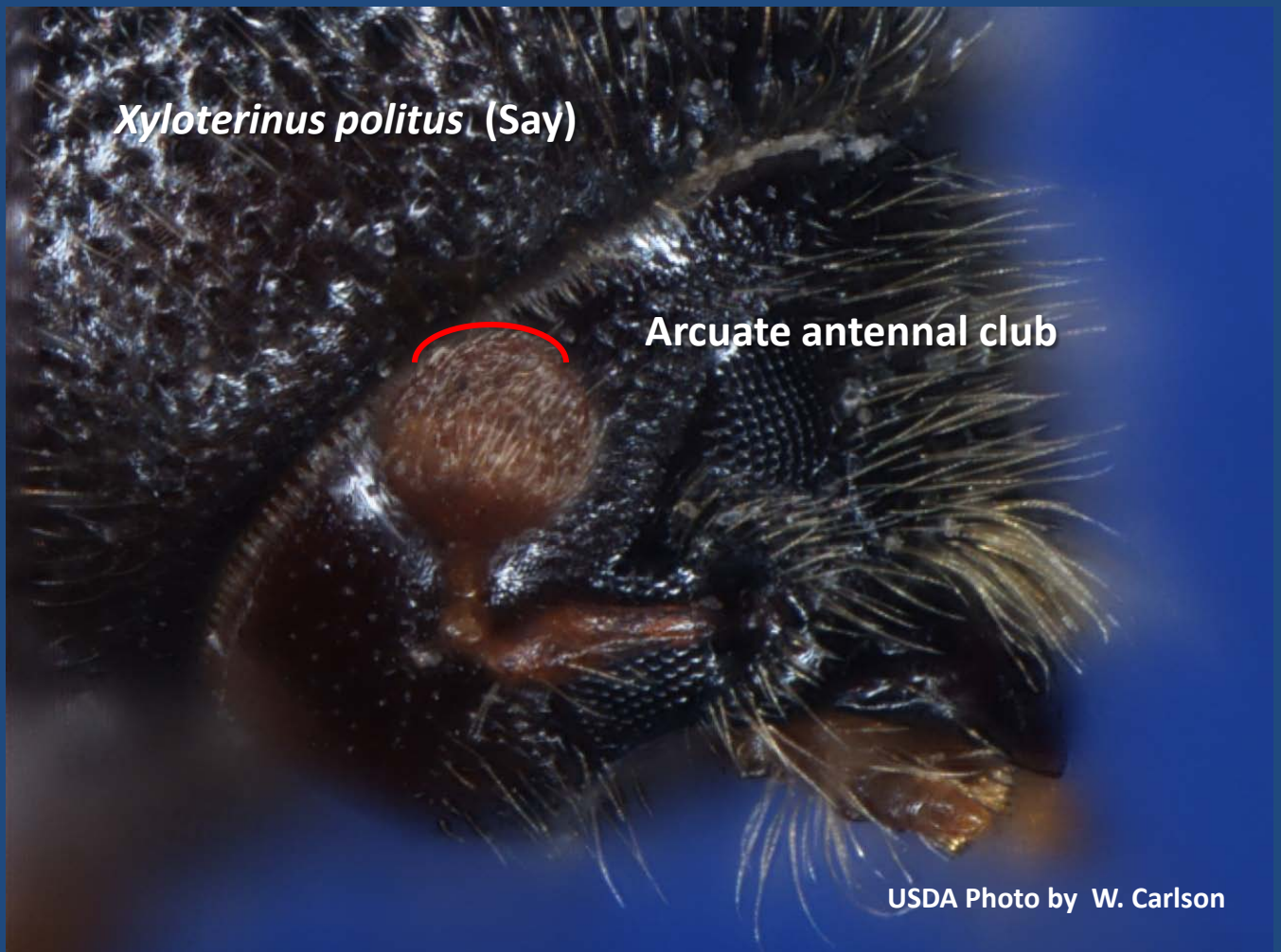
If you are screening traps east of the Rocky Mountains  
You may be finding another “look-alike” *Xyloterinus politus*

*Xyloterinus politus* (Say)



Size in mm USDA photo by W. Carlson

*Xyloterinus politus* also has the eyes divided however, the antennal club is arcuate, not pointed as in *T. domesticum*. *Xyloterinus politus* is unicolorus, (all brown) with no longitudinal light colored bands on the elytra such as other *Trypodendron* spp. It also has brown legs and the target has black legs. This should help in sorting the target out of large numbers of non-targets in a petri dish.





*Xyloterinus politus* Say

**Unicolorus (all brown)**



USDA Photo by W. Carlson

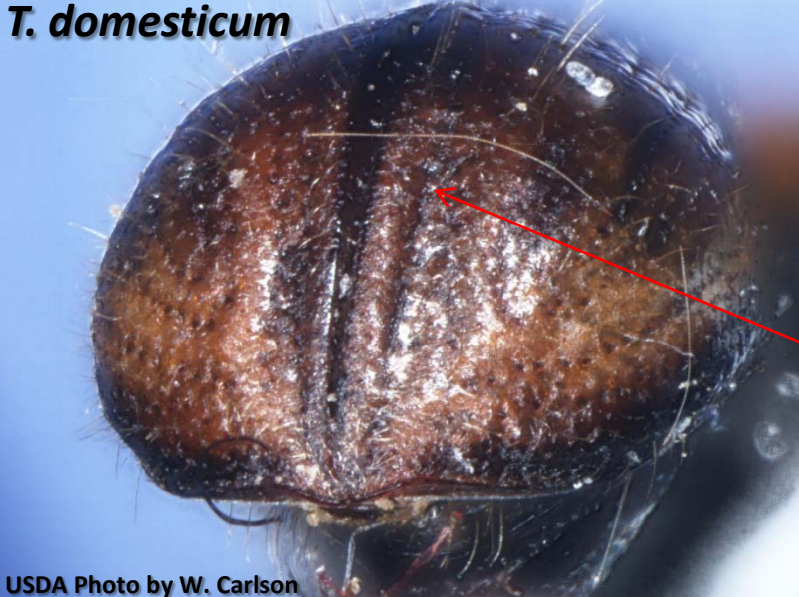
*Trypodendron domesticum* Linneaus

**Light brown patches on elytra**



USDA Photo by W. Carlson

***T. domesticum***

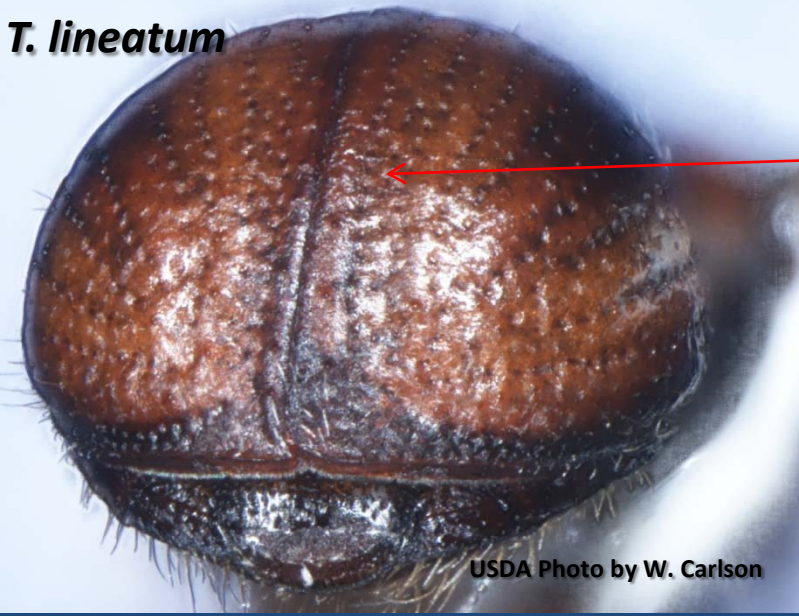


USDA Photo by W. Carlson

Comparison of the declivity of *T. domesticum*, *T. lineatum* and *X. politus*

Apical declivity with deep furrow next to suture.

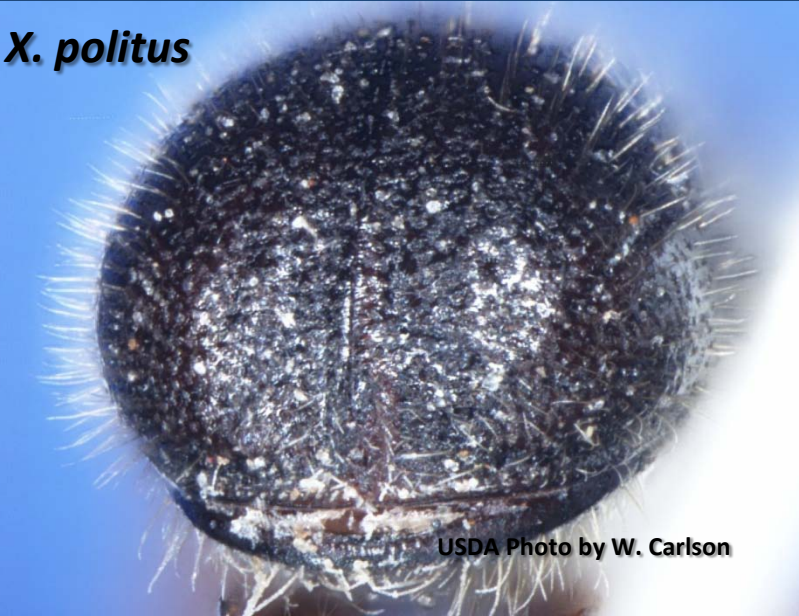
***T. lineatum***



USDA Photo by W. Carlson

Apical declivity with comparatively shallow furrow next to suture.

***X. politus***



USDA Photo by W. Carlson

Declivity rough with little or no furrow next to suture.

*Trypodendron domesticum* sexual dimorphism  
Lateral view

Pronotum  
Flattened

Frons  
concave



USDA Photo by W. Carlson

Pronotum  
Rounded

Frons  
convex



USDA Photo by W. Carlson

*Trypodendron domesticum* sexual dimorphism cont:  
Dorsal view comparing shape of pronotum

Pronotum rectangular



Pronotum rounded



# Target: *Trypodendron domesticum* Linn.

*Trypodendron domesticum* Linnaeus



Size in mm

USDA photo by W. Carlson

## Additional references:

Screening aid for Western Scolytinae by James R. LaBonte and Steven A. Valley  
A power point presentation, Oregon Dept. of Agriculture.

Bark Beetle Genera of the United States/Fact sheet: *Xyloterinus*  
[www.http://itp.lucidcentral.org/idwbb/bbgus/Xyloterinus.htm](http://itp.lucidcentral.org/idwbb/bbgus/Xyloterinus.htm)  
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