CAPS Datasheets provide pest-specific information to support planning and completing early detection surveys.

Tetropium castaneum

Scientific Name
Tetropium castaneum (Linnaeus,1758)

Synonym(s):

None

Common Name
Black spruce beetle

Type of Pest
Beetle, woodborer

Taxonomic Position
Class: Insecta, **Order:** Coleoptera,
Family: Cerambycidae

Figure 1. Adult *Tetropium castaneum*. Picture courtesy of Steven Valley,

Pest Recognition
This section describes characteristics of the organism and symptoms that will help surveyors recognize possible infestations/infections in the field, select survey sites, and collect symptomatic material. For morphological descriptions, see the Identification/Diagnostic resources on the AMPS pest page on the CAPS Resource and Collaboration website.

Pest Description

Adults:

The body is elongate, flattened, and $^{3}/_{4}$-$^{5}/_{6}$ in. long (Fig. 1) (Bílý and Mehl, 1989; Cherepanov, 1988). The body and elytra (hardened wings) are commonly black, but elytra color can vary greatly, ranging from light brown to black (Fig. 2) (Hoskovec et al., 2023; Juutinen, 1955). The antennae are thick, nodose (having distinct bumps on each segment), and reach approximately the middle of the elytra (Bílý and Mehl, 1989; Cherepanov, 1988). A deep groove is present on the forehead between the eyes (Fig. 3A) (Cherepanov, 1988). The pronotum (segment behind the head) appears shiny because it lacks puncture marks (Fig. 3B) (Bílý and Mehl, 1989). Also, in the third pair of legs, the metatrochanter is straight to evenly rounded or with a robust angle or spur in males and a smaller protuberance in females (Royals et al., 2019). Adults are found among freshly dead trees and wood piles (Hoskovec et al., 2023; Juutinen, 1955) .

Figure 2. *Tetropium castaneum* adults showing variable coloration. Picture courtesy of Dr. Makarov, Moscow State Pedagogical University.

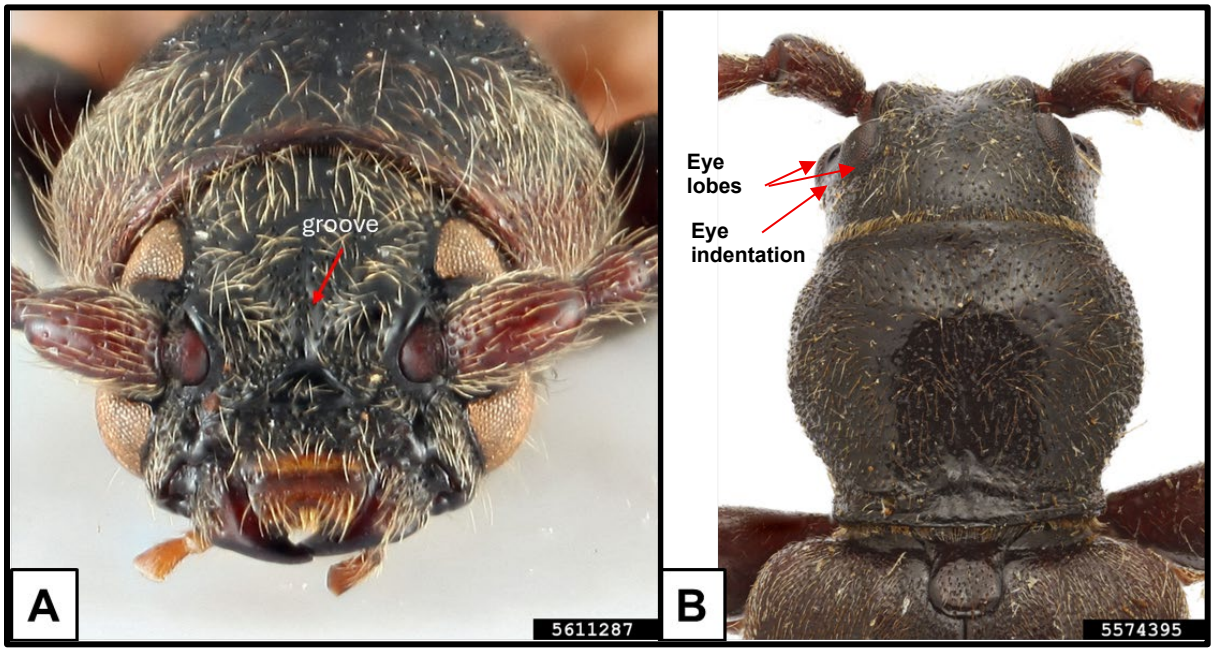

Figure 3. *Tetropium castaneum* adults: Head in frontal view **(A)** and head and pronotum in dorsal view with arrows indicating the eye lobes and eye indentation **(B)**. Pictures courtesy of (A) Sarah Smith, CerambycID, USDA-APHIS-PPQ, Bugwood.org, and (B) Hanna Royals, Screening Aids, USDA-APHIS-PPQ, Bugwood.org.

Eggs:

Eggs are oblong to oval in shape and small, 1.2 × 0.5 mm (Cherepanov, 1988). They are white with a silvery tone (Dobesberger, 2005). Eggs can be found in bark crevices (Cherepanov, 1988).

Larvae:

First instar larvae are very small and final instar larvae are ~$^{3}/_{4}$–$^{7}/_{8}$ in. long and slightly flattened (Fig. 4A) (Cherepanov, 1988). They are yellow-white with a rust or reddish brown head (Cherepanov, 1988). Larvae are found in galleries (tunnels created by the larvae) in the wood (Cherepanov, 1988).

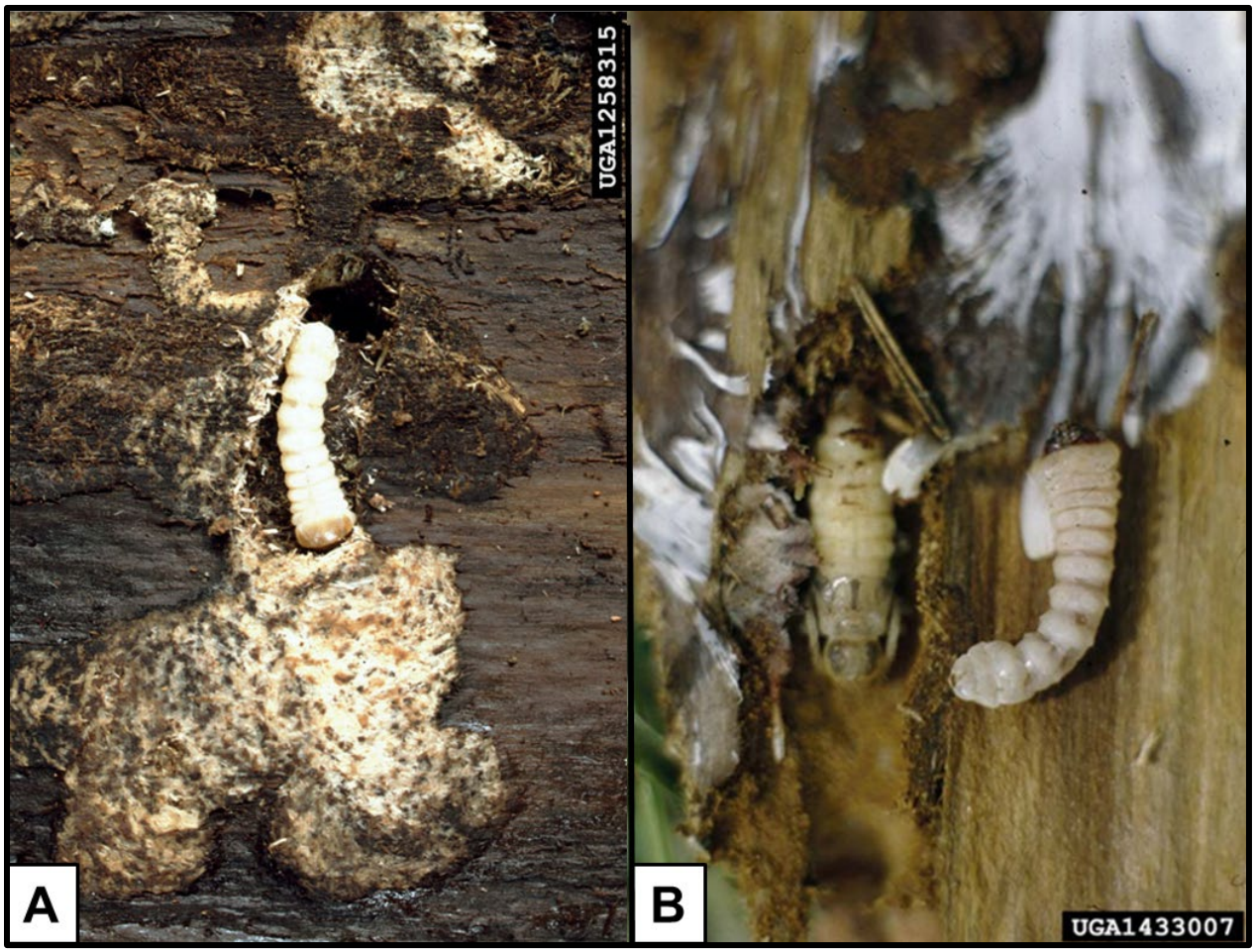

Figure 4. *Tetropium castaneum* larva in a gallery **(A)** and pupa in pupal chamber (left) and larva (right) **(B)**. Pictures courtesy of (A) Stanislaw Kinelski, Bugwood.org and (B) Fabio Stergulc, Università di Udine, Bugwood.org; both images CC BY-NC 3.0 US.

Pupae:

Pupae are ~$^{3}/_{8}$-$^{7}/_{8}$ in. long and about $^{1}/_{4}$ in. wide and white (Fig. 4B) (Cherepanov, 1988). They are located in L-shaped chambers in the sapwood (Dobesberger, 2005).

Signs and Symptoms

Typically, *T. castaneum* attacks dead, dying, or stressed trees. Signs of *T. castaneum* damage can be similar to damage by other woodborers, including other *Tetropium* species. Adults boring into the wood leads to copious resin flow down the tree (CFIA, 2016). Larval feeding creates irregular galleries that can be filled with fine frass (Fig. 5A & B). Mature larvae bore up to a depth of ~2 in. and make pupal chambers in an L-shape that can be observed when cutting into the wood (Fig. 6A) (Cherepanov, 1988). Adult exit holes are oval and are frequently in the lower part of the trunk, though they can appear anywhere on the tree (Fig. 6B) (Cherepanov, 1988; Juutinen, 1955).

As the damage progresses, the foliage will fade from green to yellow and to reddish brown (Fig. 7A) and tree trunks will appear girdled (Fig. 7B) (CFIA, 2016; Kolk and Starzyk, 1996).

Tetropium castaneum is associated with some wood-staining fungi (*Ophiostoma* spp.) that could color the wood blue (Jankowiak and Kolarik, 2010).

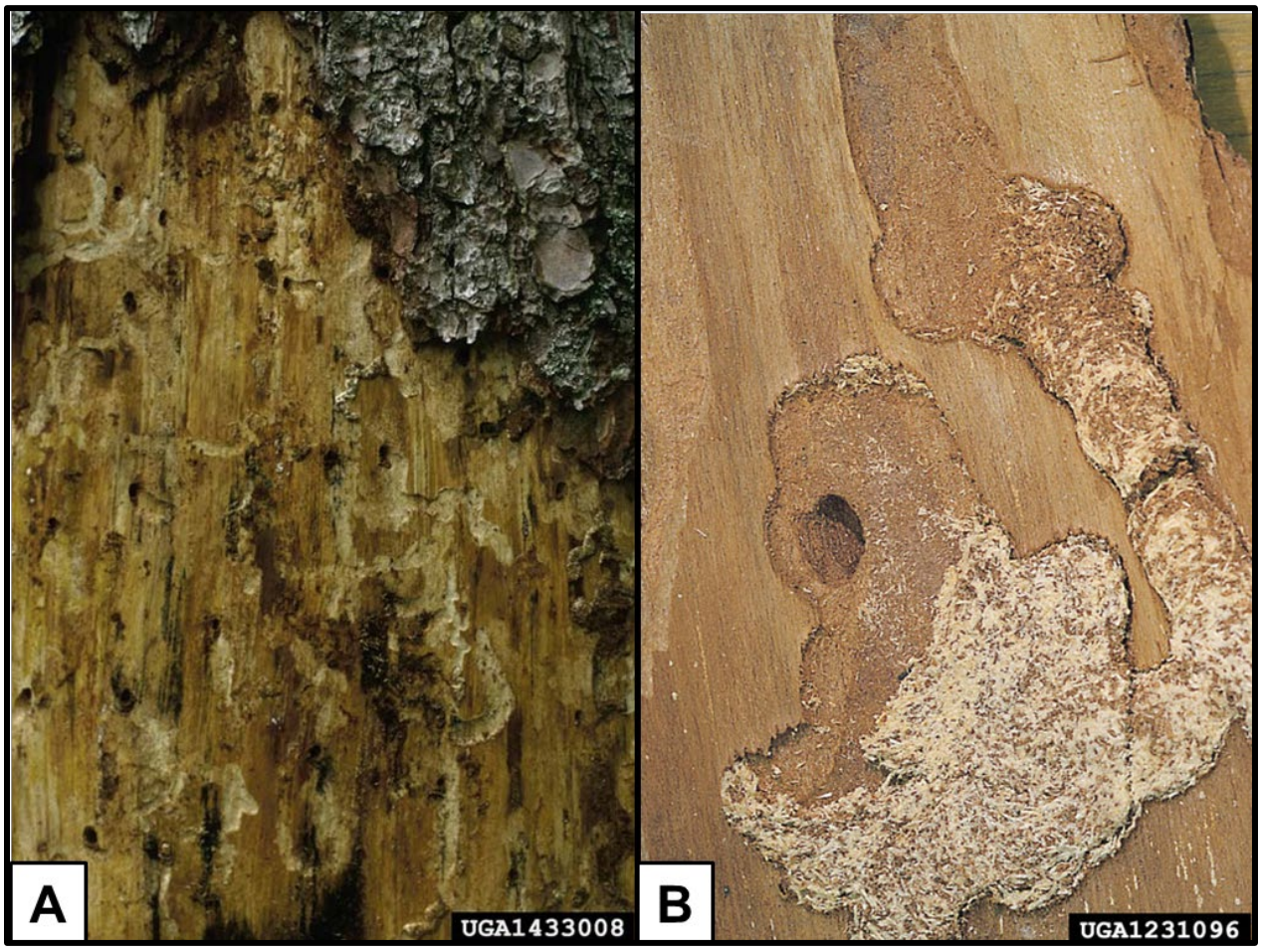

Figure 5. *Tetropium castaneum* signs of infestation: feeding galleries on trunk **(A)** and feeding galleries on trunk filled with frass **(B)**. Pictures courtesy of (A) Fabio Stergulc, Università di Udine, Bugwood.org and (B) Gyorgy Csoka, Hungary Forest Research Institute, Bugwood.org; both images CC BY-NC 3.0 US.

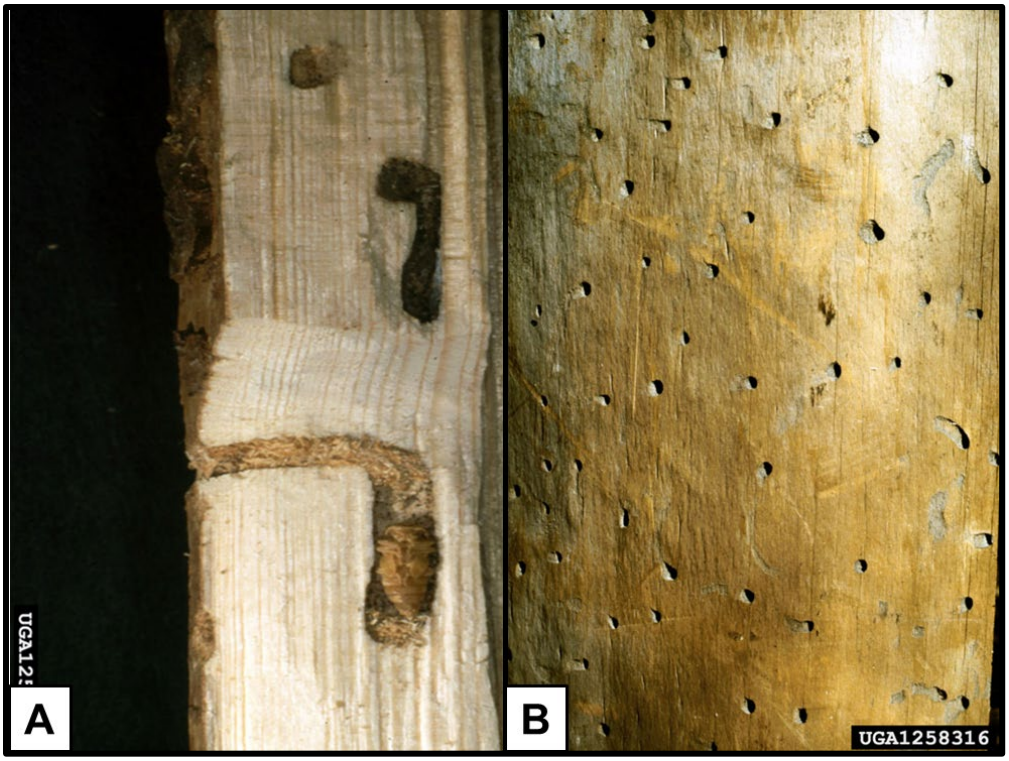

Figure 6. *Tetropium castaneum* signs of infestation: L-shape pupal chambers **(A)** and adult exit holes **(B)**. Pictures courtesy of Stanislaw Kinelski, Bugwood.org, CC BY-NC 3.0 US.

Figure 7. *Tetropium castaneum* signs of infestation: Attacked spruce tree showing discoloration **(A)** and trunk of trees girdled **(B)**. Pictures courtesy of Stanislaw Kinelski, Bugwood.org, CC BY-NC 3.0 US.

Easily Mistaken Species

The genus *Tetropium* can be distinguished from other genera within the Spondylidinae subfamily by the eyes, which are divided into two lobes by a strong indentation (as seen in Fig. 3B) (Cherepanov, 1990; Gorring et al., 2024; Royals et al., 2019). Within the genus *Tetropium*, adult beetles are difficult to differentiate, even when comparing native and exotic species, because they look similar in body shape and appearance (Royals et al., 2019).

Native Species

Tetropium species present in the United States include *T. abietis, T. auripilis*, *T. cinnamopterum, T. parallelum, T. parvulum, T. schwarzianum,* and *T. velutinum* (Bezark, 2024). Of these, the most common species in North America are *T. cinnamopterum*, *T. parvulum*, and *T. velutinum* (Fig. 8B, C & D) (Royals et al., 2019).

The following information on morphological features to distinguish *T. castaneum* from other *Tetropium* spp. was compiled from the *Tetropium* spp. Screening Aid by Royals et al. (2019).

- ***Tetropium abietis*** can be differentiated from *T. castaneum* by the pronotum. In *T. abietis*, the pronotum looks rough because of multiple small puncture marks, while in *T. castaneum*, it appears smooth. It is present along the West Coast, from Washington to southern California, and has juniper and fir as hosts (Monne and Nearns, 2024; Royals et al., 2019).

- ***Tetropium auripilis*** there is limited information on this species, including morphological features to differentiate it from *T. castaneum.* It is present in southern Arizona, but there is no available information on hosts (Bezark, 2024; Monne and Nearns, 2024).

- ***Tetropium cinnamopterum*** (Fig. 8B) can be distinguished from *T. castaneum* by examining features of the metatrochanter that will need to be examined by a trained taxonomist. It is found throughout the coniferous belt of North America (Royals et al., 2019). This beetle predominantly attacks spruce trees (Ross and Vanderwall, 1969; Royals et al., 2019).

- ***Tetropium parallelum*** can be differentiated from *T. castaneum* by the pronotum. In *T. parallelum*, the pronotum looks rough because of multiple small puncture marks, while in *T. castaneum*, it appears smooth. It is present in Arizona, Colorado, and New Mexico, with hosts including fir and spruce (Monne and Nearns, 2024; Royals et al., 2019).

- ***Tetropium parvulum*** (Fig. 8C) can be distinguished from *T. castaneum* by examining features of the metatrochanter that will need to be examined by a trained taxonomist. It is found throughout the entire coniferous belt of North America, mainly in spruce but also in pine (Monne and Nearns, 2024; Raske, 1973; Royals et al., 2019).

- ***Tetropium schwarzianum*** can be differentiated from *T. castaneum* by the weakly furrowed or absent frontal groove between the base of the antennae, which is deep in *T. castaneum.* It is present from Minnesota to Nova Scotia to North Carolina in spruce and pines (Monne and Nearns, 2024; Royals et al., 2019).

- ***Tetropium velutinum*** (Fig. 8D) can be differentiated from *T. castaneum* by the pronotum with a rough appearance because of puncture marks, which look smooth in *T. castaneum.* It is found in the central western United States as well as western Canada and north to Alaska, in larch, hemlock, and Douglas fir (Monne and Nearns, 2024; Royals et al., 2019).

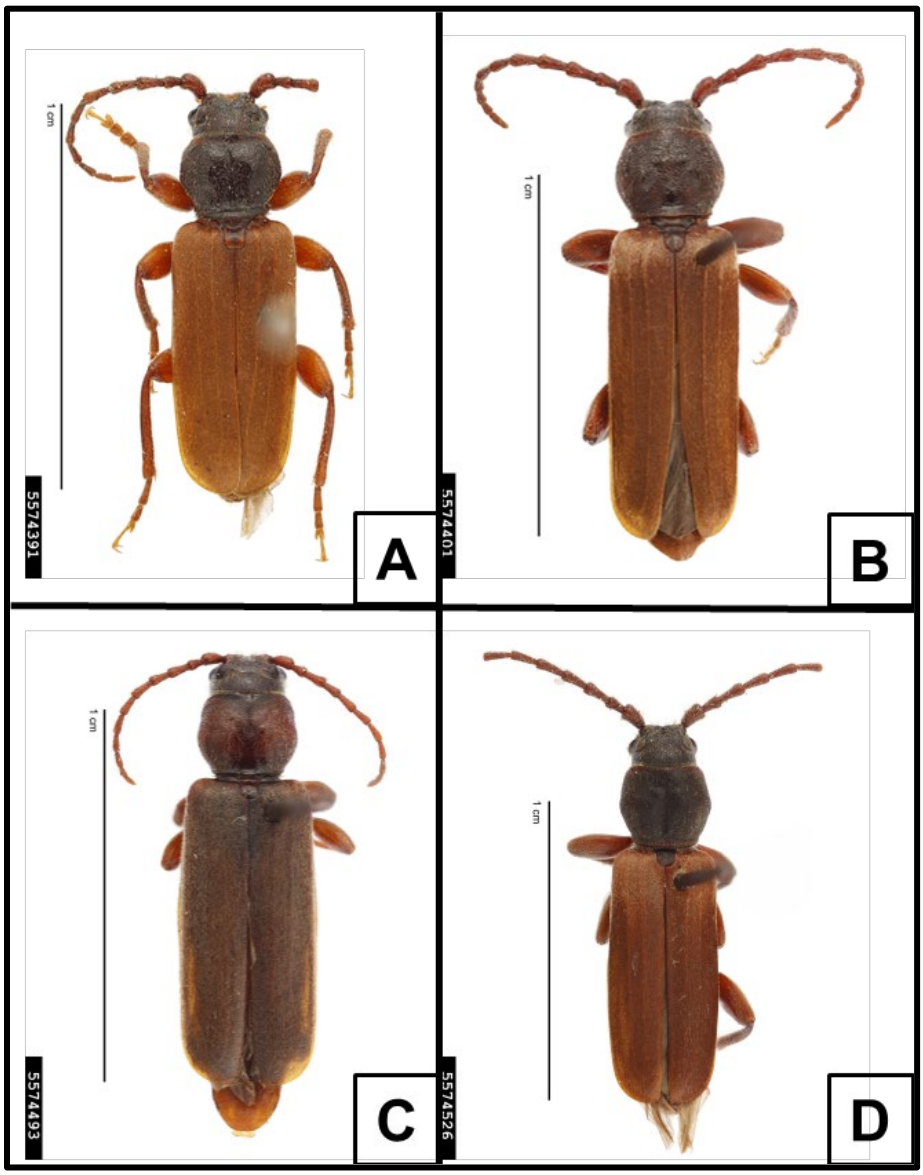

Figure 8. Common North American species that could be mistaken for *T. castaneum*: *Tetropium castaneum* **(A)**, *T. cinnamopterum* **(B)**, *T. parvulum* **(C)**, and *T. velutinum* **(D)**. All pictures courtesy of Hanna Royals, Screening Aids, USDA-APHIS-PPQ, Bugwood.org, CC BY-NC 3.0 US.

Exotic Species

Tetropium spp. not present in the United States that look similar to *T. castaneum* include *T. fuscum* and *T. gabrieli* (Fig. 9).

- ***Tetropium fuscum*** (Fig. 9B) has been introduced and is established in southeastern Canada and can be distinguished from *T. castaneum* by the thin antenna and the wide band at the base of the elytra, which is not present in *T. castaneum* (Fig. 9A) (Cherepanov, 1988). *Tetropium fuscum* prefers spruce hosts (Sweeney and Smith, 2002).

- ***Tetropium gabrieli*** (Fig. 9C) can be differentiated from *T. castaneum* by the lack of the lengthwise groove between the base of the antennae, which is present in *T. castaneum* (Schimitschek, 1929). Its coloration varies and can look very similar in color to some *T. castaneum,* but it typically has a black thorax and reddish legs (Fig. 9C) (Sláma, 1998). *Tetropium gabrieli* prefers larch hosts (Royals et al., 2019).

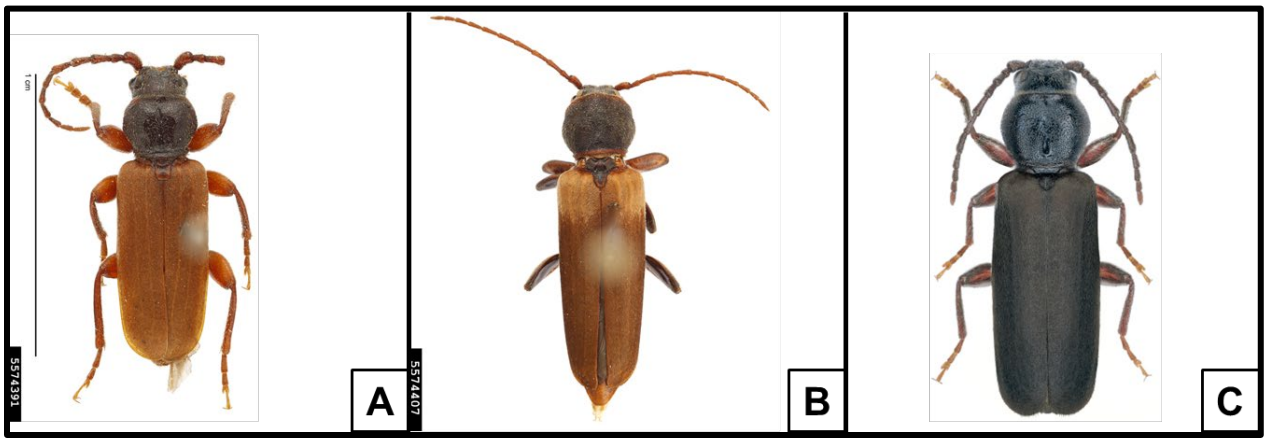

Figure 9. *Tetropium* species not present in United States that could be mistaken for *T. castaneum*: *Tetropium castaneum* **(A)**, *T. fuscum* **(B)**, and *T. gabrieli* **(C)**. Pictures courtesy of (A&B) Hanna Royals, Screening Aids, USDA-APHIS-PPQ, Bugwood.org, CC BY-NC 3.0 US and (C) Udo Schmidt, https://www.cerambyx.uochb.cz/.

Commonly Encountered Non-targets

The approved survey method for *T. castaneum* is a black cross vane panel trap baited with a lure blend that includes the following three components: spruce blend lure (alpha pinene, (-)-beta pinene, (+)-limonene, and (+)-3-carene), geranyl acetol (fuscumol), and ethanol.

Numerous insects from multiple orders, including Diptera, Hemiptera, Hymenoptera, Isoptera, Lepidoptera, Phasmatodea, and Thysanoptera, as well as springtails (class Collembola), are attracted to at least one of the components of the lure blend and may be captured in traps targeting *T. castaneum* (El-Sayed, 2025).

Within Coleoptera, beetles known to be attracted to component(s) of the lure and that are forest pests and typically woodborers include ambrosia beetles, bark beetles, platypodids, narrow-waisted bark beetles, ship-timber beetles, and bark-gnawing beetles (El-Sayed, 2025).

Several longhorn beetles (Cerambycidae) are also attracted to at least one of the components of the lure blend (El-Sayed, 2025). The longhorn beetles that belong to the subfamily Spondylidinae, tribe Asemini are the most morphologically similar to *T. castaneum*, of which the following are present in the United States: *Arhopalus asperatus*, *A. productus*, *A. rusticus*, *Asemun striatum*, and *Tetropium cinnamopterum* (El-Sayed, 2025; Silk et al., 2007). Although other *Tetropium* species are present in the United States (*Tetropium abietis, T. auripilis*, *T. parallelum, T. parvulum, T. schwarzianum,* and *T. velutinum*), it is not known whether they are attracted to components of this lure.

Biology and Ecology

Tetropium castaneum is a woodborer that infests old, weakened trees, recently dead standing trees, and freshly felled trees (Cherepanov, 1988; Juutinen, 1955).

Tetropium castaneum completes one generation in 1–2 years in northern Europe (Norway, Finland, and Russia), with 2 years being more common in colder areas (Danilevsky, 2014; Johansson et al., 1994; Juutinen, 1955). In the summer, mature adults emerge and males release a pheromone to attract females (Juutinen, 1955). A few days after mating, females colonize tree trunks with diameters greater than ~3 $^{1}/_{2}$ in. (Juutinen, 1955). The female typically lays eggs singly or in clusters in cracks between the bark scales or in bark crevices (Cherepanov, 1988; Juutinen, 1955). Eggs hatch in 2–3 weeks and females lay a total of up to 150 eggs in their lifetime (Cherepanov, 1988; Juutinen, 1955).

After hatching, larvae burrow into the inner bark and sapwood to feed. Larvae develop through 5–6 instars while creating irregular, frass-filled galleries as they feed (Bílý and Mehl, 1989). Larval development for a congener species (*T. fuscum*) with very similar biology under laboratory conditions takes about 42 and 28 days at 57 and 75 °F, respectively (Juutinen, 1955). In colder climates, the last instar larvae overwinter, thus extending the development time (Juutinen, 1955; Sláma, 1998). Once the mature larva is ready to pupate, it tunnels into the bark or wood to create an L-shaped pupal chamber plugged with coarse, fibrous white frass (Fig. 6A) (Bílý and Mehl, 1989; Cherepanov, 1988; Juutinen, 1955). If *T. castaneum* infests a tree stump, pupation can take place in the stump or in the exposed roots (Bílý and Mehl, 1989). The pupal stage lasts 3–4 weeks, and typically occurs from early May until the end of June (Cherepanov, 1988).

Adult emergence and flight starts in May and continues through August or September in northern Europe, with peak numbers in June. In central and east Asia, they fly in a short window from the end of June through the end of July (Cherepanov, 1988; Danilevsky,

2014; Juutinen, 1955). This species needs approximately 432–540 degree-days above 41°F to develop and start flying; the peak in flight activity usually occurs around 810 degree-days (reviewed in Dobesberger (2005)). Flight activity is greatest between 66°F and 75°F and does not occur below 54°F (Dourojeanni and Falisse, 1970). Adults are active at dusk and during the night (Bense, 1995; Sláma, 1998) and live up to three weeks (Juutinen, 1955; Vité, 1952).

Tetropium castaneum is associated with multiple ascomycete fungi. These fungi are commonly found in the galleries made by the larvae, although only some of them have been demonstrated to be pathogenic (Jankowiak and Kolarik, 2010).

Pathogens or Associated Organisms Vectored

Several fungi have been isolated from *T. castaneum* adults and larval galleries, including the blue staining ophiostomatoid fungi (Jankowiak and Kolarik, 2010). The most frequently isolated fungi were *Grosmannia piceiperda, Leptographium cucullatum, Ophiostoma piceae,* and *O. tetropii* (Jankowiak and Kolarik, 2010).

Of the fungi isolated from *T. castaneum*, *Endoconidiophora polonica*, *Grosmannia piceiperda,* and *Ophiostoma piceae* caused necrotic lesions and *E. polonica* and *G. piceiperda* caused death of potted spruce tree seedlings in an experimental setting (Jankowiak and Kolarik, 2010); however, the status of *T. castaneum* as a vector of pathogenic fungi to trees in natural settings remains unclear.

Table 2. Fungi commonly associated with *T. castaneum*

Scientific Name	Phylum	Vectored /isolated	Pathogenicity	Reference
Endoconidiophora polonica (=*Ceratocystis polonica*)	Ascomycota	isolated	pathogenic (lesions, mortality)	(Jankowiak and Kolarik, 2010)
Graphium pseudormiticum†	Ascomycota	isolated	unknown	(Jankowiak and Kolarik, 2010)
Grosmannia penicillata	Ascomycota	isolated	unknown	(Jankowiak and Kolarik, 2010)
Grosmannia piceiperda	Ascomycota	isolated	pathogenic (lesions, mortality)	(Jankowiak and Kolarik, 2010)
Leptographium cucullatum (= *Grosmannia cucullata*)	Ascomycota	isolated	unknown	(Jankowiak and Kolarik, 2010)
Leptographium procerum	Ascomycota	isolated	unknown	(Jankowiak and Kolarik, 2010)
Ophiostoma minus	Ascomycota	isolated	unknown	(Jankowiak and Kolarik, 2010)
Ophiostoma tetropii	Ascomycota	isolated	pathogenic (lesions)	(Jankowiak and Kolarik, 2010)

Scientific Name	Phylum	Vectored /isolated	Pathogenicity	Reference
Pesotum piceae (=Ophiostoma piceae)	Ascomycota	isolated	pathogenic (lesions, some isolates)	(Jankowiak and Kolarik, 2010)

† Isolated from galleries where both *Tetropium fuscum* and *T. castaneum* were present.

Known Hosts

Tetropium castaneum is a woodborer pest of conifers. It prefers spruce (*Picea* spp.) but can infest pines, fir, and larch (Cherepanov, 1988; Danilevsky, 2014; Juutinen, 1955).

The host list below includes cultivated and wild plants that 1) are infected or infested by the pest under natural conditions, 2) are frequently described as major, primary, or preferred hosts, and 3) have primary evidence for feeding and damage documented in the literature. Plants are highlighted in bold if they are commercially produced and the pest causes economically significant damage.

Table 1. Preferred hosts of *T. castaneum*.

Scientific Name	Common Name	Presence in the US	Type/Use	Reference
Abies sibirica	Siberian fir	No	Wild	(Cherepanov, 1988)
Larix sibirica	Siberian larch	No	Wild	(Cherepanov, 1988)
Picea abies	Norway spruce	Yes	Wild/Cultivated	(Lindhe and Lindelow, 2004)
Picea crassifolia	Qinghai spruce	No	Wild	(Luo and Sheng, 2010)
Picea obovata	Siberian spruce	No	Wild	(Cherepanov, 1988)
Picea rubens	red spruce	Yes	Wild	(Rhainds et al., 2010)
Pinus sibirica (=*Pinus sibiricus*)	Siberian stone pine	No	Wild	(Cherepanov, 1988)
Pinus sylvestris	Scots pine	Yes	Wild/cultivated	(Cherepanov, 1988)

Acer spp. (maple), and *Cedrus* spp. (cedar) are mentioned as hosts by Cherepanov (1988), but we could not locate direct evidence to support this. Only one individual/specimen of *T. castaneum* has been collected in *Betula* spp. (birch) and in *Populus tremula* (European aspen) (Lindhe and Lindelow, 2004). No other reports of this pest in *Betula* spp. or *Populus tremula* were found.

Known Distribution

Tetropium castaneum is native to the Palearctic and distributed in Europe and Asia (Bílý and Mehl, 1989; Cherepanov, 1988). It was likely introduced to Scotland in the 1940s (Kevan, 1964; Owen, 1986).

Table 3. Countries where *T. castaneum* is known to occur.

Region/Continent	Country	Reference
Asia	China	(Zhang et al., 2012)
Asia	Japan	(Nishiguchi, 1959)
Asia	South Korea	(Lim et al., 2014)
Asia	Turkey	(Özdikmen, 2008)
Europe	Belarus	(Vitali, 2010)
Europe	Belgium	(Dourojeanni and Falisse, 1970)
Europe	United Kingdom (Scotland)	(Owen, 1986; Twinn and Harding, 1999)
Europe	Bulgaria	(Gradinarov et al., 2020)
Europe	Czech Republic	(Milan, 1998)
Europe	Denmark	(Cocoș et al., 2024)
Europe	Estonia	(Pilt et al., 2014)
Europe	Finland	(Juutinen, 1955)
Europe	France	(Touroult et al., 2019)
Europe	Germany	(Grünwald et al., 2010)
Europe	Hungary	(Merkl et al., 1996)
Europe	Italy	(Audisio et al., 2008)
Europe	Latvia	(Bukejs and Telnov, 2007)
Europe	Lithuania	(Alekseev, 2007)
Europe	Luxemburg	(Vitali, 2018)
Europe	Norway	(Johansson et al., 1994)
Europe	Poland	(Sweeney et al., 2004)
Europe	Romania	(Serafim, 2004; Walentowski et al., 2013)
Europe	Russia	(Egorov, 2005; Hoskovec et al., 2023)
Europe	Serbia	(Vukajlović and Živanović, 2015)
Europe	Slovakia	(Milan, 1998)
Europe	Slovenia	(Brelih et al., 2006)
Europe	Spain	(San Martín et al., 2001)
Europe	Sweden	(Schroeder et al., 2021)
Europe	Switzerland	(Wermelinger et al., 2002)
Europe	Turkey	(Özdikmen, 2007)
Europe	Ukraine	(Zamoroka and Kapelyukh, 2016)

There are also miscellaneous records for Albania, Austria, Bosnia and Herzegovina, Croatia, Greece, Kazakhstan, Mongolia, Moldova, and the Netherlands, but we could not find evidence to verify these.

Pest Importance

In its native range, *T. castaneum* is a secondary pest that typically infests trees already damaged by biotic factors like pathogens or other insects (Evans et al., 2004; Juutinen, 1955). It is generally considered a minor pest in most countries, although Evans et al. (2004) reported *T. castaneum* as a damaging pest in Czech Republic, Estonia, Italy, Romania, Slovakia, and Switzerland. Tree death, growth losses, and timber degradation due to *T. castaneum* have been reported in Switzerland and Romania (Evans et al., 2004).

A combination of *Tetropium castaneum,* bark beetles, and weevils (with their associated fungi), was reported to have affected 450,000 acres and 8 million cubic feet of spruce in Romania in the 1990s, where it caused tree death and reduced lumber quality (Evans et al., 2004; Olenici and Vasian, 2024).

There is one old report of *T. castaneum* affecting wood floors (Kalandra, 1948), but this is likely an isolated event. While the tunneling made by the pre-pupa can reach deeper into the wood, affecting its aesthetic value, no additional reports of this type of damage were found.

Tetropium castaneum is listed as a harmful organism in Canada, Guatemala, Japan, and Taiwan (USDA-PCIT, 2024). In addition, *Tetropium* is listed as a harmful organism at the genus level in China (USDA-PCIT, 2025). There may be trade issues with these countries if this pest becomes established in the United States.

Pathway

Infested wood and solid wood packaging material (SWPM), including crating, dunnage, and pallets associated with international trade, is the most likely pathway for *T. castaneum* introduction and establishment (Dobesberger, 2005; Johnson et al., 2002; OISC, 2002). Wood-boring beetle port interception data from 2012 to 2015 indicates that *Tetropium* spp. are one of the most frequent woodborer genera found in SWPM at U.S. ports (Wu et al., 2017) .

Imported, debarked logs from Germany that were then distributed widely were likely responsible for the introduction of *T. castaneum* in Scotland (Kevan, 1964). Another *Tetropium* species on the National Priority List, *T. fuscum,* likely entered eastern Canada as larvae in wood packing material from shipping containers (CFIA, 2007; O'Leary et al., 2002). Before 2008, *T. castaneum* has been most commonly intercepted from Italy and France, associated with wood packaging material (Eyre and Haack, 2017; Labonte et al., 2005). In 2000, it was collected from Lindgren funnel traps placed at a railroad tie processing mill in Wasco Co., Oregon (Johnson et al., 2002). In 2002, live specimens were found in dunnage from a Russian ship in Portland (OISC, 2002).

Johansson et al. (1994) surmised that *Tetropium castaneum* is a good flier with great dispersal capacity. There are no studies directly testing the flight capacity of *T.*

castaneum, but the closely related species, *T. fuscum*, can likely fly more than ½ mi. per day, according to flight mill studies (Sweeney et al., 2009).

Use the **Agricultural Commodity Import Requirements(ACIR) manual** to determine 1) if host plants or material are allowed to enter the United States from countries where the organism is present and 2) what phytosanitary measures (e.g., inspections, phytosanitary certificates, post entry quarantines, mandatory treatments) are in use. These requirements are updated regularly.

Potential Distribution within the United States

Based on the known distribution of *T. castaneum* and comparing those climates to global Plant Hardiness Zones (Takeuchi et al., 2018), we expect that *T. castaneum* could establish in Plant Hardiness Zones 3–9. These Plant Hardiness Zones include most of the continental United States and parts of Alaska except for warmer areas like southern Florida and the Desert Southwest and colder areas in higher elevations and latitudes.

The endangered area for this pest covers most regions with spruce trees in the United States. Spruce trees (*Picea* spp.) can be found throughout the northern, eastern and western continental United States and Alaska (USDA-NRCS, 2025). Norway spruce, the preferred host of *T. castaneum*, is considered an important species present from Minnesota to Maine and southward to North Carolina (NELMA, 2025; USDA-NRCS, 2019).

Norway spruce (*Picea abies*) and Scots pine (*Pinus sylvestris*) are cultivated for Christmas trees. While Christmas trees are hosts and are grown in multiple states, *T. castaneum* prefers older, larger trees; therefore, these production areas are likely not at risk.

Survey and Key Diagnostics

Approved Methods for Pest Surveillance*:

For the current approved methods and guidance for survey and identification, see Approved Methods for Pest Surveillance (AMPS) pest page on the CAPS Resource and Collaboration website, at https://approvedmethods.ceris.purdue.edu/.

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Versions

May 2016: Datasheet completed (Version 1)
January 2026: Datasheet revised (Version 2)

- Added new **Pest Recognition** section
- Added **Easily Mistaken Species** section
- Added **Commonly Encountered Non-targets** section
- Updated **Biology & Ecology** section
- Updated **Known hosts** section
- Updated **Pest Importance** section
- Updated **Pathogens or Associated Organisms Vectored** section
- Updated **Known Distribution** section
- Updated **Pathway** section
- Updated **Potential Distribution within the United States** section
- Updated guidance for **Approved Methods** section

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