

Ips acuminatus

Scientific Name

Ips acuminatus (Gyllenhal, 1827)

Synonyms

Bostrichus geminatus Zetterstedt, 1828

Tomicus heydeni Eichhoff, 1884

Diagnostic notes

- Differs from all other European *Ips* spp. by the elytral declivity having three spines, of which the spine 3 is flattened and emarginate in males.
- Differs from the North American species *I. emarginatus* (5.5–7.0 mm) and *I. knausi* (4.9–6.5 mm) by its smaller size (2.2–3.9 mm).
- Differs from sister species *I. chinensis* by wider separation of spines 2 and 3.

Morphological Summary

females

Body. 2.2-3.9(-4.1) mm long, 2.3-2.6 times longer than wide; pronotum 1.1-1.3 times longer than wide.

Head. Epistomal margin with uniseriate row of tubercles with gap at midline. Frons outline convex in lateral view; vestiture fine (not hiding part of integument); surface sculpture near epistoma densely tuberculate-punctate; central carina absent; central tubercle absent; transverse carina present, punctate; frons central fovea absent; circular tubercles above top of eyes present - up to, or more than one third of all tubercles. Vertex and pronotum without stridulatory apparatus (pars stridens). Antennal club sutures bisinuate.

Prothorax. Protibiae with three socketed teeth on apical half (does not include apical spine).

Elytra. Interstriae impunctate or punctate (observed on interstriae 2 and 3 on middle third of elytral disc), punctures 0-0.8 times diameter of adjacent stria punctures (punctures and striae measured at steepest part of puncture wall), interstitial setae shorter than width of scutellar shield, interstriae 3-5 times as wide as adjacent striae. Elytral declivity with three spines per side, spine 3 largest; spine 1 (largest on 2nd interstria) closer to suture than spine 2; spines 1 and 2 separated at base by distance greater than height of spine 1; spine 2 closer to spine 1 than

spine 3; spine 3 tapered, apex acute or right-angled, with apical half symmetrical in lateral view; spines 2 and 3 not on shared tumescence; declivital integument shiny.

males

Body. 2.2-3.9(-4.1) mm long, 2.3-2.6 times longer than wide; pronotum 1.1-1.3 times longer than wide.

Head. Epistomal margin with uniseriate row of tubercles with gap at midline. Frons outline convex in lateral view; vestiture fine (not hiding part of integument); surface sculpture near epistoma densely tuberculate-punctate; central carina absent; central tubercle absent; transverse carina present, punctate; frons central fovea absent; circular tubercles above top of eyes present - up to, or more than one third of all tubercles. Vertex and pronotum without



Ips acuminatus, male frons



Ips acuminatus, male declivity



Ips acuminatus, female declivity



Ips acuminatus, male lateral habitus

stridulatory apparatus (pars stridens). Antennal club sutures bisinuate.

Prothorax. Protibiae with three socketed teeth on apical half (does not include apical spine).

Elytra. Interstriae impunctate or punctate (observed on interstriae 2 and 3 on middle third of elytral disc), punctures 0-0.8 times diameter of adjacent stria punctures (punctures and striae measured at steepest part of puncture wall), interstitial setae shorter than width of scutellar shield, interstriae 3-5 times as wide as adjacent striae. Elytral declivity with three spines per side, spine 3 largest; spine 1 (largest on 2nd interstria) closer to suture than spine 2; spines 1 and 2 separated at base by distance greater than height of spine 1; spine 2 closer to spine 1 than spine 3; spine 3 emarginate, apex right-angled or obtuse to rounded, with apical half asymmetrical in lateral view; spines 2 and 3 not on shared tumescence; declivital integument shiny.

Geographic Distribution

Austria; Belgium; Bosnia-Herzegovina; Bulgaria; Belarus; Croatia; China (Fujian, Gansu, Hebei, Heilongjiang, Henan, Hubei, Inner Mongolia, Jilin, Liaoning, Qinghai, Sichuan, Shaanxi, Shandong, Shanxi, Xinjiang); Czechia; Denmark; Estonia; Finland; France; Germany; Great Britain; Greece; Hungary; Ireland; Italy; Japan; Kazakhstan; Latvia; Lithuania; Luxembourg; Macedonia; Moldova; Mongolia; Montenegro; The Netherlands; Norway; North Korea; Poland; Romania; Russia: throughout; Serbia; South Korea; Slovakia; Slovenia; Spain; Sweden; Switzerland; Syria; Turkey; Taiwan; Ukraine

Hosts

Pinus (also *Abies*, *Larix*, *Picea*)

References

- Cognato, A.I. 2015. Biology, systematics, and evolution of *Ips*. In *Bark beetles: biology and ecology of native and invasive species*. Edited by F.E. Vega and R.W. Hofstetter. Elsevier, San Diego, California. Pp. 351–370.
- Grüne, S. 1979. *Brief illustrated key to European bark beetles*. Hannover, Germany, M. and H. Schaper.
- Knížek M. 2011. Scolytinae. In *Catalogue of Palaearctic Coleoptera, Vol. 7*. Edited by I. Löbl and A. Smetana. Apollo Books, Stenstrup, Denmark, Pp. 204–251.

Internet resources

<http://www.padil.gov.au/pests-and-diseases/pest/main/135619>