

Ips cembrae

Scientific Name

Ips cembrae (Heer, 1836)

Synonyms

Ips engadinensis Fuchs, 1913

Ips fallax Eggers, 1915

Ips shinanoensis Yano, 1924

Common names: large larch bark beetle (English), Grosser Lärchenborkenkäfer (German), lerkebarkbille (Norwegian)

Diagnostic notes

- Has four spines on the elytral declivity and is similar to *I. typographus*.
- Distinguished from *I. typographus* by the shiny elytral declivity and presence of interstitial punctures on the basal third of the elytral disc (interstriae 2 and 3).
- Differs from the morphologically similar North American *Picea*-feeding species (*I. borealis*, *I. perturbatus*, *I. pilifrons*, *I. tridens*) and *I. woodi*, by the space between the spines 1 and 2, which is less than the length of spine 1.
- Differs morphologically from its sister-species *I. subelongatus* by the less setose elytral declivity, although assigning some specimens to one of the two species is difficult.

Morphological Summary

sexes combined

Body. 4.0-6.0 mm long, 2.5-2.9 times longer than wide; pronotum 1.0-1.3 times longer than wide.

Head. Epistomal margin with uniseriate row of tubercles uninterrupted medially or 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 present or absent; central tubercle absent, without pair of circular tubercles on either side of midline; transverse carina absent; frons central fovea present or 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, four or five socketed teeth on apical half (does not include apical spine).

Elytra. Interstriae punctate (observed on interstriae 2 and 3 on middle third of elytral disc), punctures (0.5-)0.6(-0.7) times diameter of adjacent striae punctures (punctures and striae measured at steepest part of puncture wall), interstitial setae longer than width of scutellar shield, interstriae (2-)3(-4) times as wide as adjacent striae. Elytral declivity with four spines per side, spine 3 largest; spine 1 (largest on 2nd interstria) closer to spine 2 than suture; spines 1 and 2 separated at base by distance less or greater than height of spine 1; spine 2 closer to spine 1 than spine 3; spine 3 pedunculate (capitate) or hooked, apex acute, right-angled or obtuse to rounded, with apical half asymmetrical in lateral view; spines 2 and 3 not on shared tumescence, not in line with spines 1 and 4 (posterodorsal view); declivital integument shiny.



Ips cembrae, male frons



Ips cembrae, male declivity



Ips cembrae, lateral habitus

Geographic Distribution

Austria; China (Heilongjiang, Jilin); Czechia; Denmark; France; Germany; Great Britain; Greece; Hungary; Italy; Kazakhstan; Liechtenstein; Mongolia; The Netherlands; Poland; Russia: western and eastern; Slovakia; Slovenia; South Korea; Switzerland.

Hosts

Larix (also *Picea*, *Pinus*)

Notes

I. cembrae, *I. subelongatus*, and *I. woodi* form clade (Cognato and Sun 2007).

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.
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- 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/135614>



Ips cembrae male dorsal habitus

Rotatable image of *Ips cembrae* (Heer 1836)
(click on dorsal habitus images)

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