

# Ips typographus

## Scientific Name

*Ips typographus* (Linnaeus, 1758)

## Synonyms

*Bostrichus octodentatus* Paykull, 1800

*Ips japonicus* Niisima, 1909

Common names: Eight-toothed spruce bark beetle (English); Buchdrucker, grosser 8-zähniger Fichtenborkenkäfer (German); Typographe, grand scolyte de l'épicéa (French); Granbarkbille (Norwegian)

## Diagnostic notes

- Elytral declivity with four spines per side
- Differs from all Eurasian *Ips* species by its dull elytral declivity (except in rare shiny specimens) and impunctate interstriae on the basal third of elytral disc (bases of interstriae 2 and 3).
- Differs from the morphologically similar Himalayan species, North American spruce-feeding species and *I. woodi* by presence of frons central tubercle.
- Differs from *I. knausi* by its non emarginate spine 3 and from female *I. plastographus* by its petiolate or nearly parallel-sided spines (evenly tapered in *I. plastographus* females).

## Morphological Summary

### sexes combined

**Body.** 4.0-5.0 mm long, 2.3-2.5 times longer than wide; pronotum 1.0-1.1 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 or with isolated tubercles; central carina absent; central tubercle present and single, separated from base of epistomal setae by 0.5-4(-5) tubercle diameters, 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 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 0.3(-0.4) times diameter of adjacent stria punctures (punctures and striae measured at steepest part of puncture wall), interstitial setae longer than width of scutellar shield, interstriae 3-5 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 or suture than spine 2; spines 1 and 2 separated



*Ips typographus*, male frons



*Ips typographus*, female frons



*Ips typographus*, female frons



at base by distance greater than height of spine 1; spine 2 closer to spine 1 than spine 3 or 3 than spine 1; spine 3 pedunculate (capitate), rarely straight sided with tapered apex, apex acute or right-angled, with apical half symmetrical or asymmetrical in lateral view; spines 2 and 3 not on shared tumescence, in line with spines 1 and 4 (posterodorsal view); declivital integument mat, rarely shiny.

### Geographic Distribution

Algeria; Austria; Belgium; Bosnia-Herzegovina; Bulgaria; Belarus; Croatia; China (Heilongjiang, Henan, Inner Mongolia, Jilin, Qinghai, Sichuan, Shaanxi, Xinjiang); Czechia; Denmark; Estonia; Finland; France; Germany; Great Britain; Greece; Hungary; Iceland (introduced); Ireland; Italy; Japan; Kazakhstan; Latvia; Liechtenstein; Lithuania; Luxembourg; Moldova; Mongolia; Montenegro; North Korea; Poland; Portugal; Romania; Russia: throughout; Serbia; South Korea; Slovakia; Slovenia; Spain; Sweden; Switzerland; Turkey; Ukraine.

### Hosts

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

### Notes

Sister species to *I. nitidus* (Cognato and Sun 2007).

*Ips typographus*, elytral disc



*Ips typographus*, male declivity



*Ips typographus*, male lateral habitus

### 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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- 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/135618>



*Ips typographus* male dorsal habitus

Rotatable image of *Ips typographus* (Linnaeus 1758)  
(click on dorsal habitus images)

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