

Ips nitidus

Scientific Name

Ips nitidus Eggers, 1933

Diagnostic notes

- Has four spines on the elytral declivity and is similar to *I. typographus*.
 - Differs from sympatric *I. shangrila* by the usually petiolate third declivital spine.
 - Differs from its sister species *I. typographus* by the deeper frontal fovea, shiny elytral declivity (shiny in rare specimens of *I. typographus* also).
- Diagnostic characters vary so that morphological methods may not lead to reliable diagnosis of all specimens between these two species.

Morphological Summary

sexes combined

Body. 3.7-5.8 mm long, 2.4-2.8 times longer than wide; pronotum 1.0-1.2 times longer than wide.

Head. Epistomal margin with uniseriate row of tubercles with elongate mesal tubercle 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 absent; central tubercle absent or present and single, separated from base of epistomal setae by 0-1 tubercle diameters, without pair of circular tubercles on either side of midline; transverse carina absent; frons central fovea present; circular tubercles above top of eyes absent or present - up to 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 0.5-0.9(-1) 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 4-5 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 at base by distance greater than height of spine 1; spine 2 closer to spine 1 than spine 3; spine 3 straight sided with tapered apex or pedunculate (capitate), apex acute or right-angled, 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.

Geographic Distribution

China (Gansu, Qinghai, Sichuan, Xingjiang, Yunnan).

Hosts

Picea spp. (also *Abies*, *Pinus*)



Ips nitidus, frons



Ips nitidus, elytral disc



Ips nitidus, declivity

Notes

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

This species shows little sexual dimorphism: only in size of frontal tubercle and declivital spine #3.

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.

Cognato, A.I. and Sun, J.H. 2007. DNA based cladograms augment the discovery of a new *Ips* species from China (Coleoptera: Curculionidae: Scolytinae). *Cladistics*, **23**: 539–551.

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.



Ips nitidus, declivity



Ips nitidus, declivity, spine 3 (non-petiolate individual)



Ips nitidus, lateral habitus