

# Ips longifolia

## Scientific Name

*Ips longifolia* (Stebbing, 1909)

## Synonyms

Common name: chir pine Ips.

## Diagnostic notes

-Has four spines on the elytral declivity, with spine 1 closer to suture than to spine 2, spine 3 is petiolate.

-Elytral disc with punctures on interstriae 2 and 3.

-Frons without median fovea, and with many of tubercles above level of eyes.

-Morphological characteristics are nearly indistinguishable from sister species *I. stebbingi*; also similar to Palearctic *I. subelongatus*, and males of the Nearctic *I. pilifrons*.

## Morphological Summary

### sexes combined

**Body.** 4.7-6.3 mm long, 2.5-2.7 times longer than wide; pronotum 1.1-1.2 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 present or absent; circular tubercles above top of eyes present - more than one third of all frontal tubercles. Vertex and pronotum with or 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 punctate (observed on interstriae 2 and 3 on middle third of elytral disc), punctures 0.5-0.6 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 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 suture than spine 2; spines 1 and 2 separated at base by distance greater than height of spine 1; spine 2 closer to spine 3 than spine 1; spine 3 pedunculate (capitate), apex acute or right-angled, with apical half asymmetrical in lateral view; spines 2 and 3 on shared tumescence, not in line with spines 1 and 4 (posterodorsal view); declivital integument shiny.

## Geographic Distribution

Bhutan; China (Xinjiang); India (Himachal Pradesh, Uttar Pradesh); Nepal; Pakistan.

## Hosts



*Ips longifolia*, frons



*Ips longifolia*, frons



*Ips longifolia*, declivity

*Pinus* spp. Principally *P. roxburghii*.

## Notes

Sister species of *I. stebbingi* (Cognato and Sun 2007). Larger clade formed by (((*I. longifolia* + *I. stebbingi*) + *I. schmutzenhoferi*) + *I. perroti*), see Cognato and Sun (2007).

`No significant difference between males and females` (Schmutzenhofer 1988)

`No records of long-lasting epidemics` (Schmutzenhofer 1988)

## 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.

Schmutzenhofer, H. 1988. Mass outbreaks of *Ips* bark beetles in Bhutan and the revision of genus *Ips* DeGeer for the Himalayan Region. In *Integrated control of scolytid bark beetles*. Edited by T.L. Payne and H.

Saarenmaa. International Union of Forest Research Organizations, Vancouver, Canada. Pp. 345–255.



*Ips longifolia*, declivity (3rd spine on right broken)



*Ips longifolia*, lateral habitus