

# Ips lecontei

## Scientific Name

*Ips lecontei* Swaine, 1924

## Synonyms

Common names: Arizona five-spined engraver, Arizona five-spined Ips (English)

## Diagnostic notes

- Has five spines on the elytral declivity and is similar to *I. confusus*.
- Potentially sympatric with morphologically similar species *I. confusus*, *I. cribricollis*, and *I. hoppingi*.
- Males are distinguished from all other species with five declivital spines by presence of a split frons central tubercle just above the epistoma.
- Females with five declivital spines on the elytra, head frontal median tubercle absent, the spine 1 on the elytral declivity is closer to the suture than to the spine 2, pronotum length 1.0 to 1.1 times pronotum width.
- Females of *I. lecontei* cannot be distinguished morphologically from some females of *I. grandicollis*, however these species' ranges do not overlap.

## Morphological Summary

### females

**Body.** 4.0-4.7 mm long, 2.5-2.6 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 absent; transverse carina absent; 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 stridulatory apparatus (pars stridens). Antennal club sutures acutely angulate.

**Prothorax.** Protibiae with three or four 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 3-5 times as wide as adjacent striae. Elytral declivity with five 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 hooked, apex 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); spine 4 closer to spine 3 than spine 5 or 5 than spine 3; declivital integument shiny.



*Ips lecontei*, male frons



*Ips lecontei*, female frons



*Ips lecontei*, male declivity

**males**

**Body.** 4.0-4.7 mm long, 2.5-2.6 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; central carina absent; central tubercle present and split, separated from base of epistomal setae by 0-0.5 tubercle diameters; transverse carina absent or present; frons central fovea present; circular tubercles above top of eyes present - more than one third of all frontal tubercles. Vertex and pronotum without stridulatory apparatus (pars stridens). Antennal club sutures acutely angulate.

**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 3-5 times as wide as adjacent striae. Elytral declivity with five 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 hooked, 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); spine 4 closer to spine 5 than spine 3; declivital integument shiny.

**Geographic Distribution**

Honduras; Mexico (Chiapas, Chihuahua, Colima, Jalisco, Oaxaca, Sonora); USA (Arizona, New Mexico).

**Hosts**

*Pinus* spp. Principally *P. ponderosa* and *P. pseudostrobus*

**Notes**

Clade formed by (((*I. apache* + *I. calligraphus*) + *I. lecontei*) + *I. cribricollis*), see 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.

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.

EPPO. No date. Data Sheets on Quarantine Pests: *Ips lecontei*. European and Mediterranean Plant Protection Organization.

Wood, S.L. 1982. The bark and ambrosia beetles of North and Central America (Coleoptera: Scolytidae), a taxonomic monograph. *Great Basin Naturalist Memoirs*, 6: 1-1359.

**Internet resources**

[https://www.barkbeetles.info/regional\\_chklist\\_target\\_species.php?lookUp=1715](https://www.barkbeetles.info/regional_chklist_target_species.php?lookUp=1715)



*Ips lecontei*, female declivity



*Ips lecontei*, male lateral habitus



*Ips lecontei* male dorsal habitus

Rotatable image of *Ips lecontei* Swaine 1924  
(click on dorsal habitus images)

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