

Supplementary Notes on the Bark and Ambrosia Beetles of Korea

한국산 수피나무좀과 암브로시아 나무좀의 추가 기록

추 호 렬¹ · 우 건 석²
Ho Yul Choo¹ and Kun Suk Woo²

ABSTRACT One species of pin-hole borer and fifty-two species of bark and ambrosia beetles were collected in 1987. Of fifty-three species, two species, *Hylurgops palliatus* and *Xyleborus amputatus* were recorded for the first time to the fauna.

KEY WORDS pin-hole borer, bark beetle, ambrosia beetle, *Hylurgops palliatus*, *Xyleborus amputatus*

抄 錄 1987년 1종의 긴나무좀과 52종의 나무좀이 채집되었다. 그중 *Hylurgops palliatus*와 *Xyleborus amputatus* 2종은 미기록종이었다. 한편 기록뿐인 나무좀들로 몇몇 확인되지 않았던 종들도 조사 기간 동안 채집되었으며 미기록종의 형태적 특징을 기술하였다.

檢 索 語 긴나무좀, 수피나무좀, 암브로시아나무좀, *Hylurgops palliatus*, *Xyleborus amputatus*

With the aid of Korea Research Foundation, we were able to survey Korean bark and ambrosia beetles during the past year. A number of beetles including unrecorded species (#) were encountered in the course of field work. Except the recent author's works, the Korean bark and ambrosia beetles have mainly been recorded by Japanese dendroentomologist, Dr. Murayama. However, some of Murayama's specimens were not confirmed in spite of the senior author's effort. Several species of them were discovered again during this investigation. The following notes and descriptions of unrecorded species(#) were based on collection made through the fauna in 1987.

The list of bark and ambrosia beetles

Platypodidae

Platypus koryoensis (Murayama)

Jour. Chosen Nat. Hist. Soc. 11 : 39(1930)

Host: *Quercus aliena*

Spec. Exam.: Gwangneung(5♀♀, 3♂♂, 12. X. 1987)

Scolytidae

Scolytus claviger Blandford

Trans. Ent. Soc. London p. 80(1894)

Host: *Carpinus cordata*

Spec. Exam.: Gwangneung(2♀♀, 3♂♂, 4. XI. 1987)

S. seulensis Murayama

Jour. Chosen Nat. Hist. Soc. 11 : 9(1930)

Host: *Prunus salicina*, *P. persica*, *P. tomentosa*, *P. ume*

Spec. Exam.: Gwangju(10♀♀, 13♂♂, 5III. 1987), Jinyang(21♀♀, 7♂♂, 5-8. V. 1987)

1 Dept. of Agricultural Biology, College of Agriculture, Gyeongsang Nat'l. University, Chinju, 660-701, Korea (경상대학교 농대 농생물학과)

2 Dept. of Agricultural Biology, College of Agriculture, Nat'l. University, Suwon, 440-744, Korea(서울대학교 농대 농생물과)

Jinju, Sancheong(8♀♀, 5♂♂, 10-12. VII. 1987), Daegu(1♀, 1♂, 15. IX. 1987), Cheongju(3♀♀, 6♂♂, 8. VI. 1987), Milyang(3♀♀, 28. V. 1987),

Sphaerotrypes pila Blandford

Trans. Ent. Soc. London p.26(1894)

Host: *Carpinus laxiflora*

Spec. Exam.: Gwangneung(1 ex. 11. IX. 1987)

Polygraphus horyurensis Murayama

Tenthredo 1(4) : 368(1937)

Host: *Pinus koraiensis*

Spec. Exam.: Gwangneung(10♀♀, 3♂♂, 11. IX., 1987, 4. XII. 1987), Hadong(24 exx. 8. V. 1987)

Phloeosinus perlatus Chapuis

Ann. Soc. Ent. Belg. 18 : 198(1975)

Host: *Chamaecyparis obtusa*, *Juniperus virginiana*

Spec. Exam.: Jinju(8 exx. 3. XII. 1987), Seoul(5 exx. 4. X. 1987)

P. rudis Blandford

Trans. Ent. Soc. London p.73(1894)

Host: *Chamaecyparis obtusa*, *Thuja japonica*, *Cryptomeria japonica*

Spec. Exam.: Gwangneung(4♀♀, 4♂♂, 11. XI 1987), Jinju(8♀♀, 3♂♂, 3. XII. 1987) Jinyang(5♀♀, 2♂♂, 3. XII. 1987) Jinyang(5♀♀, 2♂♂, VIII. 1987)

Hylesinus cingulatus Blandford

Trans. Ent. Soc. London p.67(1894)

Host: *Ulmus davidiana* var. *japonica*

Spec. Exam: Yeongil(7exx. 16. VII. 1987)

H. tristis Blandford

Trans. Ent. Soc. London. p.66(1894)

Host: *Ulmus davidiana* var. *japonica*

Spec. Exam: Yeongil(12exx. 16. VII. 1987)

Neopteleobius scutulatus (Blandford)

Trans. Ent. Soc. London p.67(1894)

Host: *Zelkova serrata*

Spec. Exam.: Jinju(1 ex. 18. XI. 1987),

Gwangneung(2 exx. 3. XII. 1987),

Kangwhado(9 exx. 15. V. 1987), Mt. Soyo(1 ex. 15V), Mt. Geomjeong(1 ex. 1. VI. 1987)

Tomicus piniperda (L.)

Syst. Nat. ed. 10 : 503(1758)

Host: *Pinus densiflora*, *P. thunbergii*

Spec. Exam.: 83 exx. Many pine forests of each province.

T. minor (Hartig)

Forstl. Convers. Lex. p.413(1834)

Host: *Pinus thunbergii*

Spec. Exam.: Jinyang(5 exx. 8. V. 1987),

Hadong(16 exx, 15. IV. 1987),

Suncheon(7 exx. 8. IV. 1987)

Hylurgops interstitialis (Chapuis)

Ann. Soc. Ent. Belg. 18 : 196(1875)

Host: *Pinus densiflora*, *P. thunbergii*

Spec. Exam.: Sacheon(23 exx, 3. IV. 1987),

Milyang(130 exx, 7. VII. 1987),

Wando(25 exx, 15. V. 1987), Hadong(2 exx

19. IX. 1987), Jeonju(5 exx. 18. VII. 1987)

Yeongyang(3 exx. 18. VII. 1987), Yangyang

(8 exx. 25. VI. 1987)

(#) **H. palliatus (Gyllenhal)**(눈잣나무좀)
(신칭)

Ins. Suec. 3 : 340(1813)

Host: ?

Spec. Exam.: Daegu(1 ex. 22. IV. 1987)

This species is recorded to the fauna for the first time

적갈색(또는 흑갈색)을 띠는 3.0mm(2.3~3.2 mm)의 긴원통형 나무좀으로 이마는 옆으로 움푹하며 두순 부위에 세로 중앙용골이 있다. 측각의 중간절은 7마디이며 곤봉부는 원추형으로 3개의 봉합선이 있다. 앞가슴배판은 폭이 넓고

중앙부위가 약간 불룩하며 전방부 1/3에서 양측이 좁아졌다. 배판 중앙부에는 매끈한 중앙선이 있고, 전면에 크고 작은 점각들로 덮혀 있다. 시초의 앞가장자리는 융기되었고 오돌토돌하다. 점열부의 점각은 굵고 열간부는 폭이 넓으며 일렬의 작은 점각이 있다. 사면부는 뚜렷하며 비늘털로 덮혀 있다.

***H. glabratus* (Zetterstedt)**

Fauna Ins. Lappon p. 343(1828)

Spec. Exam.: Daegu(1 ex. 2. VI. 1987)

***Hylastes paralleus* Chapuis**

Ann. Soc. Ent. Belg. 18 : 195

Host: *Pinus densiflora*

Spec. Exam.: Kangwhado(1 ex. 9. V. 1987), Hadong(1 ex. 13. IX. 1987)

***H. plumbeus* Blandford**

Trans. Ent. Soc. London p. 57(1894)

Host: *Pinus densiflora*

Spec. Exam.: Kangwhado(3 exx. 10. V. 1987) Mt. Deogsung(1 ex. 19. V. 1987), Milyang(2 exx. 24. V. 1987), Mt. Gaji(1 ex. 24. V. 1987), Yangyang(3 exx. 25. VI. 1987) Wando(5 exx. 21. III. 1987), Seoul(2 exx. 5. VII. 1987)

***Hypothenemus eruditus* Westwood**

Trans. Ent. Soc. London 1 : 34(1836)

Host: *Diospyros kaki*, *Gardenia jasminoides* for. *grandiflora*

Spec. Exam.: Namhae(3♀♀, 9. 1. 1987)

***Cryphalus fulvus* Niijima**

Verh. d.k. Zool. Bot. Ges. Wien p. 92(1908)

Host: *Pinus densiflora*

Spec. Exam.: 240 exx. Many pine forests of each province.

***Cryphalus exiguus* Blandford**

Trans. Ent. Soc. London p. 82(1894)

Host: *Morus bombycis*

Spec. Exam.: Sancheong(9 exx. 12. XI. 1987)

***C. jeholensis* Murayama**

Ann. Zool. Japan 18(2) : 143(1939)

Host: *Pinus thunbergii*

Spec. Exam.: Jeju(18 exx., 12 I., 10 exx., 8. V. 1987)

***C. malus* Niijima**

Jour. Coll. Agr. Tohoku Imp. Univ. 3 : 144 (1909)

Hosts: *Prunus perica*

Spec. Exam.: Jinju(8 exx., 19. IV. 1987)

***Cryphalus* sp. on *Zelkova serrata* from Hamyang**

***Pityophthorus jucundus* Blandford**

Trans. Ent. Soc. London p. 87(1894)

Host: *Pinus densiflora*

Spec. Exam.: Seoul(1 exx., 2. VIII. 1987), Namhae(5 exx., 6. VI. 1987)

***Crypturgus pusillus* (Gyllenhal)**

Ins. Sve. Dec. Coleopt. 1(3) : 371(1813)

Host: *Pinus densiflora*

Spec. Exam.: Hadong(2 exx., 19. IX. 1987)

***Poecilips nubilis* Blandford**

Trans. Ent. Soc. London p. 95(1894)

Host: *Pinus densiflora*

Spec. Exam.: Sacheon(8 exx. 26. IX. 1987), Jinju(2 exx. 19. VII. 1987)

***Dryocoetes pini* Niijima**

Jour. Coll. Agr. Tohoku Imp. Univ. 3 : 152 (1909)

Host: *Pinus densiflora*

Spec. Exam.: Seongpanak, Jeju(2 exx. 27. III. 1987)

***Pityogenes chalcographus* (L.)**

Fauna Suecica 2 : 143(1761)

Host: *Pinus koraiensis*, *P. densiflora*

Spec. Exam.: Chuncheon(2♂♂. 31. V. 1987), Mt. Myeongji(1♂. 25. V. 1987),

Gwangneung(3♀♀, 2♂♂, 11. XI. 1987)

***Orthotomicus angulatus* (Eichhoff)**

Ann. Soc. Ent. Belg. 18 : 200(1875)

Host: *Pinus densiflora*

Spec. Exam.: Jinju(240 exx. 26. IX. 1987),

Sacheon(300 exx.15. VII. 1987)

***O. suturalis* (Gyllenhal)**

Insecta suecia descripta 4 : 622(1827)

Host: *Pinus densiflora*

Spec. Exam.: Jinju(4 exx. 31 V. 1987), Mt.

Palgong(2 exx. 22. IV. 1987)

***Ips acuminatus* (Gyllenhal)**

Insecta suecia descripta 4 : 620(1827)

Host: *Pinus densiflora*

Spec. Exam.: Yangyang(8♀♀, 2♂♂, 25. VI. 1987)

***I. sexdentatus* (Boerner)**

Oekon. Nach. Ges. Schles. 4 : 78(1767)

Host: *Pinus densiflora*

Spec. Exam.: Yangang(6♂♂, 25. VI. 1987)

***I. typoraphus* (L.)**

Syst. Nat. ed. 10 : 355(1758)

Spec. Exam.: Mt. Seolak(1♂, 19. VI. 1987)

***Xylosandrus germanus* (Blandford)**

Trans. Ent. Soc. London p.106(1894)

Host: *Pinus densiflora*, *Malus pumila*, *Rhus chinensis*, *Alnus japonica*

Spec. Exam.: Daegu(1♀, 1. VII. 1987),

Gwangneung(3♀♀, 13. XI. 1987),

Jinju(3♀♀, 30. VI. 1987), Gapyeong(2♀♀, 12. VI. 1987)

***X. mutilatus* (Blandford)**

Trans. Ent. Soc. London p.103(1894)

Spec. Exam.: Mt. Cheonma(1♀, 16. VII. 1987)

Mt. Yongmun(1♀, 7. VI. 1987)

***Xyleborus adumbratus* Blandford**

Trans. Ent. Soc. London p.115(1894)

Host: *Malus pumila* var. *dulcissima*

Spec. Exam.: Gapyeong(4♀♀, 12. IV. 1987)

(#)*X. amputatus* Blandford(무화과나무좀)

(신칭)

Trans. Ent. Soc. London p.575(1894)

Host: ?

Spec. Exam.: Seogwipo(5♀♀, 5. IX. 1987)

This species is recorded to the fauna for the first time.

체장은 2.8~3.0mm로 몽툭한 타원형이다. 시초사면부의 흑갈색부분을 제외하고는 밝은 황갈색이다. 이마는 약간 볼록한편이며, 점각과 털은 드문드문하다. 두순위에 짧고 회미한 융기선이 있다. 겹눈은 중앙부가 유각되었으으며 촉각은 유각부 아랫쪽 기부에서 시작된다. 촉각의 중간절은 5마디이고 곤봉부는 끝이 비스듬한 절단형이며 봉합선은 없다. 앞가슴배판은 볼록하며 전반부는 과립상의 점각열로 파도모양을 이룬다. 후반부의 중앙에는 다소 길고 뾰족한 섬모열이 있다. 소순판은 작고 삼각형이다. 시초사면부이전의 길이는 앞가슴배판과 거의 같거나 짧아 보인다. 점열부는 열간부와 거의 같아 파치지 않았고 열간부에는 2열의 불규칙한 섬모열이 있다. 시초사면부는 절벽처럼 가파르며 흑갈색이고 점열부는 뚜렷하나 전부분이 매끈하다.

***X. apicalis* Blandford**

Trans. Ent. Soc. London P.105(1894)

Host: *Malus pumila* var. *dulcissima*

Spec. Exam.: Gapyeong(2♀♀, 12. IV. 1987) Seoul(2♀♀)

***X. atratus* Eichhoff**

Ann. Soc. Ent. Belg. 18 : 201(1875)

Spec. Exam.: Seoul(1♀), Mt. Obong,

Gangweon(1♀, V. 1987),

Mt. Gaji, Gyeongnam(1♀, 21. V. 1987)

***X. attenuatus* Blandford**

Trans. Ent. Soc. London P.114(1894)

Host: *Carpinus cordata*

Spec. Exam.: Gwangneung(2♀♀, 15. I. 19

87), Seoul(2♀♀)

***X. lewisi* Blandford**

Trans. Ent. Soc. London P. 194 : 1894
Spec. Exam.: Mt. Seolak(1♀, 19. VI. 1987)

***X. minutus* Blandford**

Trans. Ent. Soc. London P. 116(1894)
Spec. Exam.: Gwangneung(4♀♀, 13. I. 1987)

***X. rubricollis* Eichhoff**

Ann. Soc. Ent. Belg. 18 : 202(1875)
Spec. Exam.: Mt. Naejang(5♀♀, 14. VIII. 1987), Hwasun(1♀, 16. V. 1987),
Sancheong(11♀♀, 9. VII. 1987), Seoul(4♀♀)

***X. seiryorensis* Murayama**

J. Chosen Nat. Hist. Soc. 11 : 25(1930)
Spec. Exam.: Seoul(2♀♀)

***X. validus* Eichhoff**

Ann. Soc. Belg. 18 : 202(1875)
Spec. Exam.: Daegu(1♀, 22. IV. 1987),
Hadong(2♀♀, 13. IX. 1987)
Yeongyang(3♀♀, 18. VII. 1987)

***X. volvulus* (Fabricius)**

Syst. Ent. 4 : 454(1775)
Spec. Exam.: Seoul(1♀)

***Xyleborinus saxeseni* (Ratzeburg)**

Foestins. p. 167(1837)
Host: *Malus pumila* var. *dulcissima*, *Pinus densiflora*
Spec. Exam.: Seoul(3♀♀, 12. VI. 1987)

***Scolytoplatypus mikado* Blandford**

Trans. Ent. Soc. London P. 437(1893)
Spec. Exam.: Mt. Myeongji, Gyeonggi(1♀, 6. 1987),
Ulneugdo(2♀♀, 1♂, 18. VI. 1987)

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