

One Newly Recorded Species, *Autosticha kyotensis* (Lepidoptera: Autostichidae) from Korea with a World Checklist of the Genus

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Autosticha kyotensis (나비목: 점원뿔나방과)의 한국 첫 보고와 *Autosticha*속의 전 세계 체크리스트

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ABSTRACT: Herein, we newly added *Autosticha kyotensis* (Matsumura, 1931) to Korea fauna. Adult and genitalia illustrations of the species are provided with a world checklist of the genus including each type localities and distributional data.

Key words: Lepidoptera, Autostichidae, *Autosticha*, New record

초록: 한국산 *Autosticha kyotensis* (Matsumura, 1931) (교토점원뿔나방, 신칭)이 새롭게 추가되었다. 이 종에 대한 성충과 생식기 형태에 대한 사진 정보와 *Autosticha*속의 전 세계 체크리스트가 함께 제공되었다.

검색어: 나비목, 점원뿔나방과, 미기록종, 한국, 체크리스트

The *Autosticha* established by Meyrick in 1886, by replacing the name of the genus *Automola* Meyrick, 1883, is one of the largest genera of a superfamily Gelechioidea. So far, 116 species of the *Autosticha* have been recorded and majority from Oriental regions (Table 1): 85 species from only Oriental regions; 6 species from Palaearctic; 10 species from Oriental and Palaearctic regions together; 8 species from Pacific; 4 species from Afrotropical; 2 species from Australasian; 1 species from Afrotropical and Palaearctic regions. They are superficially distinguished by the inconspicuous coloration (Ueda, 1997), having pale brown, yellowish brown to pale grayish brown

with stigmata and series of fuscous dots on forewing (Fig. 1B).

Although there's no disagreement among scholars that the *Autosticha* belongs to the Gelechioidea, its subfamily and family levels have often been changed: originally placed in Gelechiidae *sensu* Meyrick, 1886; in Oecophoridae *sensu* Hodges, 1978; changed to Autostichinae of the Autostichidae *sensu* Hodges, 1998. Recently, their high constituents at subfamily and family levels have been recognized as Autostichinae and Autostichidae, and the *Autosticha* is phylogenetically close to genera *Deroxana*, *Anaptilora* and *Apethistis* in the molecular phylogenetic works (Heikkilä et al., 2014; Wang and Li, 2020).

Larvae of few *Autosticha* species have been known as detritivore feeders: *A. modicella* feed on dead leaves; larvae of

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Table 1. A world checklist of the genus *Autosticha* Meyrick

Species of <i>Autosticha</i>	Original reference	Type locality	Distributional data	Zoogeographical regions
<i>A. academica</i> Meyrick, 1922a	Zool. Meded. Leiden 7: 87	Java, Megamendaeng	Indonesia	Oriental
<i>A. acharacta</i> Meyrick, 1918	Exotic Microlep. 2 (5): 153	NW.India, Abbottabad	India, Pakistan	Oriental, Palaeartic
<i>A. affixella</i> (Walker, 1864)	List Spec. Lepid. Insects Colln Br. Mus. 29: 632	Ceylon	Sri Lanka	Oriental
<i>A. angustivalva</i> S. Wang, 2021	Zootaxa 5048 (3): 347-370	Hainan, Mt. Wuzhi, 732 m	China	Oriental
<i>A. annulata</i> S. Wang, 2021	Zootaxa 5048 (3): 347-370	Datian, Dongfang City, 56 m	China	Oriental
<i>A. ansata</i> Meyrick, 1931	Exotic Microlep. 4 (2-4): 85	Madras, Palnis, Kodaikanal, 7000 feet	India	Oriental
<i>A. apicilata</i> S. Wang, 2021	Zootaxa 5048 (3): 347-370	Yunnan, Nankang, Baoshan City, 2009 m	China	Oriental
<i>A. arcivalvaris</i> Wang, 2004	Acta Zootax. Sinica 29 (1): (38-62)	Hubei	China	Oriental
<i>A. aspasta</i> Meyrick, 1908	J. Bombay nat. Hist. Soc. 18 (2): 457	Maskeliya, Ceylon	Sri Lanka	Oriental
<i>A. auriculata</i> S. Wang, 2021	Zootaxa 5048 (3): 347-370	Yunnan, Yexianggu, Xishuangbanna, 762 m	China	Oriental
<i>A. banauscopia</i> (Meyrick, 1929)	Exot. Microlep. 3 (17): 526	New Hebrides, Efate; Espiritu Santo	Vanuatu	Pacific
<i>A. basiprocessa</i> S. Wang, 2021	Zootaxa 5048 (3): 347-370	Hainan, Hongxin Village	China	Oriental
<i>A. bilobella</i> Park & Wu, 2003	Insecta Koreana 20 (2): (195-226)	Botanical Garden, Prov. Guangdong, Mt. Jiulianshan, Prov. Jiangxi	China	Oriental
<i>A. binaria</i> Meyrick, 1908	J. Bombay nat. Hist. Soc. 18 (2): 456	Maskeliya, Ceylon	Sri Lanka	Oriental
<i>A. bomiensis</i> S. Wang, 2021	Zootaxa 5048 (3): 347-370	Tibet, Bomi County, 2800m	China (Tibet)	Oriental
<i>A. calceata</i> Meyrick, 1908	J. Bombay nat. Hist. Soc. 18 (2): 456	Maskeliya, Ceylon	Sri Lanka	Oriental
<i>A. chernetis</i> (Meyrick, 1906)	J. Bombay nat. Hist. Soc. 17 (1): 141	Peradeniya, Madulsima, Ceylon	Sri Lanka	Oriental
<i>A. chishulensis</i> Wang, 2004	Acta Zootax. Sinica 29 (1): (38-62)	Guizhou	China	Oriental
<i>A. chlorodelta</i> (Meyrick, 1906)	J. Bombay nat. Hist. Soc. 17 (1): 140	Maskeliya, Ceylon	Sri Lanka	Oriental
<i>A. cipingensis</i> Wang, 2004	Acta Zootax. Sinica 29 (1): (38-62)	Jiangxi	China	Oriental
<i>A. complexivalvula</i> Wang, 2004	Acta Zootax. Sinica 29 (1): (38-62)	Gansu	China	Palaeartic
<i>A. conciliata</i> Meyrick, 1918	Exotic Microlep. 2 (5): 154	Madras, Madura	India, Indonesia	Oriental
<i>A. conjugipunctata</i> Wang, 2004	Acta Zootax. Sinica 29 (1): (38-62)	Henan	China	Palaeartic
<i>A. consimilis</i> Park & Wu, 2003	Acta Zootax. Sinica 29 (1): (38-62)	Taiwan	Taiwan	Oriental
<i>A. cordiformis</i> Wang & Wang, 2017	Zoological Systematics, 42(4): 508-513	Nantou Hueisun Exp	China, Taiwan	Oriental
<i>A. crocothicta</i> Meyrick, 1916	Exot. Microlep. 1 (19): 588	Ceylon, Namunukuli, 6000ft	Sri Lanka	Oriental
<i>A. cuspidata</i> Park & Wu, 2003	Insecta Koreana 20 (2): (195-226)	Hainan	China	Oriental
<i>A. dayuensis</i> Park & Wu, 2003	Insecta Koreana 20 (2): (195-226)	Dayu, Prov. Jiangxi	China	Oriental
<i>A. deductella</i> (Walker, 1864)	List Spec. Lepid. Insects Colln Br. Mus. 29: 631	Ceylon	Sri Lanka	Oriental
<i>A. demetrius</i> Meyrick, 1908	J. Bombay nat. Hist. Soc. 18 (2): 457	Ceylon	Sri Lanka	Oriental
<i>A. demias</i> Meyrick, 1886	Trans. ent. Soc. Lond. 1886 (3): 281	Fiji	Fiji	Pacific
<i>A. demotica</i> Meyrick, 1908	J. Bombay nat. Hist. Soc. 18 (2): 458	Peradeniya, Madulsima, Ambulangoda, Ceylon	Sri Lanka	Oriental
<i>A. dianeura</i> Meyrick, 1939	Trans. R. ent. Soc. Lond. 89 (4): 56	Fiji	Fiji	Pacific
<i>A. dimochla</i> Meyrick, 1935	Mat. Microlep. Fauna chin. Prov.: 76	Hunan	China, Korea	Oriental
<i>A. emmetra</i> Meyrick, 1921	Ann. Transv. Mus. 8 (2): 93	Rhodesia, Salisbury	Zimbabwe, England	Afrotropical, Palaeartic
<i>A. encycota</i> Meyrick, 1922b	Exotic Microlep. 2 (16): 506	Madras	India	Oriental
<i>A. enervata</i> Meyrick, 1929	Exot. Microlep. 3 (17): 532	Assam, Khasis	India	Oriental

Table 1. Continue

Species of <i>Autosticha</i>	Original reference	Type locality	Distributional data	Zoogeographical regions
<i>A. euryterma</i> Meyrick, 1920	in Alluaud & Jeannel, Voyage Afr. Orientale, Ins. Lép. 2: 80	E.Africa	E.Africa	Afrotropical
<i>A. exemplaris</i> Meyrick, 1916	Exot. Microlep. 1 (19): 586	S.India, Coimbatore	India	Oriental
<i>A. fallaciosa</i> Wang, 2004	Acta Zootax. Sinica 29 (1): (38-62)	Jiangxi	China	Oriental
<i>A. flabellata</i> S. Wang, 2021	Zootaxa 5048 (3): 347-370	Manghe, Yangcheng County, 594 m	China	Oriental
<i>A. flavescens</i> Meyrick, 1916	Exot. Microlep. 1 (19): 587	Ceylon, Pundaloya; Peradeniya	Sri Lanka	Oriental
<i>A. flavida</i> Wang, 2004	Acta Zootax. Sinica 29 (1): (38-62)	Jiangxi	China	Oriental
<i>A. furcillata</i> S. Wang, 2021	Zootaxa 5048 (3): 347-370	Yunnan, Taiyanghe, 1450 m	China	Oriental
<i>A. guangdongensis</i> Park & Wu, 2003	Insecta Koreana 20 (2): (195-226)	Botanical Garden, Prov. Guangdong	China	Oriental
<i>A. guttulata</i> Meyrick, 1925	Mem. Sect. Sti. Acad. Romana 3 (7): 380	China	China	Oriental
<i>A. hainanica</i> Park & Wu, 2003	Insecta Koreana 20 (2): (195-226)	Mt. Jianfengling, Prov. Hainan	China	Oriental
<i>A. heteromalla</i> Wang, 2004	Acta Zootax. Sinica 29 (1): (38-62)	Yunnan	China	Oriental
<i>A. imitativa</i> Ueda, 1997	Jpn. J. Ent. 65 (1): 113	Honshu	Japan, China, Taiwan	Oriental, Palaeartic
<i>A. iterata</i> Meyrick, 1916	Exot. Microlep. 1 (19): 585	Ceylon, Rambukkhana	Sri Lanka	Oriental
<i>A. kyotensis</i> (Matsumura, 1931)	Jpn. J. Ent. 65 (1): 120	Honshu	Japan, Korea*	Palaeartic
<i>A. latiuncusa</i> Park & Wu, 2003	Insecta Koreana 20 (2): (195-226)	Qingcheng-shan, Prov. Sichuan	China	Oriental
<i>A. leucoptera</i> Clarke, 1986	Smithshon. Contr. Zool. 416: 171	Marquesas Archipelago, Hiva Oa, Atuona	Polynesia	Pacific
<i>A. leukosa</i> Park & Wu, 2003	Insecta Koreana 20 (2): (195-226)	Mt. Emei, Prov. Sichuan	China	Oriental
<i>A. longispina</i> S. Wang, 2021	Zootaxa 5048 (3): 347-370	Zhejiang, Zhongbeikeng, Mt. Tianmu, 566 m	China	Oriental
<i>A. lushanensis</i> Park & Wu, 2003	Insecta Koreana 20 (2): 206	Taiwan	Taiwan, China	Oriental
<i>A. maculosa</i> Wang, 2004	Acta Zootax. Sinica 29 (1): (38-62)	Henan	China	Palaeartic
<i>A. menglunica</i> Wang, 2004	Acta Zootax. Sinica 29 (1): (38-62)	Yunnan	China	Oriental
<i>A. merista</i> Clarke, 1971	Smithson. Contr. Zool. 56: 143	Rapa I., Haurei	Polynesia	Pacific
<i>A. microphilodema</i> Wang, 2004	Acta Zootax. Sinica 29 (1): (38-62)	Henan	China	Oriental, Palaeartic
<i>A. mingchrica</i> Park & Wu, 2003	Insecta Koreana 20 (2): (195-226)	Taiwan	Taiwan	Oriental
<i>A. mirabilis</i> Wang, 2004	Acta Zootax. Sinica 29 (1): (38-62)	Hubei	China	Oriental
<i>A. modicella</i> (Christoph, 1882)	Jpn. J. Ent. 65 (1): 115	Wladiwostok	Russian, Japan, Korea, Ussuri, China, and Taiwan	Oriental, Palaeartic
<i>A. nanchangensis</i> Wang, 2004	Acta Zootax. Sinica 29 (1): (38-62)	Jiangxi	China	Oriental
<i>A. naulychna</i> Meyrick, 1908	J. Bombay nat. Hist. Soc. 18 (2): 456	Newera Eliya; Pattipola, Ceylon	Sri Lanka	Oriental
<i>A. nothriforme</i> (Walsingham, 1897)	Trans. Ent. Soc. Lond. 1897 (1): 39, pl. 2, f. 3	rench Congo, Kangwé, Ogowé R.	Congo	Afrotropical
<i>A. nothropis</i> Meyrick, 1921	Ann. Transv. Mus. 8 (2): 92	Rhodesia, Umtali	Zimbabwe	Afrotropical
<i>A. opaca</i> (Meyrick, 1931)	Bull. Acad. Roum., 14(3): 9; Meyrick, 1935: 75. opaca: Ueda, 1997: 125.	Tienmu shan	China, Japan, Taiwan	Oriental, Palaeartic
<i>A. ornithorhyncha</i> S. Wang, 2021	Zootaxa 5048 (3): 347-370	Hainan, Shuimanxiang	China	Oriental
<i>A. oxyacantha</i> Wang, 2004	Acta Zootax. Sinica 29 (1): (38-62)	Hubei	China	Oriental

Table 1. Continue

Species of <i>Autosticha</i>	Original reference	Type locality	Distributional data	Zoogeographical regions
<i>A. pachysticta</i> (Meyrick, 1936)	Jpn. J. Ent. 65 (1): 117	Honshu	Japan, China, Korea	Oriental, Palaearctic
<i>A. pelaea</i> Meyrick, 1908	J. Bombay nat. Hist. Soc. 18 (2): 456	Maskeliya, Ceylon	Sri Lanka	Oriental
<i>A. pelodes</i> (Meyrick, 1883)	Ent. mon. Mag. 20: 34	Oahu, Honolulu	State of Hawaii, Indonesia, Vanuatu, Samoa	Pacific
<i>A. pentagona</i> Park & Wu, 2003	Insecta Koreana 20 (2): (195-226)	Guangdong	china	Oriental
<i>A. perixantha</i> Meyrick, 1914	Exot. Microlep. 1 (7): 202	Portuguese East Africa, E of Mt Mlanje	Mozambique, Malawi	Afrotropical
<i>A. petrotoma</i> Meyrick, 1916	Exot. Microlep. 1 (19): 587	Ceylon, Nuwara Eliya	Sri Lanka	Oriental
<i>A. phaulodes</i> Meyrick, 1908	J. Bombay nat. Hist. Soc. 18 (2): 459	Madulsima, Ceylon	Sri Lanka	Oriental
<i>A. protypa</i> Meyrick, 1908	J. Bombay nat. Hist. Soc. 18 (2): 457	Maskeliya, Peradeniya, Maturatta, Ceylon	Sri Lanka	Oriental
<i>A. pyungyangensis</i> Park & Wu, 2003	NS. Koreana, 20(2): 195-225, 22	Mt. Ryongak-san, Pyungyang, North Korea, Sozan, China (Korea), Korea	Korea, China, and Taiwan.	Oriental, Palaearctic
<i>A. pyunyangensis</i> Park & Wu, 2003	Insecta Koreana 20 (2): (195-226)	Jiangxi	China, Korea, Taiwan	Oriental, Palaearctic
<i>A. rectipunctata</i> Wang, 2004	Acta Zootax. Sinica 29 (1): (38-62)	Jiangxi	china	Oriental
<i>A. relaxata</i> Meyrick, 1916	Exot. Microlep. 1 (19): 586	Ceylon, Bandarawela	Sri Lanka	Oriental
<i>A. rhombea</i> S. Wang, 2021	Zootaxa 5048 (3): 347-370	Yunnan, Botanical Garden, 1000 m	China	Oriental
<i>A. semicircularia</i> S. Wang, 2021	Zootaxa 5048 (3): 347-370	Hainan, Mt. Wuzhi, Wuzhishan City, 710 m	China	Oriental
<i>A. shenae</i> Wang, 2004	Acta Zootax. Sinica 29 (1): (38-62)	Jiangxi	China	Oriental
<i>A. shexianica</i> Wang, 2004	Acta Zootax. Sinica 29 (1): (38-62)	Ming-Chi Ilan, Fujian, Zhejiang	Taiwan, China	Oriental
<i>A. siccivora</i> Meyrick, 1935	Exotic Microlep. 4 (18-19): 592	Java, Telawa	Indonesia	Oriental
<i>A. sichuanica</i> Park & Wu, 2003	NS. Koreana, 20(2): 195-225, 15	Mt. Qingcheng shan, Prov. Sichuan	China	Oriental
<i>A. sichunica</i> Park & Wu, 2003	Insecta Koreana 20 (2): (195-226)	Hainan	China	Oriental
<i>A. silacea</i> Bradley, 1962	Bull. Brit. Mus. (N.H) (Ent) 12 (5): 258, pl. 14, f. 8	New Hebrides, Aneityum, Red Crest, 1200ft, 3 m. NE of Anelgauhat	Vanuatu	Pacific
<i>A. sinica</i> Park & Wu, 2003	Insecta Koreana 20 (2): (195-226)	Mt. Qingchengshan, Prov. Sichuan	China	Oriental
<i>A. solita</i> Meyrick, 1923a	Exot. Microlep. 3 (1-2): 45	Fiji	Fiji	Pacific
<i>A. solomonensis</i> Bradley, 1957	Nat Hist. Rennell. I., Brit. Sol. Is. 2: 98	Rennell Is.	Rennell Island	Australasian
<i>A. spilochorda</i> Meyrick, 1916	Exot. Microlep. 1 (19): 588	S.India, Nilgiris, 6000ft	India	Oriental
<i>A. squarrosa</i> Wang, 2004	Acta Zootax. Sinica 29 (1): (38-62)	Jiangxi	China	Oriental
<i>A. stigmatopis</i> Meyrick, 1923b	Exot. Microlep. 3 (1-2): 50	S.India, Cuddapah	India	Oriental
<i>A. strenuella</i> (Walker, 1864)	List Spec. Lepid. Insects Colln Br. Mus. 29: 632	Ceylon	Sri Lanka	Oriental
<i>A. suwonensis</i> Park & Wu, 2003	Insecta Koreana 20 (2): (195-226)	Suwon	Korea	Palaearctic
<i>A. symmetra</i> (Turner, 1919)	Proc. R. Soc. Qd 31 (10): 148	N. Queensland, Cardwell	Australian	Australasian
<i>A. tachytoma</i> (Meyrick, 1935)	Zoological Systematics, 42(4): 508-513	Nantou Hueisun Exp	China, Taiwan	Oriental
<i>A. taiwana</i> Park & Wu, 2003	Insecta Koreana 20 (2): 213	Taiwan, Nantou Co., Lushan, ca. 30km W Wu-she, ca. 1000m	Taiwan	Oriental
<i>A. tetragonopa</i> (Meyrick, 1935)	Mat. Microlep. Fauna chin. Prov.: 75	Honshu	S.China, Japan	Oriental, Palaearctic
<i>A. tetrapeda</i> Meyrick, 1908	J. Bombay nat. Hist. Soc. 18 (2): 458	Palni Hills	India	Oriental

Table 1. Continue

Species of <i>Autosticha</i>	Original reference	Type locality	Distributional data	Zoogeographical regions
<i>A. thermopis</i> Meyrick, 1923b	Exot. Microlep. 3 (1-2): 50	Ceylon, Maskeliya	Sri Lanka	Oriental
<i>A. tianmushana</i> Wang, 2004	Acta Zootax. Sinica 29 (1): (38-62)	Zhejiang	China	Oriental
<i>A. trapeziformis</i> S. Wang, 2021	Zootaxa 5048 (3): 347-370	Fujian, Tongmu Village	China	Oriental
<i>A. triangulimaculella</i> (Caradja, 1927)	Mem. Sect. stiint. Acad. rom. (3) 4 (8): 423	China	China	Oriental
<i>A. truncicola</i> Ueda, 1997	Jpn. J. Ent. 65 (1): 122	Japan, Honshu	Japan, China, Korea	Palaeartic
<i>A. turriiformis</i> S. Wang, 2021	Zootaxa 5048 (3): 347-370	Yunnan, Gaoligongshan National Forest Park	China	Oriental
<i>A. validentata</i> Wang, 2004	Acta Zootax. Sinica 29 (1): (38-62)	Fujian	China	Oriental
<i>A. valvifida</i> Wang, 2004	Acta Zootax. Sinica 29 (1): (38-62)	Yunnan	China	Oriental
<i>A. ventericoncava</i> S. Wang, 2021	Zootaxa 5048 (3): 347-370	Yunnan, Taiyanghe, Pu'er City, 1450 m	China	Oriental
<i>A. vicularis</i> Meyrick, 1911	J. Bombay nat. Hist. Soc. 20 (3): 725	Galle, Ceylon	Sri Lanka	Oriental
<i>A. wufengensis</i> Wang, 2004	Acta Zootax. Sinica 29 (1): (38-62)	Hubei	China	Oriental
<i>A. xanthographa</i> Meyrick, 1916	Exot. Microlep. 1 (19): 588	Ceylon, Madulsima	Sri Lanka	Oriental

A. kyotensis in spun dead leaves of *Cedrus deodora* and fed on the bark of *Prunus mume*; *A. truncicola* is associated with *Sophora japonica*, *Robinia pseudoacacia* and *Prunus mume* (Ueda, 1997).

So far, seven Korean species of the *Autosticha* have been reported to date (Park, 1991; Park and Wu, 2003; Sohn, 2007): *A. dimochla*, *A. modicella*, *A. opaca*, *A. suwonensis*, *A. truncicola*, *A. pachysticta*, and *A. pyungyangensis*. In this study, we found and added a newly recorded species, *A. kyotensis* (Matsumura, 1931), to Korea fauna. This species has been reported only in Japan. Illustrations of adult and male genitalia of the species are provided. Additionally, a world checklist of the *Autosticha* is also provided including distributional information.

Material and Methods

Materials in this study were based on the private collection of the third author, KT Park. All specimens were collected by using light trap with mercury vapor lamp. For species identification, we examined all specimens under a microscope (Leica Z16AP) and made slide genitalia vouchers. Photographs of adult and genitalia were taken using the software, Image Lab version 2.2.4.0 by MCM Design. Morphological terminology on the *Autosticha* follows Ueda (1977).

Systematics

Family Autostichiidae Le Marchand, 1947

Subfamily Autostichiinae Le Marchand, 1947

Genus *Autosticha* Meyrick, 1886

Autosticha Meyrick, 1886; Trans. Ent. Soc. Lond. 1886 (3): 281; Type species. *Automola pelodes* Meyrick

Autosticha kyotensis (Matsumura, 1931) 교토점원뿔나방 (신칭) (Fig. 1)

Depressaria kyotensis Matsumura, 1931: 1090. Type Locality. Japan.

Brachmia deodora Clarke, 1962: 98.

Brachmia kyotensis Ridout, 1981: 35.

Autosticha kyotensis Ueda, 1997: 120.

Diagnosis. This species is superficially similar to *Autosticha truncicola* in the wing pattern and coloration, but it can be easily differentiated from the latter by the genitalic characters. The male genitalia of *A. kyotensis* is recognized by the digitate uncus, short and broad tegumen and the shorter in length and the broader in width of the valva.

Description. Adults (Fig. 1A, 1B). *Head:* Frons and vertex grayish pale brown tinged with pale yellow laterally. Scape of

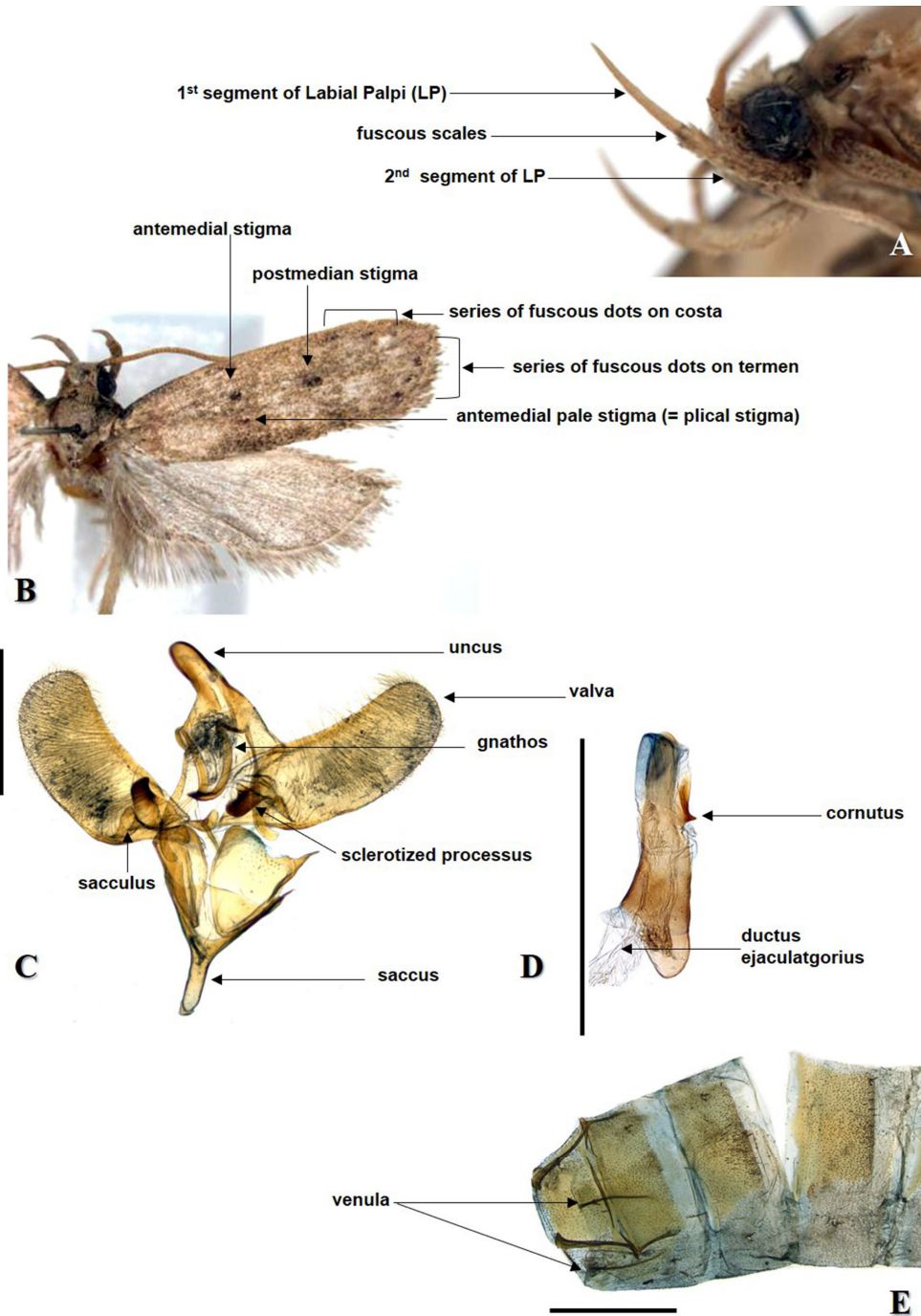


Fig. 1. Adult and male genitalia of *Autosticha kyotensis* in Korea. A, Head; B, Wing; C, Male genitalia; D, Aedeagus; E, Abdomen; scale bar: 1.0 mm.

antenna grayish pale brown, shorter than diameter of eye; flagellum pale yellow mixed with grayish brown after 2/3 to apex, dorsally. Labial palpus pale yellow mixed fuscous scales at 2nd segment entirely, basal part of 3rd segment outerly. *Thorax*: thorax grayish pale brown; tegula grayish brown. Wing expanse

14.5-16.5 mm. Forewing ground color grayish pale brown; two distinct stigmata: antemedial stigma at 2/5, postmedian stigma at 3/5; antemedial pale stigma (=plical stigma) under antemedial former one; series of fuscous dots on costa near apex and other followed by termen. Hindwing pale brown.

Male genitalia (Fig. 1C, 1D). Uncus digitate, a thumb-shaped, sclerotized outerly. Gnathos rather tongue-shaped, curved, sclerotized apically, as same length as uncus. Tegumen short. Valva broad, elongate with round apex, slightly concave costal margin. Sacculus rather triangular basally. Sclerotized process of saccular inner margin slightly curved ventrally. Saccus moderate. Aedeagus short, bearing cornutus sub-apically.

Material examined. South Korea: 1 ♂, Seoguipo, Andeok, Changcheon, Jeju island, 26 vii 2012, light trap, gen. Prep. No. JBNU IPE-9517/ S. Kim; 1 ♂, Seoguipo, Andeok, Gamsan, 26 vii 2012, light trap, gen. Prep. No. JBNU IPE-9516/ S. Kim; 1 ♂, Seoguipo, Andeok, Gamsan, 24 vii 2014, light trap, gen. Prep. No. JBNU IPE-9515/ S. Kim.

Distribution. Korea (new record; this study), Japan.

Host plant. *Cedrus deodora*, *Prunus mume* (Ueda, 1997).

Remark. In comparison with previous references, Korean specimens of this species are rather smaller than the Japanese individuals. Only male of *A. kyotensis* are recognized from Korea.

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Statements for Authorship Position & Contribution

Kim S.: Jeonbuk National University, Professor; wrote the manuscript, morphological identifications, prepared

genitalia vouchers and figures, designed the research, finance support

Han T.: Jeonbuk National University, undergraduate student; data arrangement

Park K.-T.: The Korean Academy of Science and Technology, Professor; provided specimen vouchers

All authors read and approved the manuscript.

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