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A REVISION OF THE JAPANESE SPECIES OF THE GENUS
XENOMIMETES WOLLASTON,
WITH DESCRIPTION OF A NEW SPECIES*

(Col., Curculionidae)

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In the course of my studies on Cossoninae I have discovered a new species of the genus *Xenomimetes* WOLLASTON in Japan, which will be described herein after. On this occasion there will be given a revision of the Japanese species of this genus.

Before going further I wish to express my hearty thanks to Professor T. UCHIDA and Dr. C. WATANABE for their constant guidance. I am much obliged to Dr. H. KÔNO, Dr. M. OKADA and Mr. K. UMEYA for their kind helps in finishing this investigation. Many thanks are also due to Messrs. N. HAYASHI, C. HIRANO, K. KOJIMA, Y. KURCSAWA, K. MORIMOTO, T. NAKANE, S. NOMURA and A. YOSHIDA who have kindly given a number of valuable specimens for my present use.

Genus *Xenomimetes* WOLLASTON

Xenomimetes WOLLASTON, Trans. Ent. Soc. Lond., p. 35 (1873); WOLLASTON, Trans. Ent. Soc. Lond., p. 439, 497-498, 584 (1873); MARSHALL, Proc. R. Ent. Soc. Lond., (B) 6 (3), p. 55 (1937).

Genotype: *Xenomimetes destructor* WOLLASTON (monobasic).

This is a rather aberrant and small genus having the elytra of which the apex is considerably excised and the lateral margins are widely explanate posteriorly. The members of this genus are recognized as injurious pests of forest-trees for their wood-boring habits. Up to the present time five species have been described from Saghalien, the Kuriles, Japan, North-East Burma, North-West Himalaya and India. In this paper a new species from Japan will be added to the members. My examinations, however, have convinced me that the two Japanese species, *Xenomimetes destructor* WOLLASTON and *X. todomatsuanus* KÔNO, should be treated as the same species. Accordingly, in reality there are two species occurring in Japan, which may be distinguished by the following key:—

* Taxonomic studies on Cossoninae, Curculionidae, I.

Key to the species

1. Elytral intervals I and III both flattened throughout, II not narrowed on declivity; apex of elytra \wedge -shaped. In male genitalia apical portion of median lobe with no projection on sides. Length (excluding rostrum) 2.8-4.6 mm.; breadth, 0.8-1.4 mm. *X. destructor* WOLLASTON
- On declivity elytral interval I suddenly much widened and highly elevated, II gradually narrowed, III slightly widened and distinctly elevated; apex of elytra \sim -shaped. In male genitalia apical portion of median lobe with round humeri on sides. Length (excluding rostrum) 3.5-4.2 mm.; breadth 0.9-1.2 mm. *X. alni* sp. nov.

Xenomimetus destructor WOLLASTON (Pl. I, A, a, & Fig. 1, A, B)

Xenomimetus destructor WOLLASTON, Trans. Ent. Soc. Lond., p. 36 (1873); WOLLASTON, Trans. Ent. Soc. Lond., p. 656 (1873); LEWIS, Cat. Col. Jap. Arch., p. 24 (1879); SCHÖNFELDT, Cat. Col. Jap., p. 154 (1887); WINKLER, Cat. Col. reg. palaearc., 13, F 1531 (1932); CSIKI, in JUNK et SCHENKLING, Col. Cat., 149, p. 179 (1936).

Xenomimetus todomatsuanus KÔNO, Ins. Mats., X (1/2), p. 55 (1935); KÔNO, Hattori-Hôkôkai Kenkyû Shôroku, V, p. 273, 277 (1938); KÔNO, Ins. Mats., XII (2/3), p. 144 (1938); KÔNO, Icon. Ins. Jap. (ed. II), p. 1274, f. 3673 (1950); INOUE, Ringyôgaichû-Bôjoron, II, p. 149 (1953). (Syn. nov.)

Having examined many specimens including the types of *X. todomatsuanus*, I have become to convince that *X. todomatsuanus* should be synonymous with *X. destructor*: because I can not find any specific differences between these species. The type-locality of *X. destructor* is Nagasaki, Kyushu.

Specimens examined: Saghalien (Kurashi, 1 ex.—paratype of *X. todomatsuanus*, 8. VIII, 1934, C. WATANABE & T. INOUE leg.; Konuma, 1 ex., 22. VII, 1934, K. TAMANUKI leg.); the Kuriles (Shikotan Is., 3 exs.—paratypes of *X. todomatsuanus*, 23-27. VII, 1935, Y. SUGIHARA leg.; Kunashiri Is., 1 ex.—paratype of *X. todomatsuanus*, 17-22. VII, 1935, T. UCHIDA leg.); Hokkaido (Uryû, 5 exs.—paratypes of *X. todomatsuanus*, 4. VI, 1935, H. KÔNO leg.; Sapporo, 1 ex., 30. VIII, 1937, H. KÔNO leg., host—*Taxus cuspidata*; Jôzankei, 3 exs., 5. VI, 1936, H. KÔNO leg., host—*Abies sachalinensis*; Nopporo, many exs., 15-17. VI, 1952, T. KUMATA & T. OKU leg., host—*Abies sachalinensis*; Hidaka, 1 ex., 5. VII, 1926, M. MATSUSHITA leg.; Mt. Tokachidake, 1 ex., 9. VII, 1951, M. OKADA leg.; Yukomambetsu, 1 ex., 29. VII, 1952, N. HAYASHI leg.; Mt. Meakandake, 1 ex., VIII, 1952, N. HAYASHI leg.; Tomuraushi, 1 ex., VII, 1949, K. KOJIMA leg., host—*Abies sachalinensis*; Nakashibetsu, 1 ex., 23. VI, 1948, K. KOJIMA leg.; Kamioboro, 1 ex., 14. VII, 1948, K. KOJIMA leg.; Shiretoko, 3 exs., 17. VII, 1952, M. KONISHI leg., host—*Abies sachalinensis*); Honshu (Chûzenji, Tochigi Pref., 13 exs., 21. VII, 1917, E. GALLOIS leg.; Oku-Nikkô, Tochigi Pref., 1 ex., 20. VII, 1935, A. YOSHIDA leg.; Oze, Gumma Pref., 1 ex., 15. VII, 1949, N. HAYASHI leg.; Takaragawa, Gumma Pref., 1 ex., VII, 1953, C. HIRANO leg.; Tokura, Gumma Pref., 1

ex., 9. VII, 1951, T. NAKANE leg.; Kamikôchi, Nagano Pref., 5 exs., 21-28. VII, 1951, T. NAKANE & S. ÔSAWA leg., 1 ex., 20. VIII, 1951, K. UMEYA leg.; Tokugô, Nagano Pref., 1 ex., 22. VII, 1951, T. NAKANE leg.; Sanjô, Yamanashi Pref., 1 ex., 4. VI, 1951, A. YOSHIDA leg.); Shikoku (Mt. Kuroson, Kôchi Pref., 1 ex., 23. VII, 1937, A. YOSHIDA leg., first record from Shikoku).


Host plants—*Abies sachalinensis* (after KÔNO and INOUE; and by the present designation), *Taxus cuspidata* (by the present designation), *Pinus densiflora* (after INOUE) and pine tree (after WOLLASTON).

Distribution: Saghalien; the Kuriles (Shikotan Is. and Kunashiri Is.); Japan (Hokkaido, Honshu, Shikoku and Kyushu).

Japanese name: *Matsu-kobukikuizô*.

Xenomimetes ulni sp. nov. (Pl. I, B, b, & Fig. 1, C, D)

Male and female. Derm black, rather shiny, elytra and legs slightly diluted with brownish red, antennae and tarsi reddish yellow; setae yellow, conspicuous in antennae, legs, rostrum, declivity and underside.

Head moderately rounded on sides, densely punctate, but sparsely punctate basally and laterally, becoming denser on forehead, frontal fovea very shallow; eyes much prominent. Rostrum narrowed from base to basal half, thence almost parallel-sided, rugosely punctate, but finely punctate distally and laterally, with a longitudinal depression in middle; upper margin of scrobe touching lower edge of eye. Antennae with scape not reaching hind edge of eye, longer than funiculus; funicular segment I about as long as broad and as long as II plus III, II about as long as III, II to VII transverse and somewhat widened distally; club longer than broad, longer than preceding six segments together. Prothorax slightly longer than broad (53 : 50 in holotype, 63 : 56 in allotype), broadest near base, slightly narrowed towards apex, gently narrowed at base, slightly sinuate laterally in middle, and shallowly constricted subapically, the constriction not extending across dorsum but slightly raised there, apical margin much feebly sinuate in middle, basal margin subtruncate, and rather gently angled; dorsum coarsely and densely punctate, with an irregular and rather broad impunctate median stripe, the punctures variable in form and size, having a tendency to run in longitudinal or oblique rows, sometimes well separated and sometimes subconfluent, and becoming confluent near lateral margins; pleurae subconfluently punctate. Scutellum subelliptical, with a few small punctures. Elytra slightly broader than prothorax, somewhat widened posteriorly, with humeri formed by intervals VI-IX, so that striae VI-VIII not reaching base, base broadly granulate, basal margin sinuate at scutellum, apex gently rounded and feebly notched laterally, and -shapedly emarginate at extremity; striae distinctly narrower than intervals, their punctures deep, nearly rectangular, incising margins of intervals and much diminished on declivity, their interstices much narrower than punctures; intervals rather flat except some ones on declivity, each with a single row of small punctures which are often irregularly arranged, but without such punctures on declivity; interval I transversely sculptured,

gradually widened backwards, suddenly much widened and highly elevated on declivity, there appearing smooth and well polished, and separating each other towards apex, so that a narrow interspace seen between them; II gradually narrowed on declivity, and there much narrower than I or III; III slightly widened and distinctly elevated on declivity, but there much narrower and lower than I; IV-VI united posteriorly and thence becoming much narrower than III; IX suddenly swollen and projected above ventrites III and IV. Legs with third tarsal segment being obviously broader than the second. Prosternum with intercoxal process which is a little narrower than distance between coxa and hind margin of prosternum. Length (excluding rostrum) 3.5-4.2 mm.; breadth, 0.9-1.2 mm.

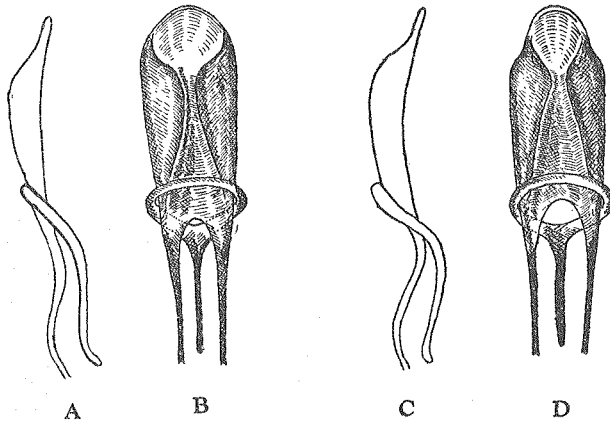


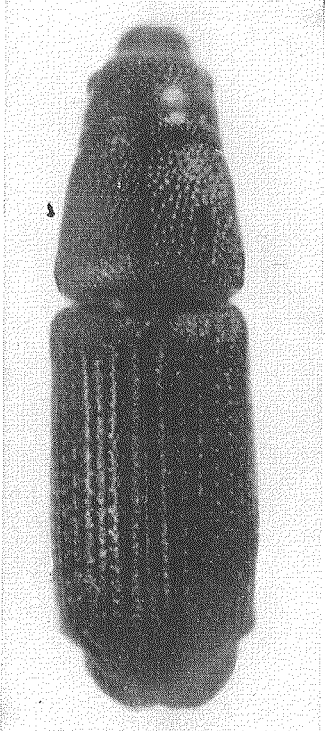
Fig. 1. Male genitalia of :

- A. *Xenomimetes destructor* WOLLASTON (lateral view).
- B. Ditto (ventral view).
- C. *Xenomimetes alni* sp. nov. (lateral view).
- D. Ditto (ventral view).

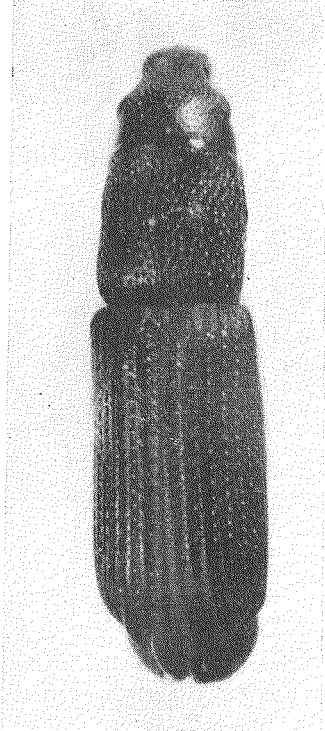
Holotype (♂) and Allotype (♀): Jōzankei, Hokkaido, 27. VI, 1954, M. KONISHI leg., host—*Alnus japonica*.

Paratypes: Hokkaido (Jōzankei, 2 exs., 27. VI, 1954, 1 ex., 13. VII, 1953, M. KONISHI leg., host—*Alnus japonica*; Sapporo, 5 exs., 11-20. VI, 1935, H. KŌNO leg., host—*Alnus japonica*, 1 ex., 6. VI, 1952, T. TOMIOKA leg., 1 ex., 8. VII, 1952, 1 ex., 11. VI, 1953, 1 ex., 24. VI, 1954, M. KONISHI leg.; Mt. Teine, 1 ex., 14. VI, 1953, T. KUMATA leg.; Naganuma, 1 ex., 29. VI, 1953, H. KIMURA leg.; Mt. Tarumae, 1 ex., 3. VIII, 1954, M. KONISHI leg., host—*Magnolia obovata*; Kamuikotan, 1 ex., 26. VI, 1953, M. KONISHI leg., host—*Tilia japonica*; Sōunkyō, 1 ex., 25. VII, 1952, N. HAYASHI leg.; Shiretoko, 1 ex., 18. VII, 1952, M. KONISHI leg., host—*Kalopanax septemlobus*); Honshu (Tsuta-Onsen, Aomori Pref., 1 ex.,

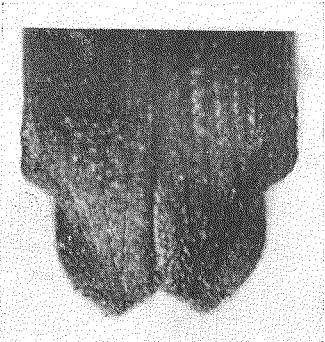
A



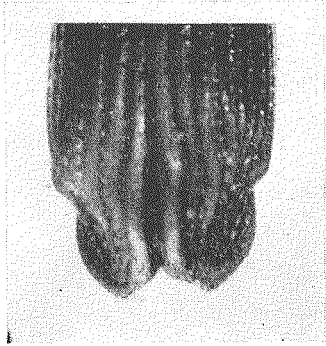
B



a



b



14. VII, 1954, T. KUMATA leg.; Mt. Azuma, Yamagata Pref., 1 ex., 16. VII, 1941, 2 exs., 2. VII, 1944, Y. KUROSAWA leg.; Yunohana, Fukushima Pref., 1 ex., 17. VI, 1947, Y. KUROSAWA leg.; Asamata, Fukushima Pref., 1 ex., 29. VI, 1949, Y. KUROSAWA leg.; Mt. Yatsugatake, Nagano Pref., 7 exs., 19. VII, 1951, S. NOMURA leg.; Kamikôchi, Nagano Pref., 1 ex., 16. VII, 1949, M. NAKAMURA leg.; Chûzenji, Tochigi Pref., 1 ex., 2. VIII, 1916, E. GALLOIS leg.; Oku-Nikkô, Tochigi Pref., 1 ex., 15. VII, 1935, A. YOSHIDA leg.; Takaragawa, Gumma Pref., 1 ex., 25. VII, 1953, C. HIRANO leg.; Okutama, Tokyo, 1 ex., 2-4. VI, 1951, S. NOMURA leg.; Sanjô, Yamanashi Pref., 1 ex., 4. VI, 1937, A. YOSHIDA leg.; Izu-Ôshima Is., 4 exs., 26. V, 1949, M. KONISHI & K. UMEYA leg., host—*Alnus Sieboldiana*; Kyushu (Mt. Fukuchi, Fukuoka Pref., 1 ex., 5. V, 1954, T. YOSHIDA leg.).

Types are preserved in the collection of the Entomological Institute of the Hokkaido University, and the other five paratypes collected by Mr. Y. KUROSAWA are in the collection of the National Science Museum, Tokyo.

Host plants—*Alnus japonica*, *Alnus Sieboldiana*, *Tilia japonica*, *Kalopanax septemlobus* and *Magnolia obovata*.

Distribution: Japan (Hokkaido, Honshu, Izu-Ôshima Is. and Kyushu).

Japanese name: *Hannoki-kobukikuizô*.

This species is closely related to the preceding species, *X. destructor*, differing therefrom by the above mentioned key. It should be noted that the diagnostic characters of this species lie in the structure of the elytra, especially that of the apex, and that the host plants of *X. alni* are hardwoods, while those of *X. destructor* are conifers.

Explanation of Plate I

- A. *Xenomimetes destructor* WOLLASTON (♀).
 - a. Ditto (showing apex of elytra).
- B. *Xenomimetes alni* sp. nov. (♀).
 - b. Ditto (showing apex of elytra).

(Photo by Dr. M. OKADA).