

Studies on Scolytidae VI**

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In the present paper, the author describes four new species of the following genera : *Hyorrhynchus* BLANDFORD, *Taphrorychus* EICHHOFF, *Ernopor* THOMSON and *Cryphalus* ERICHSON. And also he records three species, which have been unrecorded from Japan.

The specimens treated in the present paper are kept in the collection of the Second Laboratory of Forest Entomology, Government Forest Experiment Station.

Descriptions

Hyorrhynchus unicornis sp. nov.

Male : Oblong, cylindrical, parallel-sided ; opaque, black, mouth-parts (except mandibles), antennae and tarsi yellowish brown, elytra with irregular gray markings, which are formed of gray hairs.

Head produced into a flattened rostrum, weakly expanded laterally at apex as in female of *H. lewisi* BLANDFORD, very finely punctured and minutely reticulate at vertex, finely reticulate and indistinctly punctured at frons, frons with a deep and wide impression, which extend from epistoma to behind upper division of eyes, triangularly elevated at anterior area, sides of rostrum not carinate, rounded at anterior margin, with a short but sharp epistomal horn, vestiture consisting of short hairs, which are rather long and close around impression. Upper division of eyes nearly triangular. Antennal funicles 7-segmented, 1st segment large, 2nd nearly globular, 3rd to 7th transverse, clubs oblong, 3-segmented. Pronotum wider than long (5.6 : 4.8), basal margin nearly straight and truncate, basal corners almost angulate, lateral sides not or slightly widened anteriorly at posterior third, thence gradually narrowly rounded anteriorly, anterior margin weakly rounded ; disc strongly convex, weakly impressed at middle of posterior and anterior areas, roundly impressed at each lateral side of middle, minutely rough, rather sparsely asperate at each side of anterior portion, and covered with decumbent white scale-like setae, which are denser partially. Scutellum semicircular ; dorsum slightly convex, rough. Elytra nearly equal in width to base of pronotum, 2.34 times as long as wide, basal margin rounded and with a row of narrow tubercles, lateral sides subparallel, widest at middle, weakly narrowly rounded at posterior fourth ; disc strongly convex, humeral callosities slightly elevated, striae deeply impressed but very narrow, finely and sparsely punctured, interstices slightly convex, finely rough, closely covered with brown hairs and gray scale-like hairs partially, declivity convex, 3rd interstice conjointed behind junction of 7th and 9th, 4th, 5th and 6th ending at junction of 3rd and 7th, 8th ending at junction of 7th and 9th.

Body length : 3.8 mm.

Holotype : ♂, Gamushi, Hokkaido, May 10, 1956, A. NOBUCHI leg.

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** Part 1 Akitu, 8 (1) : 9~13 1959

Part 2 Bull. Gov. For. Exp. Sta., 116 : 21~26 1959

Part 3 Ditto, 171 : 129~134 1964

Part 4 Akitu, 13 : 1~3 1965

Part 5 Bull. Gov. For. Exp. Sta., 185 : 1~49 1966

The type is preserved in the collection of the Second Laboratory of Forest Entomology, Government Forest Experiment Station.

This new species is allied to *Hyorrhynchus lewisi* BLANDFORD from Japan, but may be separated by the smaller and slender body, by the presence of a horn at the epistoma and a strong impression at the frons, by the weakly expanded rostrum, etc.

***Taphrorychus striatus* sp. nov.**

Body oblong, cylindrical, slightly widening posteriorly; shining, black, anterior portion of pronotum reddish brown, mouth-parts (except mandibles), antennae and legs yellowish brown, body beneath reddish brown. Vestiture consisting of sparse and long hairs.

Head with frons slightly convex, with a rather distinct longitudinal carina at middle, finely reticulate, sparsely granulate, closely covered with long hairs, mouth-ciliae distinct, vertex minutely reticulate evenly. Eyes oblong, emarginate at anterior margin. Antennal funicles 5-segmented, 1st segment larger and wider, 2nd narrower, slightly shorter than 1st, 3rd to 5th wider, cup-shaped, clubs oval, two procurved sutures on either side. Pronotum as long as wide, basal corners strongly rounded, lateral sides slightly rounded, widest at basal third, sides and apex separately rounded, anterior margin gently rounded; disc strongly convex, with a weak transverse elevation just behind middle, clothed with erect setae, of which anterior ones longer, basal portion finely rough, with rather close and weak granules and a narrow elevated median line, apical portion rather closely, irregularly and distinctly asperate, interspace of the asperities finely rough. Scutellum semicircular, strongly shining. Elytra nearly equal in width to pronotum, 1.46 times as long as wide, lateral sides almost straight near by apex, slightly widened posteriorly, strongly rounded apically, apical margin weakly rounded; upper surface strongly convex, striae distinctly impressed posteriorly, with indistinct short setae and rather large rounded punctures, which are irregular at base, interstices wide, slightly elevated, rugose at base, with uniseriate small punctures and long setae, declivity abrupt, striae narrower than those on disc, distinctly impressed, punctures smaller, interstices weakly elevated, with a row of small granules and setae.

Body length: 2.0 mm.

Holotype: Mt. Homan, Fukuoka Pref., March 21, 1960, A. NOBUCHI leg.

Paratypes: 2 exs., same data as for holotype.

The types are preserved in the collection of the Second Laboratory of Forest Entomology, Government Forest Experiment Station.

This new species is allied to *Taphrorychus coffeae* (EGGERS), but may be easily distinguished by the smaller body, by the presence of epistomal carina, by the absence of excavation of the frons, by the more impressed elytral striae, and by the distinctly finer punctures.

***Ernopus japonicus* sp. nov.**

Oblong-oval, cylindrical; strongly shining, black, mouth-parts (except mandibles), antennae and legs yellowish brown. Body above moderately covered with scales and hairs.

Head finely reticulate and minutely punctured, setiferous; in female frons slightly convex, strongly shining and weakly impressed at epistoma, finely rugose-punctate; in male frons slightly and circularly impressed at middle, somewhat edged above the impression, finely rugose-punctate. Eyes larger, elongate and not emarginate at anterior margin. Antennal funicles 4-segmented, 1st segment globular and larger, 3rd and 4th nearly equal in shape, clubs oval, without distinct suture on either side. Pronotum wider than long, widest just before base, basal

margin slightly bisinuate, narrowly marginate, lateral sides strongly narrowing toward front, apical margin moderately produced anteriorly, with about six distinct marginal tubercles; disc strongly convex, summit situated at basal third, anterior area of the summit concentrically asperate in four rows, of which posterior two or three rows fused and formed into two or three arcuate carinae, ground surface microscopically rugose, finely and very sparsely granulate at base; vestiture consisting of close and fine hairs but scales at middle of base. Scutellum rather large, triangular; upper surface flattened, rough. Elytra nearly as wide as base of pronotum, 1.39 times as long as wide, parallel-sided at basal two-thirds, and thence strongly rounded at apex; upper surface strongly convex, humeral callosities weakly elevated, sutures narrowly elevated, striae narrower, weakly impressed posteriorly at 1st and 2nd striae, with indistinct but large punctures, which are somewhat deeper at lateral striae, interstices almost flattened, rugose and finely punctured, covered with comparatively long scales in a row and fine scales in a few rows, the scales gradually obliterated anteriorly, and also with a row of minute tubercles at declivity. Body beneath with fine pubescence, minutely punctured and reticulate.

Body length: ca. 1.4 mm.

Holotype: ♀, Arashiyama, Kyoto City, May 29, 1955, T. KISHII leg.

Paratypes: 10 ♀♀ 9 ♂♂, same as in holotype.

The type specimens are mostly preserved in the collection of the Second Laboratory of Forest Entomology, Government Forest Experiment Station.

This new species appears to be more closely allied to *Margadillius corpulentus* (SAMPSON) than to species of the genus *Ernopus* THOMSON in the shape of the body and in the vestiture on the elytra, but distinguished by the absence of transverse carina at the frons in the male and the presence of a few rows of scales on the elytral interstices.

***Cryphalus kyotoensis* sp. nov.**

Oblong-oval, cylindrical, parallel-sided; opaque, testaceous, mouth-parts (except mandibles), antennal funicles and legs yellowish brown.

Head with frons slightly convex, not or slightly impressed over mouth, minutely reticulate, finely punctured and setiferous, in male frons with a long transverse carina at upper side, flattened or slightly convex over the carina. Antennal funicles 4-segmented, 1st segment larger and globular, 2nd rather narrow, nearly equal in shape to 3rd, 4th short, clubs oval, with three broadly recurved sutures outside, and three procurved sutures inside. Eyes oval, triangularly emarginate at anterior margin. Pronotum slightly wider than long (2.6:2.4), widest just before base, basal margin slightly bisinuate, very narrowly marginate, basal corners strongly rounded, lateral margins very narrowly marginate in basal one-third, roundly narrowing anteriorly, anterior margin strongly rounded, with six small tubercles; disc strongly convex, summit situated at basal one-third in length, rather sparsely scattered with thick asperities before the summit, ground surface closely and finely granulate, reticulate and closely covered with fine decumbent hairs. Scutellum small, nearly triangular, rugose. Elytra slightly wider than pronotum, 1.31 times as long as wide, parallel-sided in two-thirds, rather gradually rounded at apex; dorsum strongly convex, humeral callosities feebly elevated, striae very narrow, deep and with fine punctures, interstices slightly convex, closely rugose-punctate, with distinct and long setae in a row, ground scales very short, rather narrow and dense. Body beneath finely reticulate, minutely punctured and pubescent.

Body length: 1.1 mm.

Holotype : ♀, Mizorogaike, Kyoto City, Dec. 30, 1957, on *Alnus firma* SIEB. et ZUCC., A. NOBUCHI leg.

Paratypes : 14 ♀♀ 5 ♂♂, same data as for holotype.

The type specimens are preserved in the collection of the Second Laboratory of Forest Entomology, Government Forest Experiment Station.

The present new species is allied to *Cryphalus scopiger* BERGER, but may be distinguished by the smaller body, by the longer seriate setae on the elytral interstices, and by a distinctly longer carina at the frons of the male.

New Records

Hylurgops spessivtzevi EGGERS, 1914

Ent. Blätt., 10 : 187

Specimens examined : 3 exs. Kawamata, Fukushima Pref., June 25, 1955, on *Pinus pentaphylla* MAYR, M. KABE leg. ; 2 exs. Tomakomai, Hokkaido, June 2, 1964, on *Pinus silvestris* L. and *P. strobus* L., C. KOIZUMI leg.

Distribution : Siberia, Manchuria, Saghalien, Japan (Hokkaido, Honshu).

Taphrorychus coffeae (EGGERS), 1923

Zool. Meded. R. Mus Nat. Hist. Leiden, 7 : 161

Specimens examined : 13 exs., Takao, Tokyo, Nov. 12, 1957, on *Quercus acuta* THUNB., A. NOBUCHI leg. ; 4 exs., Mt. Takao, Tokyo, July 31, 1957, on *Quercus glauca* THUNB., A. NOBUCHI leg. ; 4 exs., Mt. Takao, May 19, 1958, on *Quercus myrsinaefolia* BLUME, A. NOBUCHI leg. ; 4 exs., Takao, Sept. 19, 1958, on *Quercus acuta* THUNB., A. NOBUCHI leg. ; 15 exs., Mt. Tachibana, Fukuoka Pref., Feb. 6, 1960, on *Quercus acuta* THUNB., A. NOBUCHI leg. ; 2 exs. Mt. Homan, Fukuoka Pref., Feb. 21, 1960, on *Machilus Thunbergii* SIEB. et ZUCC., A. NOBUCHI leg. ; 1 ex. Satsuna, Tsushima, Nagasaki Pref., May 23, 1961, Y. KIMURA leg. ; 1 ex., Nachi, Wakayama Pref., May 5, 1961, Y. KIMURA leg. ; 48 exs., Mt. Kiyosumi, Chiba Pref., May 8, 1963, on *Quercus acuta* THUNB., A. NOBUCHI leg. ; 2 exs., Suzaki, Shizuoka Pref., Nov. 8, 1963, A. NOBUCHI leg. ; 1 ex., Oneyama, Gunma Pref., May 23, 1964, A. leg. ; NOBUCHI 2 exs., Takarabe, Kagoshima Pref., May 25, 1965, on *Machilus Thunbergii* SIEB. et ZUCC. A. NOBUCHI leg.

The galleries in *Quercus* and *Machilus* plants were made a longitudinal tunnel in the cut twigs.

Distribution : India, Java, Borneo, Malaya, Japan (Honshu, Kyushu).

Trypophloeus populi KURENZOV, 1941

Bark-beetles Far East USSR : 164

Specimens examined : 11 exs., Shokotsu, Hokkaido, Sept. 30, 1957, on *Populus* sp., A. NOBUCHI leg.

Distribution : Siberia, Japan (Hokkaido).

Explanation of Plates

Plate 1 Fig. 1 *Hyorrhynchus unicornis* sp. nov.

Fig. 2 *Taphrorychus striatus* sp. nov.

Fig. 3 *Ernoporos japonicus* sp. nov.

Fig. 4 *Cryphalus kyotoensis* sp. nov.

Fig. 5 *Taphrorychus coffeae* (EGGERS)

Fig. 6 *Trypophloeus populi* KURENZOV

Fig. 7 *Taphrorychus coffeae* (EGGERS), nest.

Plate 2 Fig. 8 *Taphrorychus striatus* sp. nov., proventricular plate.

Fig. 9~11 *Ernoporos japonicus* sp. nov., : 9, antenna ; 10, proventricular plate ; 11, male genitalia.

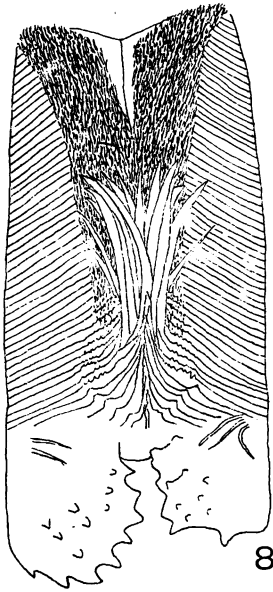
Fig. 12~14 *Cryphalus kyotoensis* sp. nov. : 12, antenna ; 13, proventricular plate ; 14, male genitalia.

キクイムシ科の研究 第6報

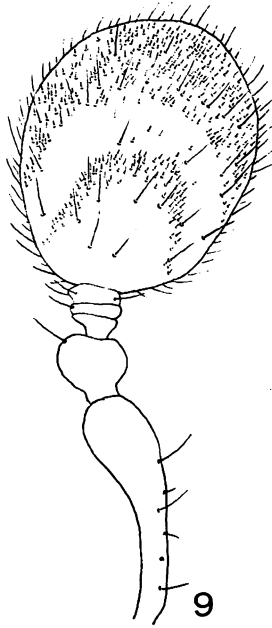
野 淵 輝 (1)

本報においてツノオオキクイムシ *Hyorrhynchus unicornis* NOBUCHI, スジキクイムシ *Taphrorychus striatus* NOBUCHI, ツヤコキクイムシ *Ernoporos japonicus* NOBUCHI, キョウトコキクイムシ *Cryphalus kyotoensis* NOBUCHI を新種として記載し, これまでシベリヤ, 樺太より知られていたスベシフツムシ *Hylurgops spessivtzevi* EGGERS, 熱帯アジアに分布するコーヒーキクイムシ *Taphrorychus coffeae* (EGGERS), シベリヤから記載されたポプラコキクイムシ *Trypophloeus populi* KURENZOV を日本未記録種として報告した。

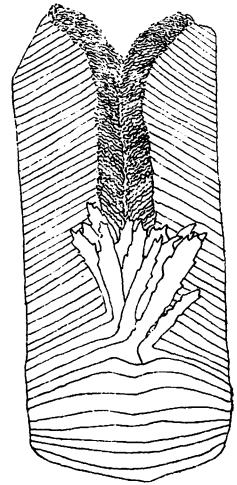
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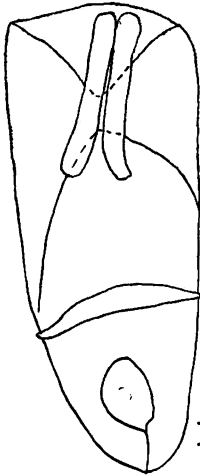
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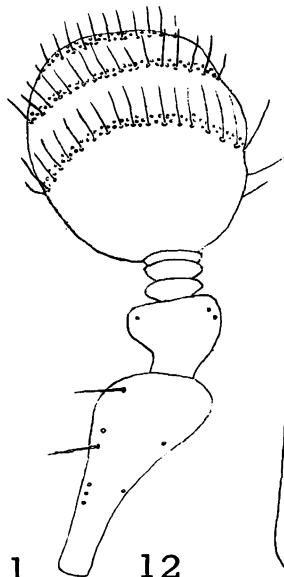
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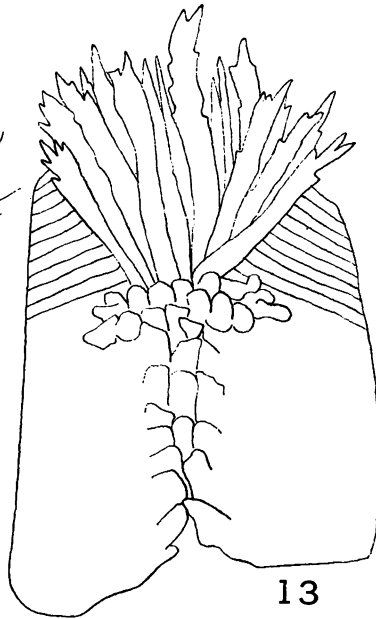
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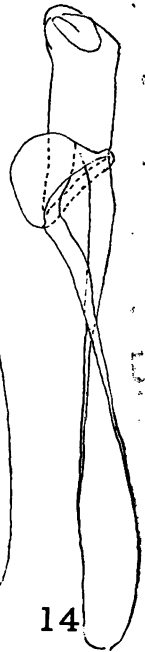
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