NEW GEOMETRIDAE FROM JAPAN. 1*

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Lygris pyropata elegans subsp. nov.

♂, 29 mm. Somewhat intermediate between *p. pyropata* (Hübner) [1808-1804] from central Europe and *p. sugitanii* Prout (1937) from the central mountainous region of Honshu; forewing with antemedian white line not so even as in *sugitanii*, but less strongly dentate than the nominotypical race, white margins of the median dark band narrower and more strongly curved than in *sugitanii*, the white distal edge of the median band from costa to R_2 dentate (while in *sugitanii* it is even), the subapical white mark weak as in *pyropata*. Hindwing with postmedian line weak.

Holotype & Paratype: 2 ♂♂, Near Lake Akan, Kushiro, Hokkaido, 23 July 1952 (K. Ijima).

Thera sounkeana ishizukai subsp. nov.

♂♀, 30–32 mm. Antenna in ♂ ciliate, ciliation long, a little over the length of diameter of shaft, in ♀ simple. Head and palpi fuscous brown, mixed with whitish scales.

Forewing dark reddish brown, much darker than *comis* (Butler) (1879) and *abolla* Inoue (1943); basal line oblique, subbasal line strongly crenulate, basal patch limited by the subbasal line dark brown, antemedian nearly parallel with subbasal, angled at the origin of M_2, there is no dark blotch at the hindmargin between subbasal and antemedian, postmedian dentate-sinuous, produced at R_2, central band between ante- and postmedian dark brown, black discal fleck distinct, subterminal line strongly dentate as in *comis*, outer margin of subbasal and postmedian and proximal margin of antemedian narrowly edged with whitish, termen spotted with blackish brown on each side of vein. Hindwing pale brownish grey, weak discal fleck and postmedian line.

Under surface of both wings with discal dots and postmedian lines well-developed, forewing with subterminal dark clouding anteriorly distinct, veins are darker than the ground-colour on both wings.

♂ genitalia: costa broadened apically, apex acutely pointed; uncus very long, about as long as the length of costa; sacculus long; cornuti many short spines.

Holotype: ♂, Mt. Jônen (2500 m.), Japan Alps, 26 July 1951 (H. Inoue).

Allotype: ♀, type-locality, 31 July 1953 (K. Ishizuka).

Paratypes: 1 ♀, Tsubakuro-dake (2600 m.), Japan Alps, 25 July 1942 (I. Fujiyama), 2 ♂♂, data as holotype (H. Inoue), 7 ♂♂, data as allotype (K. Ishizuka), 8 ♂♂, 4♀♀, Mt. Norikura (2700 m.), Japan Alps, 10-11 Aug. 1953 (T. Haruta), 6 ♂♂, Mt. Ebôshi (2540 m.), Japan Alps, 4 Aug. 1954 (K. Ishizuka). 2 paratypes in coll. Brit. Mus. (Nat. Hist.) and 1 paratype in coll. T. Haruta.

Easily separable from *comis* and *abolla* by its darker colour, lack of characteristic black blotch at the hindmargin of forewing, less acutely angulated anteme-

* Continued from Kontyû, vol. 22, nos. 1/2, p. 35, 1954.

dian line and the ♂ antennal structure (in *comis* and *abolla* bipectinated). Distinguished from the European congeners that bear ciliated antennae in ♂ by its large size, longer ciliations, its colour and ♂ gentitalia.

I checked the type of the moninotypical *sounkeana* (Matsumura) (Ins. Mats., 1: 184, 1927) from Sounkei, Mt. Daisetsu, and found that 3 ♂♂* in my collection match *s. sounkeana*. According to the original description, *sounkeana* has the antenna in ♂ "fine bipectinate", but it is an error of observation.

The present subspecies from the Japan Alps is larger and a little lighter in colour and postmedian line of forewing more weakly incurved in cellule 6, discal fleck a little less heavier than *s. sounkeana*.

It is highly probable that *Thera kurilaria* (Bryk) (Iris, 56: 70, 1942)† from Shimushir Island, Kuriles, is synonymous with or a race of *sounkeana*, since the description matches *sounkeana* in its length of forewing and the structure of ♂ genitalia.

For the convenience of diagnosis all the *Thera* species found in Japan will be listed as follows:

A. ♂ antenna ciliate.
variata (Schiffermüller) (1776) — Hokkaido (unrecorded), Honshu, Korea, Saghalien, China, E. Siberia, C. Asia, Europe.
quadrifulta (Prout) (1938) — Honshu (Central Mts.), ? Korea.
praefecta (Prout) (1914)‡ — Honshu.
sounkeana sounkeana (Matsumura) (1927) — Hokkaido (Mts.).
s. ishizukai Inoue (1954) — Honshu (Japan Alps).

B. ♂ antenna bipectinate.
comis (Butler) (1879) — Honshu, Shikoku, Ussuri, W. China.
abolla Inoue (1943) — Honshu.

Operophtera nana sp. nov.

♂, 26-30 mm. Very similar to *relegata* Prout (1908) and *japonaria* (Leech) (1891), but wings more rounded, markings weaker, antennal ciliations much shorter than in *relegata* and a little shorter than in *japonaria*; forewing with discocellulars strongly biangulate, R_2 arising from the lower angle (whereas in *japonaria* discocellulars weakly curved inward, R_2 from the middle), R_1 from beyond middle of areole, lines and bands much weaker than in *relegata*, antemedian line gently excurved outward (while in *japonaria* arched or strongly denticu-

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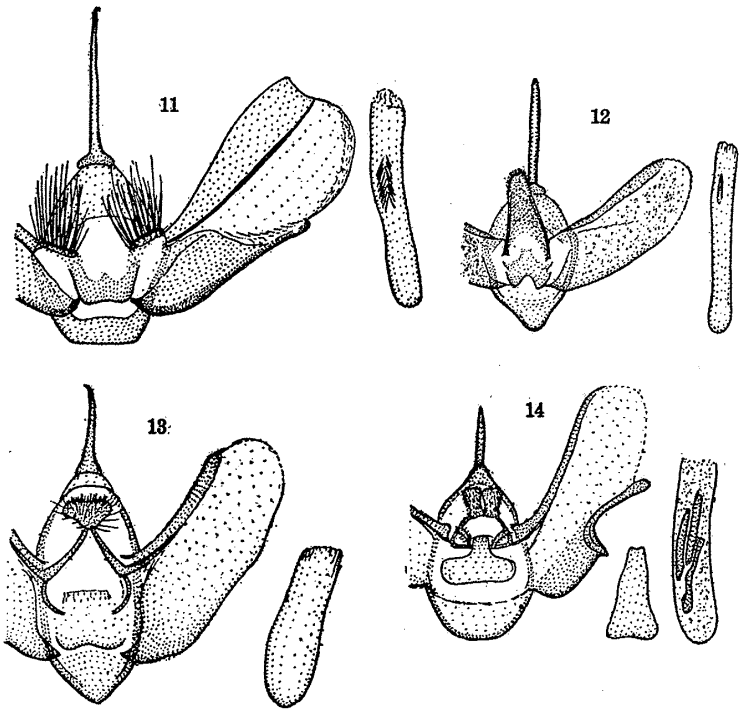
* 2 ♂♂, Kurodake Mt. Daisetsu, 2 Aug. 1951 (M. Nakamura), 1 ♂, Mt. Teshio (1590 m.), 29 July 1949 (T. Hasegawa).

† He described *kurilaria* by 1 ♂ and its subspecies *ecce* Bryk (loc. cit.: 71, t. 2, f. 14) by 1 ♀ from Kunashiri Island, about 370 miles SW. of Shimushir. I wonder how he did know the distinction between the ♂ and ♀ he observed, as to whether it was of individual or sexual or racial! At any rate, it seems to be impossible that a certain species of moths is so specialized in one island from another in the Kuriles as to be a distinct race.

‡ The male of this species is undescribed, but there are 2 ♂♂ in my collection: Akagi-yama, Gumma Pref., 30 May 1943, coll. T. Sato (erroneously recorded by me as *quadrifula*, Trans. Kansai Ent. Soc., 14 (1): 81, 1944); Yabitsu Pass (800 m.), Kanagawa Pref., 30 April 1954, coll. K. Ishizuka.

late), black mark on M_2 and X-shaped mark at the base of R_3 and M_1 nearly as in *japonaria* or a little weaker, subapical black streak wanting. Hindwing paler than *japonaria* and coloured nearly as in *relegata*.

♂ genitalia: valva not so long as in *japonaria*, but a little longer than in *relegata*; labides shaped about as in *relegata*, but smaller (in *japonaria* elongate, narrowed apically); uncus much longer than in *relegata* and similar to *japonaria* but still narrower, tip rounded (the tip of uncus is sharply pointed both in *relegata* and *japonaria*).



Male genitalia:

Fig. 11. *Thera sounkeana ishizukai* subsp. nov. Fig. 12. *Operophtera nana* sp. nov. Fig. 13. *Perizoma japonica* sp. nov. Fig. 14. *Eupithecia takao* sp. nov.

♀ unknown, but presumably semi-apterous.

Holotype and paratypes: 7 ♂♂, Yumoto (about 1500 m.), Nikko, 24-25 Oct. 1929 (A. Kawada).

This new species seems to be mountainous, while *relegata* and *japonaria* are common at the level land and low mountains in Honshu and they are so far not found in such high land as Nikko.

Acolutha pictaria shirozui subsp. nov.

♂♀, 15-16 mm. Very small as *p. imbecilla* Warren (Novit. Zool., 12: 426, 1905) from Hainan, but distinguished from it as well as from the nominotypical *pictaria* (Moore) (1887) by the paler costal area of forewing and brighter yellow bandings on hindwing.

Holotype (♂), allotype (♀) and 1 ♂ paratype: Ambô, Yakushima Island, 24 July 1950 (T. Shirôzu). 1 ♀ paratype: Miyanoura, Yakushima, 29 April 1954 (Y. Kurosawa), in coll. Sci. Mus., Tokyo. 1 paratype in coll. Brit. Mus. (Nat. Hist.).

Perizoma japonica sp. nov.

♂♀, 18-20 mm. Best comparable with *blandiata* (Schiffermüller) (1776), but ground-colour pale ashy grey with bluish tinge; forewing somewhat more elongate, termen less convex, blackish basal patch distinct, angled in cell or irregularly curved, central band represented by a round or nearly triangular black spot on the costal margin, discocellular black spot is enclosed in the costal spot, band is pale in the middle but again dark between SM_2 and hindmargin, proximal margin of the band angled in the cell, then oblique outward to the hindmargin, distal margin of the band weakly undulated, veins are tinged with black at the both sides of the band, marginal area dark clouded, pale subterminal dentate line running from the costa to the tornus. Hindwing with black discal dot, sometimes weak subterminal dark band traceable, distal area never infuscated as in *blandiata*.

Under surface of forewing darker than the above, costal spot and the pale subterminal line of the above weakly reproduced, hindwing with discal dot and postmedian line, subterminal dark clouding very weak but visible.

♂ genitalia: close to *blandiata*, but perhaps valva more or less longer, with ventral or outer margin less smooth, aedoeagus thicker and shorter.

Holotype: ♂, Mt. Jônen (2500 m.), Japan Alps, 26 July 1951 (H. Inoue).

Allotype: ♀, locality as above, 31 July 1953 (K. Ishizuka).

Paratypes: 4 ♂♂, locality as above, 26 July 1951 (H. Inoue), 8 ♂♂, 5 ♀♀, locality as above, 31 July 1953 (K. Ishizuka). 2 paratypes in coll. British Museum (Nat. Hist.).

Eupithecia takao sp. nov.

♂♀, 21-25 mm. Antennal ciliations in ♂ about twice as long as diameter of shaft, in ♀ less than one-half of the shaft. Resembles *carearia* Leech (1897), but still larger, fulvous brown, ante- and postmedian lines black, very distinct, antemedian acute-angled in cell, postmedian sinuous, weakly incurved at its anterior half, discal spot elongate, heavy, postmedian connected with the discal spot at the origin of R_3, very often the angle of the antemedian touches the discal spot, forming a triangular with the anterior half of the postmedian, subterminal white line and its proximal clouding well-developed, very often posterior margin of cell and M_1 from origin to the postmedian blackened. Hindwing with lines distinct along the abdominal margin in cellule 1, discal spot sometimes vestigial, but frequently distinct, proximal shading of subterminal line from costa to abdominal margin.

Under surface paler, anterior half of forewing more or less infuscated, postmedian line of forewing represented by a costal spot, of hindwing dashes on veins, both wings with discal dash distinct.

♂ genitalia: valva strongly emarginated at the ventral margin, highly sclerotized harpe developed along the emargination, costa more acutely curved than in *carearia*; uncus longer than in *carearia*; cornuti three strong plates, aedoeagus as in most species of the genus and much shorter than in *carearia*; eighth sternum very weakly concave at the caudal and basal margins, tapered caudally, about

twice as long as width of base.

Holotype: ♂, Takao-san, Tokyo, 14 March 1940 (H. Inoue).

Allotype: ♀, Fudakake, Tanzawa Mts., Kanagawa Pref., 12 April 1939 (H. Inoue).

Paratypes: 2 ♂♂, 2 ♀♀, data as allotype; 2 ♂♂, data as holotype (H. Inoue), 5♂♂, type-locality, 25 March 1952; 5 ♂♂, 3 April 1952; 1 ♂, 21 March 1953; 2 ♂♂, 22 March 1954 (K. Ishizuka). 3 ♂♂ (paratypes) in coll. Brit. Mus. (Nat. Hist.).

Subfamily **Ennominae**

Abraxas sylvata ijimai subsp. nov.

The Hokkaido specimens are nearly as large as the 1st brood of *s. fulvobasalis* Warren (1894) from Honshu and Kyushu, but dark markings more reduced, basal patch more or less lighter in colour, hindmarginal blotch smaller. Superficially similar to *orientalis* Staudinger (1897), but in most specimens costal and apical area of forewing with fewer small dots.

Holotype: ♂, Futatsu-yama, Shibecha, Kushiro, 28 June 1951 (K. Ijima).

Allotype: ♀, Ikomanbetsu, Foot of Mt. Daisetsu, 2 Aug. 1951 (M. Nakamura).

Paratypes: 1 ♂, 2 ♀♀, data as allotype (M. Nakamura), 6 ♂♂, 10 ♀♀, type-locality, 6 July—4 Aug. 1952; 1 ♂, 1♀, Akan, Kushiro, 23 July 1952 (K. Ijima), 2 ♂♂, Usubetsu-onsen, near Sapporo, 3 Aug. 1954 (H. Inoue). 1 paratype in coll. Brit. Mus. (Nat. Hist.).

Pseuderannis lomozemia incana subsp. nov.

Much paler than the nominotypical race from Honshu, especially the median area between ante- and postmedian lines almost white; expanse nearly identical with. *l. lomozemia* (Prout) (1930).

Holotype: ♂, Futatsu-yama, Shibecha, Kushiro (Hokkaido), 17 May 1952 (K. Ijima).

Allotype: ♀, locality as above, 30 May 1952 (K. Ijima).

Paratypes: 3 ♂♂, 1 ♀, type-locality, 11-30 May 1951; 2 ♂♂, 6 & 17 May 1952; 1 ♂, 3 ♀♀, 24 May 1954 (K. Ijima).

Boarmia invenustaria ijimai subsp. nov.

More or less smaller than the nominotypical race, wings paler, postmedian line more weakly lunulate, its brown shade very weak, discal marks on above and beneath much less developed.

Holotype: ♂, Futatsu-yama, Shibecha, Kushiro (Hokkaido), 6 July 1952 (K. Ijima).

Paratypes: 2 ♂♂, type-locality, same date (K. Ijima); 3 ♂♂, Usubetsu-onsen, near Sapporo, 3 Aug. 1954 (H. Inoue).

Boarmia roboraria nipponica subsp. nov.

Much paler than the nominotypical race from Europe and *arguta* Butler (1878) from the level land of Honshu, Shikoku and Kyushu, lines conspicuous, size and cell spot on both wings smaller than in *arguta*, subapical dark clouding on forewing beneath less developed than in *arguta*, postmedian series of spot weaker than in *arguta* and similar to moninotypical race.

This subspecies is found in Hokkaido and the central mountainous region of

Honshu.

Holotype: ♂, Nakabusa-onsen (1400 m.), Nagano Pref., 24 July 1951 (H. Inoue).

Allotype: ♀, Yumata (1532 m.), Nagano Pref., 23 July 1943 (I. Fujiyama).

Paratypes: 1 ♂, Kamikôchi, (1500 m.) Nagano Pref., 28 July 1951 (H. Inoue), 3 ♂♂, Kamikôchi, 2 Aug. 1953 (T. Haruta), 1 ♂, Kamikôchi, 3 Aug. 1953 (K. Ishizuka), Futatsu-yama, Shibecha, Kushiro, Hokkaido, 1 ♂, 10 July 1951; 3 ♂♂, 6-14 July 1952 (K. Ijima). Each 1 paratype in coll. British Muesum (Nat. Hist.) and in coll. T. Haruta.

Erannis gigantea sp. nov.

Erannis (s. str.) *jacobsoni* Inoue (nec Djakonov), Trans. Kansai Fnt. Soc., 12 (2): 21, 1943.

♂, 45-47 mm., length of forewing 25-26 mm. Much larger shan *defoliaria* (Clerck) (1764), *golda* Djakonov (1929) and *jacobsoni* Djakonov (1926). Antennal structure about as in *defoliaria*.

Forewing a little narrower than in *defoliaria* and *golda*, concavity of the termen as in *golda*; considering from the two specimens before me ground-colour quite unstable as in *defoliaria*, antemedian 7-9 mm. from base at costa, strongly bent on the fold and angled in cell, 4-7 mm. from base on SM_2, proximal suffusion of the antemedian and distal clouding of the postmedian are very strong, dark brown in the pale yellow form, but vague in the dull russet brown form; postmedian pronounced, darker than the antemedian, arising from costa 6-7 mm. from apex, oblique outward, strongly produced in cellule 5, then oblique inward, running the origin of R_3 and M_1, more or less incurved at hindmargin, 4-5 mm. from termen on SM_2, very weak median shade nearer to postmedian than to antemedian, discal spot heavy. Hindwing as in *defoliaria* and *golda*, but slightly more elongate.

Under surface as on above, but more yellowish, hindwing more irrorated and discal spot and postmedian line more distinct.

♂ genitalia: very similar to *defoliaria* and perhaps nearly identical with *jacobsoni*, valva with ventral margin more irregularly curved than in *golda*, uccus and gnathos narrower.

Holotype: ♂, Karuizawa (900 m.), Nagano Pref., 6 Sept. 1945 (H. Inoue).

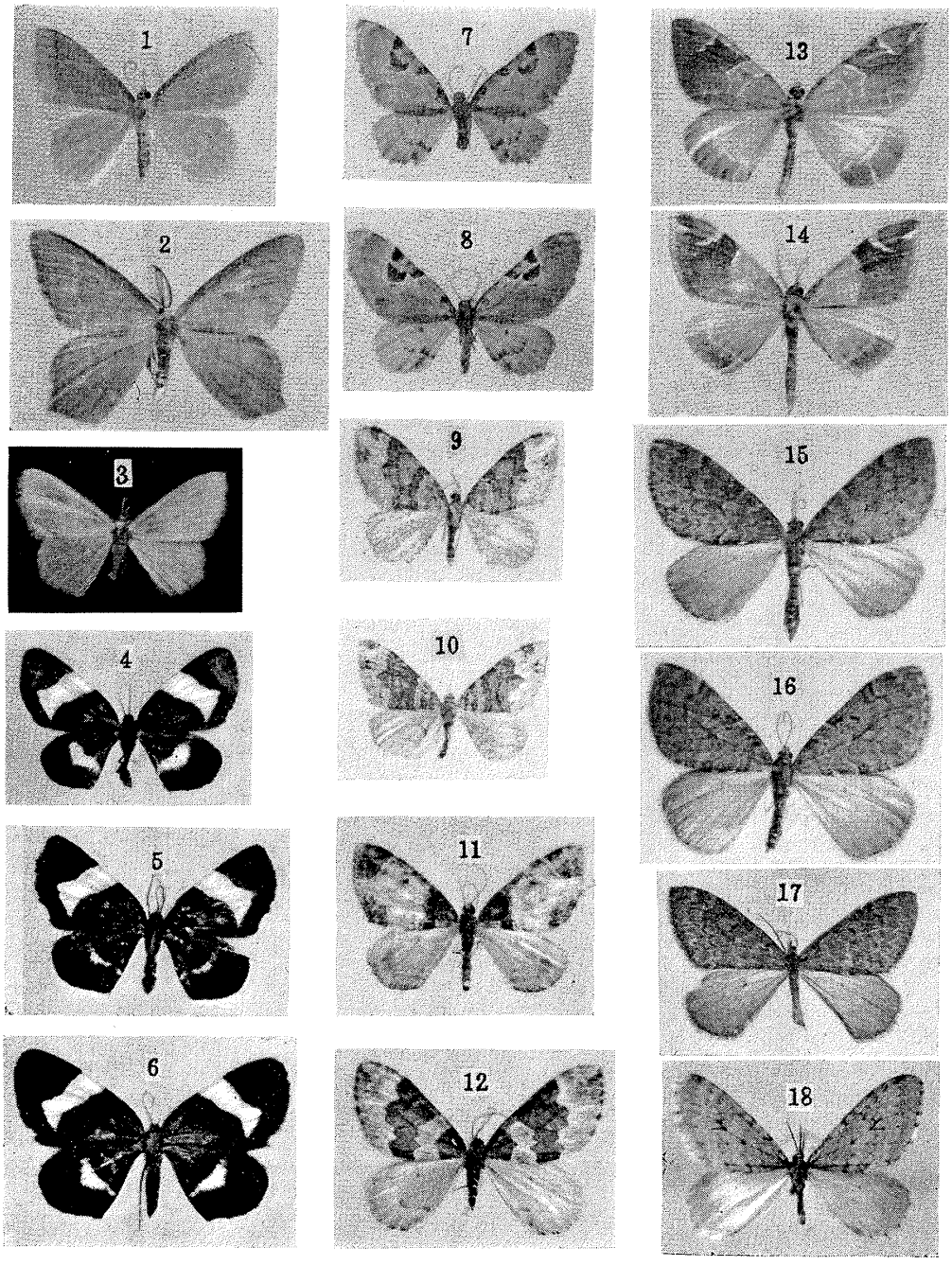
Paratype: 1 ♂, Chüzenji, Nikko, 24 Oct. 1929 (A. Kawada). The three males (Kokushidake, Yamanashi Pref. and Yumoto, Nikko) recorded by me as *jacobsoni* (1943) were reduced to ashes during the war, but without doubt they belong to this new species.

This species seems to be distributed in the central mountainous region of Honshu; the holotype is a uniformly dark brown form while the paratype is the banded form, with pale yellow ground-colour.

Very closely related to *jacobsoni* Djakonov from the central Altai (*ectroma* Prout (1929) is supposed to be its race from the Ussuri district), but larger in size and it appears in autumn while *jacobsoni* and *ectroma* wing in spring.

Erannis rara sp. nov.

♂, 39-41 mm., length of forewing 21-22 mm. Antenna about as in *defoliaria*, fascicles a little shorter.



Inoue — New Geometridae from Japan. 1

Forewing nearly as in *golda*, ground-colour varies from pale orange yellow to orange yellow, irrorated with brown; excepting its size and shape, it is superficially very similar to *aurantiaria* (Hübner) [1808-1814], antemedian as in *defoliaria*, postmedian nearly straight, but sometimes very weakly curved at the anterior half and weakly incurved at hindmargin, about 5 mm. from apex at costa and about 3-4 mm. from termen on SM_2, proximal shading of antemedian and distal one of postmedian sometimes strong, but not extremely so as in *defoliaria* and *gigantea*; discal spot weak, often represented by darkening of the ground-colour, median shade nearly midway between ante- and postmedian line, arising from costal diffusion, where it is a little nearer to postmedian than to antemedian, entirely or nearly entirely vanishes behind the cell, fringes weakly spotted in dark specimens but unspotted in light specimens. Hindwing coloured between *defoliaria* and *aurantiaria*, more yellowish than in *golda*, discal spot and postmedian line vestigial.

Under surface of both wings coloured about as in *aurantiaria* or a little paler, postmedian line of both wings traceable, discal spot of hindwing stronger than on the upper surface.

Holotype and 5 ♂♂ (paratypes): Okushibetsu, Teshio, Hokkaido, 11-14 Oct. 1947 (T. Hasegawa), 1 ♂ (paratype): Shibecha, Kushiro, 30 Oct. 1953 (K. Ijima). 1 paratype in coll. Brit. Mus. (Nat. Hist.).

Considering from the six specimens the range of pattern variation seems to be more limited than in *defoliaria*, *golda* and *gigantea*.

♂ genitalia nearly identical with *golda*, but uncus and gnathos appreciably narrower.

1 ♂ collected by Mr. S. Yamamoto at Tavanho, East Manchuria on 14 Sept. 1943 in my collection matches the present new species in pattern, course of lines and the structure of ♂ genitalia, but slightly larger in size. I have omitted from selecting it as a paratype, as there is possibility of separating it as a race in future.

Hypoxystis kozhantshikovi uniformis subsp. nov.

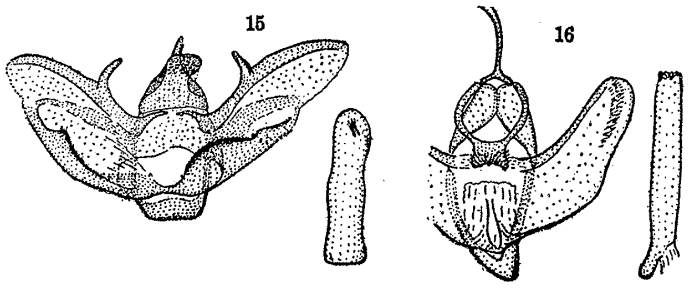
♂, 33-35 mm., ♀, 30-33 mm. More or less smaller than the nominotypical race from the Amur district, Manchuria and Tibet, postmedian line of forewing rudimental and represented by weak dashes on veins, that of hindwing scarcely traceable or entirely faded away; under surface with postmedian line also much weaker than in the nominotype.

♂ genitalia: finger-like process of costa more or less longer than in the nominotypical race.

Holotype (♂) and allotype (♀): Futatsu-yama, Shibecha, Kushiro (Hokkaido), 29 May 1952 (K. Ijima).

Paratypes: 1 ♂, type-locality, 25 May 1951; 1 ♂, 2 ♀♀, 29 May 1952; 1 ♂, 2 ♀♀, 24 & 30 May 1954; 1 ♂, Shirarutoro, Kushiro, 4 June 1953 (K. Ijima).

If *H. mandli* Schawerda (Zeit. österr. Ent.-Ver., 9: 89, 1924) from the Ussuri district is proved to be identical with *kozhantshikovi* Djakonov (Rev. Russe Ent., 18: 181, 1924), the present subspecies will have to be combined as *mandli uniformis*. (Cfr. Wehrli in Seitz, Macrolep., 4: 374-375, 1940).



Male genitalia:

Fig. 15. *Hypoxystis kozhantshikovi uniformis* subsp. nov.
Fig. 16. *Aspitates obliquizona* Inoue.

Aspitates obliquizona Inoue

Aspitates (s. str.) *obliquizona* Inoue, Tinea, 1 (1): 18, 1953.

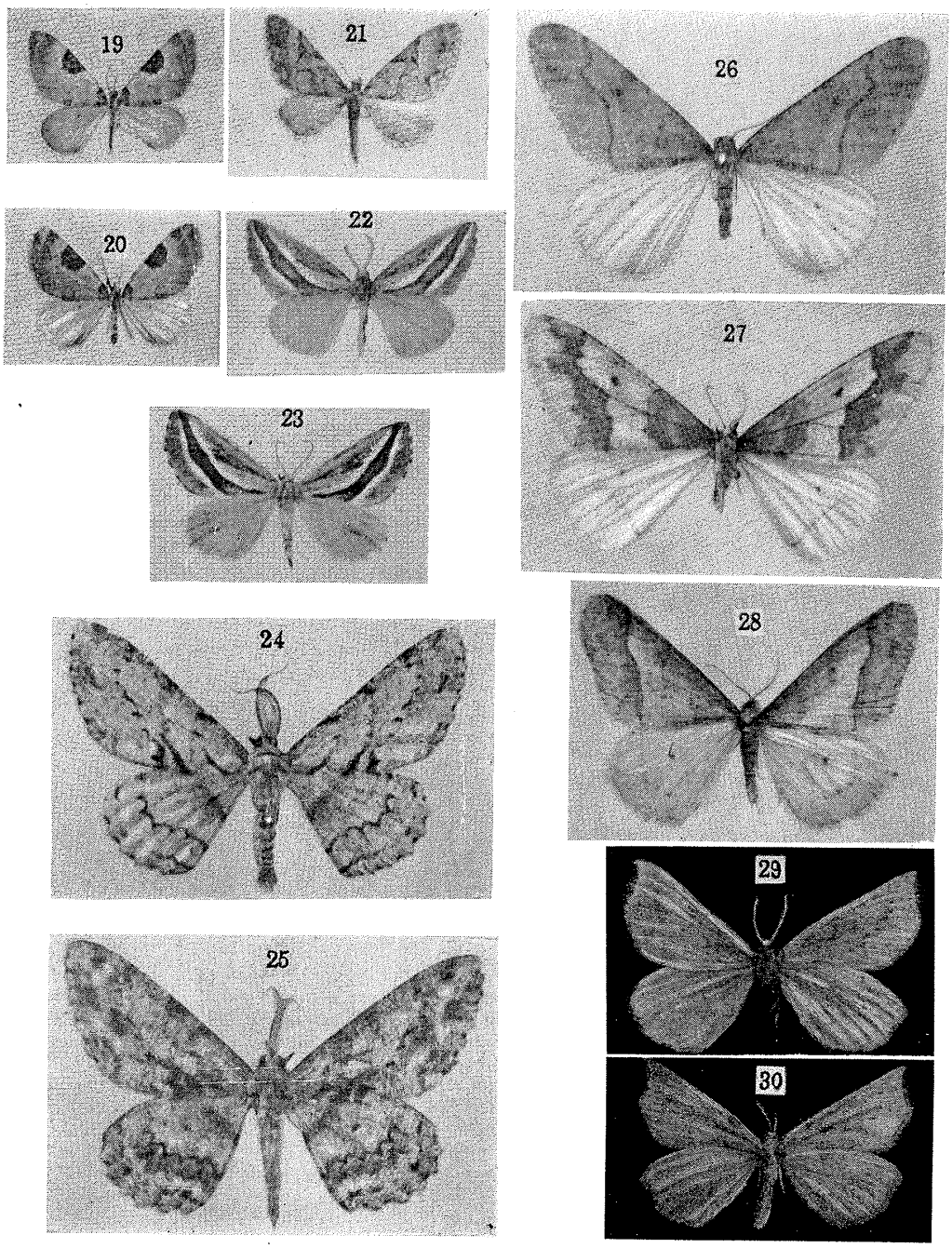
Dissection of the male genitalia revealed that this species has little affinity with *Aspitates* (type: *gilvaria* Schiffermüller) and therefore a new genus may be demanded for it in future. In *Aspitates* valva complicated, costal arm produced with two or more hamulate spines, but in *obliquizona* valva simple, costa smooth, without the arm, uncus much slenderer than in the typical *Aspitates*.

As I gave no figures in the original description, I inserted the pictures of the holotype and allotype into the Pl. 7, f. 22 & 23.

Explanation of Plates

Plate 6

1. *Chlorissa macrotyro* sp. nov., ♂ (Paratype).
2. *Gelasma fuscofrons* sp. nov., ♂ (Paratype).
3. *Scopula analogia* sp. nov., ♂ (Paratype).
4. *Boptria tibiale hiroobi* subsp. nov., ♀ (Holotype).
5. Ditto, ♀ (Paratype).
6. *Baptria tibiale aterrima* ab. *shiroobi* ab. nov., ♀ (Holotype).
7. *Physetobasis triangulifera* sp. nov., ♂ (Holotype).
8. Ditto, ♀ (Allotype).
9. *Xanthorhoë dentipostmediana* sp. nov., ♂ (Holotype).
10. Ditto, ♀ (Paratype).
11. *Coenotephria albicoma* sp. nov., ♂ (Holotype).
12. *Coenotephria anomala* sp. nov., ♂ (Holotype).
13. *Lygris pyropata elegans* subsp. nov., ♂ (Holotype).
14. *Lygris pyropata sugitanii* Prout, ♂.
15. *Thera sounkeana ishizukai* subsp. nov., ♂ (Holotype).
16. Ditto, ♀ (Allotype).
17. *Thera sounkeana sounkeana* (Matsumura), ♂.
18. *Operophtera nana* sp. nov., ♂ (Holotype).



Inoue — New Geometridae from Japan. 1

Plate 7

19. *Perizoma japonica* sp. nov., ♂ (Holotype).
20. Ditto, ♀ (Allotype).
21. *Eupithecia takao* sp. nov., ♂ (Paratype).
22. *Aspitates obliquizona* Inoue, ♂ (Holotype).
23. Ditto, ♀ (Allotype).
24. *Boarmia roboraria nipponica* subsp. nov., ♂ (Paratype from Kamikôchi, Nagano Pref.).
25. *Boarmia roboraria arguta* Butler, ♂.
26. *Erannis gigantea* sp. nov., ♂ (Holotype).
27. Ditto, ♂ (Paratype).
28. *Erannis rara* sp. nov., ♂ (Holotype).
29. *Hypoxystis kozhantshikovi uniformis* subsp. nov., ♂ (Holotype).
30. Ditto, ♀ (Allotype).

鳥島の蛾2種

井上寛

八丈島から南へ凡そ 300 km., 伊豆七島と小笠原諸島の中間にある南海の孤島鳥島で, 藤山家徳氏が 1950 年 8 月 13 日と 14 日に採集された蛾は, 次の 2 種であつた. 茲に記録して貴重な標本を下さつた同氏の御好意に感謝したい.

Pyralidae メイガ科

Bradina admixtalis Walker イネノハカジミズメイガ

多数の雄をいただいたが, 本州のものと殆んど差異がない.

Noctuidae ヤガ科

Grammodes geometrica orientalis Warren ナカグロクチバ

1 ♂. 亜種名については再検討を要する. 本種は, 従来わが国では九州・種子島・奄美大島などから知られている. アフリカ・インド・オーストラリアなど熱帯・亜熱帯に広く分布しているもので, 将来四国や本州南岸地域で発見される可能性がある.