

Butterflies (Insecta: Lepidoptera) collected from the Kamchatka Peninsula and North Kuril Islands in 1996–1997

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Abstract Thirty-three subspecies which belonging to 32 species and six families of butterflies (Lepidoptera) are recorded from the Kamchatka Peninsula and North Kuril Islands, based on material collected during the Biological Expedition to the Kamchatka Peninsula and North Kuril Islands in 1996 and 1997. Two subspecies, *Colias tyche relict*a Kurentzov, 1970 and *Oeneis normna chione* Austaut, 1911 are newly recorded from the Kamchatka Peninsula.

Key words: butterflies, Lepidoptera, Kamchatka Peninsula, Kuril Islands.

Alphéraky (1897) recorded 26 species of butterflies from the Kamchatka Peninsula for the first time. Kurentzov (1963, 1966) reported data on the butterfly fauna of the Kamchatka Peninsula based on the samples collected during 1958–1960 and Kurentsov (1970) discussed the distribution and variation of local populations of 39 Kamchatian species. Tuzov (1993) and Korshunov (1995) listed 37 and 50 species of butterflies from the Kamchatka Peninsula, respectively. Recently, Yazaki (1995) reported four species from Mt. Klyuchevskaya, and Ikezawa (1996) listed 15 species collected during his trip to the Kamchatka Peninsula.

There are very few records of the butterflies of the North Kuril Islands. Matsumura (1927a, b) described *Argynnis selene chibiana*, and *Lycaena optilete kurilensis* as a new subspecies based on the materials collected by K. Doi in 1926 and 1927, and Esaki (1933) reported two species from the North Kuril Islands, collected by K. Koba and K. Okada in 1931.

The Biological Expedition to the Kamchatka Peninsula and North Kuril Islands of the Natural History Museum and Institute, Chiba, was carried out in 1996 and 1997. It was a part of a project entitled “The Origin

and Biogeography of the Northeast Asian Biota,” in co-operation with the Institute of Biology and Pedology and the Institute of Marine Biology belonging to the Far Eastern Branch of the Russian Academy of Sciences, Vladivostok.

In the present paper, a list of the butterflies is presented based on the material collected during the expedition.

Materials and Methods

Specimens were collected at 22 sites on the Kamchatka Peninsula, during the periods 3rd to 17th July 1996, 7th to 10th July 1997 and 27th July to 5th August 1997. On the North Kuril Islands, butterflies were collected at seven sites on Paramushir Island and one site from Shumshu Island, during the periods 11th to 24th July 1997. The sampling localities are shown in Figs. 1 and 2 and detailed information is given below.

Kamchatka Peninsula

KP-1: 5 km west of Mt. Vilyuchinsky (52°42' N, 158°10' E), alt. ca. 154 m.

KP-2: Bystraya River (riverside), 11 km north of Malki (53°26' N, 157°32' E), alt. ca. 220 m.

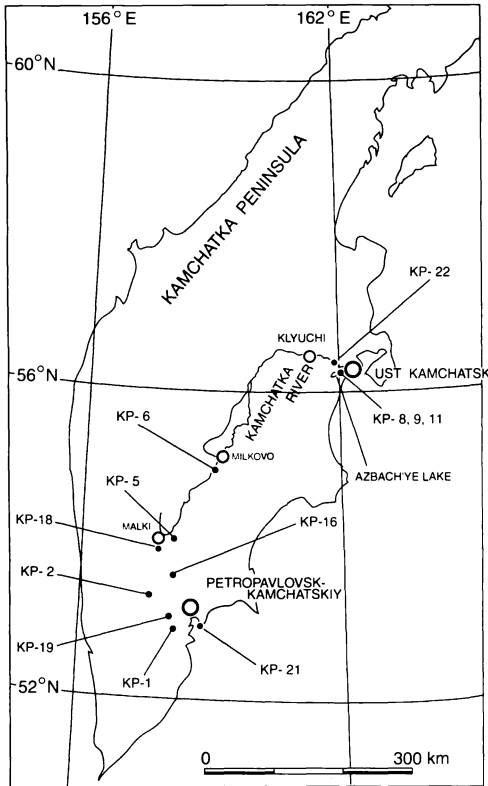


Fig. 1. Map of study sites in the Kamchatka Peninsula. For detailed explanations, see text.

- KP-5:** Pravaya River (upper part), 23 km south of Pushchino ($54^{\circ}01'N$, $157^{\circ}51'E$), alt. ca. 540 m.
- KP-6:** Milkovo Village ($54^{\circ}42'N$, $158^{\circ}36'E$), alt. ca. 112 m.
- KP-8:** Biological Station near Azhabach'ye Lake ($56^{\circ}11'N$, $161^{\circ}59'E$), alt. ca. 20 m.
- KP-9:** Inlet small stream, Azhabach'ye Lake (left side) ($56^{\circ}09'N$, $161^{\circ}55'E$), alt. ca. 20 m.
- KP-11:** Athal Stream near Azhabach'ye Lake ($56^{\circ}11'N$, $161^{\circ}41'E$), alt. ca. 20 m.
- KP-16:** Poperechnaya River, Bystraya River basin, 17 km from main road ($53^{\circ}23'N$, $157^{\circ}41'E$), alt. ca. 320 m.
- KP-18:** Bystraya River basin, 30 km north of Ganaly ($53^{\circ}58'N$, $157^{\circ}45'E$), alt. ca. 390 m.
- KP-19:** Mt. Vachkazhets, Upper part of Takholoch River, basin of Plotnikova ($53^{\circ}05'N$, $157^{\circ}55'E$), alt. ca. 550 m.
- KP-21:** Lagernaya Bay, 6 km southeast from Petropavlovsk-Kamchatskiy ($52^{\circ}55'N$, $158^{\circ}41'E$), alt. ca. 10 m.

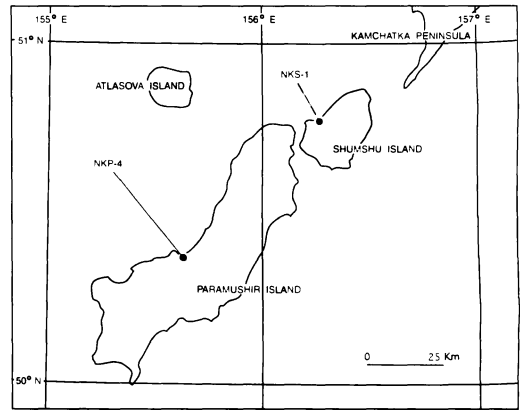


Fig. 2. Map of study sites in the North Kuril Islands. For detailed explanations, see text.

KP-22: Ebet Mountains (south part), 42 km northwest of Ust'Kamchatsk ($56^{\circ}30'N$, $161^{\circ}59'E$), alt. ca. 150 m.

North Kuril Islands: Paramushir Island

NKP-4: Shelekhovo ($50^{\circ}22'N$, $155^{\circ}37'E$), alt. 10 m.

North Kuril Islands: Shumshu Island

NKS-1: Lake Bol'shoye ($50^{\circ}46'N$, $156^{\circ}15'E$), alt. 15 m.

Specimens were collected by using entomological nets and were preserved in paper triangles. Most of them are deposited in the Natural History Museum and Institute, Chiba (CBM, with a code of ZI).

List of collected species

Information on the specimens is given in the following sequence: scientific name, site of collection (abbreviation), number of specimens, date, collector, registration number (CBM-ZI), and known distribution. Collector's names are abbreviated as follows. AS: Akiko Saito; RBK: Ryoichi B. Kuranishi; YI: Yoshiya Iwamoto; YT: Yuri A. Tshistjakov. In the following list, 33 subspecies belonging to 32 species are recorded and these are classified into six families as follows: two subspecies of two species (Papilionidae), five subspp. of five spp. (Pieridae), eight subspp. of eight spp. (Lycaenidae), eight subspp. of seven spp. (Nymphalidae), eight subspp. of eight spp. (Satyridae) and two

subsp. of two spp. (Hesperiidae). Two species, *Colias tyche* Boeder and *Oeneis norna* Becklin have not been recorded from the Kamchatka Peninsula. *Colias tyche relict* Kurentzov and *Oeneis norna chione* Austaut are herein recorded from the Kamchatka Peninsula for the first time.

Family Papilionidae

1. *Papilio machaon kamtschadalis* Alphéraky, 1897

Material examined. **KP-1:** 1 male, 6.VII.1996, YT leg.; 1 male, RBK leg., CBM-ZI 83223; **KP-2:** 1 female, 7.VII.1996, YT leg.; 1 male, RBK leg., CBM-ZI 83224; **KP-8:** 1 female, 12.VII.1996, YT leg.; 1 female, RBK leg., CBM-ZI 83227; **KP-9:** 1 male, 13.VII.1996, RBK leg.; **KP-16:** 2 males, 27.VII.1997, YT leg.; 1 female, RBK leg., CBM-ZI 83228; 1 male, YI leg.; **KP-18:** 1 male, 30.VII.1997, YT leg.; 1 male 1 female, RBK leg., CBM-ZI 83229; 5 males 3 females, YI leg.; 2 males, AS leg., CBM-ZI 83230; **KP-19:** 1 female, 3.VIII.1997, AS leg., CBM-ZI 83231; **KP-21:** 2 males, 24.VII.1997, YT leg.; 1 male, 5.VIII.1997, YI leg.; **KP-22:** 2 males 1 female, 11.VII.1996, RBK leg., CBM-ZI 83225–83226.

Distribution. Russian Far East: Kamchatka Peninsula.

Japanese name. Ki-ageha.

2. *Parnassius phoebus kamtschaticus* Ménétrières, 1859

Material examined. **KP-21:** 12 males 1 female, 24.VII.1997, YT leg.; 11 males 2 females, YI leg.; 2 males 3 females, 5.VIII.1997, YT leg.; 1 male 1 female, RBK leg., CBM-ZI 83232–83233; 2 males 1 female, AS leg., CBM-ZI 83234–83236; 3 males 1 female, YI leg.

Distribution. Russian Far East: Kamchatka Peninsula.

Japanese name. Miyama-usuba-ageha.

Family Pieridae

3. *Pieris bryoniae kamtschadalis* Rober, 1907

Material examined. **KP-1:** 10 males, 3.VII.1996, YT leg.; 2 males, RBK leg., CBM-ZI 83237–83238; 2 males, 6.VII.1996, YT leg.;

KP-2: 2 males, 7.VII.1996, YT leg.; 1 male, RBK leg., CBM-ZI 83239; **KP-5:** 4 males, 7.VII.1996, RBK leg., CBM-ZI 83240–83243; 1 male, 8.VII.1996, RBK leg.; 1 male, 10.VII.1996, RBK leg., CBM-ZI 83244; **KP-8:** 1 male, 12.VII.1996, YT leg.; 4 males, RBK leg., CBM-ZI 83246–83247; **KP-9:** 1 male 1 female, 13.VII.1996, YT leg.; **KP-11:** 1 male 1, 15.VII.1996, YT leg.; **KP-16:** 3 males 1 female, 26.VII.1997, YI leg.; 13 males 4 females, 27.VII.1997, YT leg.; 4 males, RBK leg., CBM-ZI 83257–83259; 7 males, AS leg., CBM-ZI 83260–83262; 1 male 2 females, YI leg.; 3 males, 28.VII.1997, RBK leg., CBM-ZI 83263–83264; **KP-18:** 1 female, 29.VII.1997, RBK leg., CBM-ZI 83265; 1 female, YI leg.; 1 male, 30.VII.1997, YT leg.; **KP-19:** 2 males 1 female, 17.VII.1996, RBK leg., CBM-ZI 83248–83249; 3 males, 1.VIII.1997, YT leg.; 3 males 2 females, AS leg., CBM-ZI 83266–83267; 2 males, 2.VIII.1997, RBK leg., CBM-ZI 83268; 1 male, AS leg.; 1 male 3 females, 3.VIII.1997, AS leg., CBM-ZI 83269–83270; 2 males, 4.VIII.1997, YI leg.; **KP-21:** 1 male, 7.VII.1997, RBK leg., CBM-ZI 83250; 1 female, 24.VII.1997, YT leg.; 1 male, YI leg.; **KP-22:** 2 males, 11.VII.1996, RBK leg., CBM-ZI 83245; **NKP-4:** 1 female, 14.VII.1997, RBK leg.; 1 male, 19.VII.1997, RBK leg., 2 males, 21.VII.1997, RBK leg., CBM-ZI 83251–83252; **NKS-1:** 9 males, 22.VII.1997, RBK leg., CBM-ZI 83253–83254; 4 males, 24.VII.1997, AS leg., CBM-ZI 83255–83256.

Distribution. Russian Far East: Chukotka, Kamchatka Peninsula, North Kuril Islands.

Japanese name. Yama-sujiguro-shirochou

4. *Pontia callidice nelsoni* Edwards, 1883

Material examined. **KP-21:** 1 female, 24.VII.1997, YT leg., CBM-ZI 83271.

Distribution. Russian Far East: Chukotka, Kamchatka Peninsula.

Transbaicalien, Polar tundras of Siberia, Great Caucasus, Central Asia, Altai, Sayan.

Japanese name. Kusatsuki-shirochou.

5. *Euchloe creusa kurentzovi* Beljaev, 1986

Material examined. **KP-1:** 1 female, 3.VII.1996, YT leg.; 1 male, 6.VII.1996, YT leg.; **KP-8:** 2 males, 12.VII.1996, YT leg.; **KP-18:** 1 female, 30.VII.1997, YT leg.; **KP-22:** 6 males

1 female, 11.VII.1996, RBK leg., CBM-ZI 83272-83274.

Distribution. Russian Far East: Chukotka, Magadan, Yakutia, Kamchatka Peninsula. Northern Siberia.

Japanese name. Akatsuki-shirochou

**6. *Colias palaeno orientalis*
Staudinger, 1892**

Material examined. **KP-9:** 1 female, 13.VII.1996, YT leg.; **KP-18:** 23 males 3 females, 30.VII.1997, YT leg.; 8 males 1 female, RBK leg., CBM-ZI 83275-83278; 16 males 2 females, AS leg., CBM-ZI 83279-83286; 38 males 6 females, YI leg.; **KP-19:** 1 male, 4.VIII.1997, YI leg.

Distribution. Russian Far East: Kamchatka Peninsula, Amur, Okhotsk, Primorye.

Transbaicalien, Altai, Sayan.

Japanese name. Miyama-monkichou.

**7. *Colias tyche relicta*
Kurentzov, 1970**

Material examined. **KP-18:** 1 female, 30.VII.1997, YT leg., CBM-ZI 83287.

Distribution. Russian Far East: Chukotka, Kamchatka Peninsula (new record), Amur.

Japanese name. Amuru-monkichou.

Family Nymphalidae

8. *Neptis rivularis ludmilla* Herrich-Schaffer, 1856

Material examined. **KP-5:** 2 males, 9.VII.1997, AS leg., CBM-ZI 83289; **KP-18:** 1 male, 30.VII.1997, YT leg.; **KP-19:** 1 male, 17.VII.1996, RBK leg.; **KP-22:** 1 male, 11.VII.1996, RBK leg., CBM-ZI 83288.

Distribution. Russian Far East: Kamchatka Peninsula, Altai, Sayan.

Japanese name. Futasujichou.

**9. *Aglais urticae polaris*
Staudinger, 1871**

Material examined. **KP-16:** 1 female, 26.VII.1997, YI leg., CBM-ZI 83290.

Distribution. Russian Far East: Kamchatka Peninsula.

Northern Europe, Siberia.

Japanese name. Kohiodoshi.

**10. *Melitaea menetriesi menetriesi*
Caradja, 1895**

Material examined. **KP-1:** 1 female, 6.VII.1996, YT leg.; **KP-2:** 1 male 1 female, 7.VII.1996, RBK leg., CBM-ZI 83291; **KP-16:** 2 males, 27.VII.1997, AS leg.; 1 male, 28.VII.1997, YT leg.; **KP-18:** 2 males, 29.VII.1997, AS leg.; 5 males 2 females, 30.VII.1997, YT leg.; 2 males, RBK leg., CBM-ZI 83292; 4 males 1 female, AS leg.; 3 males, YI leg.

Distribution. Russian Far East: Kamchatka Peninsula.

Japanese name. Menetorisu-dandarachou.

**11-1. *Clossiana selene thalia*
Herbst, 1800**

Material examined. **KP-1:** 1 male, 6.VII.1996, YT leg.; **KP-11:** 1 male, 15.VII.1996, YT leg.; **KP-16:** 1 male, 27.VII.1997, RBK leg., CBM-ZI 83293.

Distribution. Russian Far East: Magadan, Kamchatka Peninsula.

Japanese name. Nakagin-kohyoumon.

**11-2. *Clossiana selene chibiana*
Matsumura, 1927**

Material examined. **NKP-4:** 3 males, 14.VII.1997, RBK leg., CBM-ZI 83294-83295; 1 male, 17.VII.1997, RBK leg., CBM-ZI 83296; 1 male, 21.VII.1997, RBK leg.; **NKS-1:** 2 males, 22.VII.1997, RBK leg., CBM-ZI 83297; 17 males, AS leg., CBM-ZI 83298-83307; 4 males 1 female, 24.VII.1997, AS leg., CBM-ZI 83308-83309.

Distribution. Russian Far East: Sakhalin, North Kuril Islands.

Japanese name. Nakagin-kohyoumon.

**12. *Clossiana euphrosyne kamtchadalis*
Seitz, 1909**

Material examined. **KP-1:** 1 female, 4.VII.1996, YT leg.; 4 males 1 female, 6.VII.1996, YT leg.; **KP-2:** 1 male, 7.VII.1996, YT leg.; 2 males, RBK leg., CBM-ZI 83310; **KP-5:** 2 males, 8.VII.1996, RBK leg., CBM-ZI 83311; **KP-8:** 1 male, 12.VII.1996, YT leg.; **KP-16:** 1 male, 27.VII.1997, YI leg.; 2 males, YT leg.; 1 female, AS leg., CBM-ZI 83312; **KP-18:** 1 male, 30.VII.1997, YT leg.; 4 males, YI leg.; **KP-19:** 2 males, 2.VIII.1997, RBK leg.

Distribution. Russian Far East: Kamchat-

ka Peninsula.

Japanese name. Miyama-hyoumon.

**13. *Clossiana thore borealis*
Staudinger, 1861**

Material examined. **KP-6:** 1 female, 16. VII. 1996, RBK leg., CBM-ZI 83313.

Distribution. Russian Far East: Yakutia, Kamchatka Peninsula.

Widely distributed from northern Europe to Siberia.

Japanese name. Hosoba-hyoumon.

**14. *Brenthis ino siopelus*
Fruhstorfer, 1907**

Material examined. **KP-5:** 1 male, 10. VII. 1996, RBK leg., CBM-ZI 83314; **KP-16:** 1 male, 26. VII. 1997, YI leg.; 1 female, 27. VII. 1997, RBK leg., CBM-ZI 83315; 1 male, 27. VII. 1997, YI leg.; **KP-18:** 1 male, 30. VII. 1997, YT leg.; 1 male, RBK leg.; 1 female, AS leg., CBM-ZI 83316; 2 males 1 female, YI leg.

Distribution. Russian Far East: Kamchatka Peninsula.

Japanese name. Ko-hyoumon.

Family Lycaenidae

**15. *Lycaena phlaeas hypophlaeas*
Boisduval, 1852**

Material examined. **KP-21:** 1 male, 24. VII. 1997, YT leg.; **KP-18:** 1 male, 29. VII. 1997, AS leg.; CBM-ZI 83317.

Distribution. Russian Far East: Chukotka, Kamchatka Peninsula, Amur, Primorye.

Japanese name. Beni-shijimi.

**16. *Cupido minimus minimus*
Fuessly, 1775**

Material examined. **KP-8:** 2 females, 12. VII. 1996, YT leg., CBM-ZI 83318; **KP-18:** 1 female, 29. VII. 1997, YI leg.

Distribution. Russian Far East: Magadan, Yakutia, Kamchatka, Amur, Primorye.

Northern Europe, Siberia, Transbaicalien.

Japanese name. Koma-shijimi.

**17. *Lycaeides argyrognomon kamtchatica*
Kurentzov, 1970**

Material examined. **KP-18:** 3 males 1 female, 29. VII. 1997, YI leg.; 4 males, 30. VII. 1997, YT leg.; 4 males 4 females, RBK leg.,

CBM-ZI 83319–83322; 1 male 1 female, YI leg.

Distribution. Russian Far East: Kamchatka Peninsula.

Japanese name. Miyama-shijimi.

**18. *Vacciniina optilete sibirica*
Staudinger, 1892**

Material examined. **KP-18:** 2 males, 29. VII. 1997, AS leg., CBM-ZI 83323; 5 males 1 female, 30. VII. 1997, YT leg.; 3 males 5 females, RBK leg., CBM-ZI 83324–83326; 3 males 1 female, AS leg.; 2 males, YI leg.; 1 female, 3. VIII. 1997, YT leg.

Distribution. Russian Far East: Yakutia, Kamchatka Peninsula.

Northern Siberia, Altai, Sayan, Transbaicalien.

Japanese name. Karafuto-ruri-shijimi

**19. *Albulina orbitulus wosnesenskii*
Méntériés, 1857**

Material examined. **KP-1:** 4 males 1 female, 4. VII. 1996, YT leg., CBM-ZI 83327; **KP-21:** 5 males 2 females, 24. VII. 1997, YI leg.

Distribution. Russian Far East: Chukotka, Mogadan region Kolymariver, Kamchatka Peninsula.

Japanese name. Arupusu-takane-shijimi

**20. *Cyaniris semiargus altaianus*
Tutt, 1909**

Material examined. **KP-1:** 1 male, 5. VII. 1996, YT leg.; **KP-21:** 1 female, 5. VIII. 1997, AS leg., CBM-ZI 83328.

Distribution. Russian Far East: Kamchatka Peninsula.

Altai, Sayan, Transbaicalien.

Japanese name. Koujirei-shijimi

**21. *Polyommatus eros kamtschadalus*
Sheljuzhko, 1933**

Material examined. **KP-1:** 1 male, 6. VII. 1996, YT leg.; **KP-5:** 1 female, 8. VII. 1996, RBK leg., CBM-ZI 83329; **KP-18:** 1 female, 29. VII. 1997, AS leg., CBM-ZI 83330; **KP-19:** 1 male, 2. VIII. 1997, AS leg., CBM-ZI 83331; 2 males, 4. VIII. 1997, YI leg.

Distribution. Russian Far East: Mountains of Kolyma, Kamchatka Peninsula.

Japanese name. Chousen-ruri-shijimi.



Fig. 3-1. Habitus of the butterflies recorded in this study. Length from apex of head to apex of forewing in parenthesis. *Parnassius phoebus kamschaticus* Ménériès, A: male (36.0 mm), B: female (38.0 mm); *Papilio machaon kamschadalis* Alphéraky, C: male (35.5 mm); *Colias palaeno orientalis* Staudinger, D: male (23.0 mm), E: female (23.0 mm); *Colias tyche relict* Kurentzov, F: female (21.5 mm); *Pontia callidice nelsoni* Edwards, G: female (22.8 mm); *Clossiana selene chibiana* Matsumura, H, K (ventral): male (18.7 mm), I, J (ventral): female, (19.5 mm).

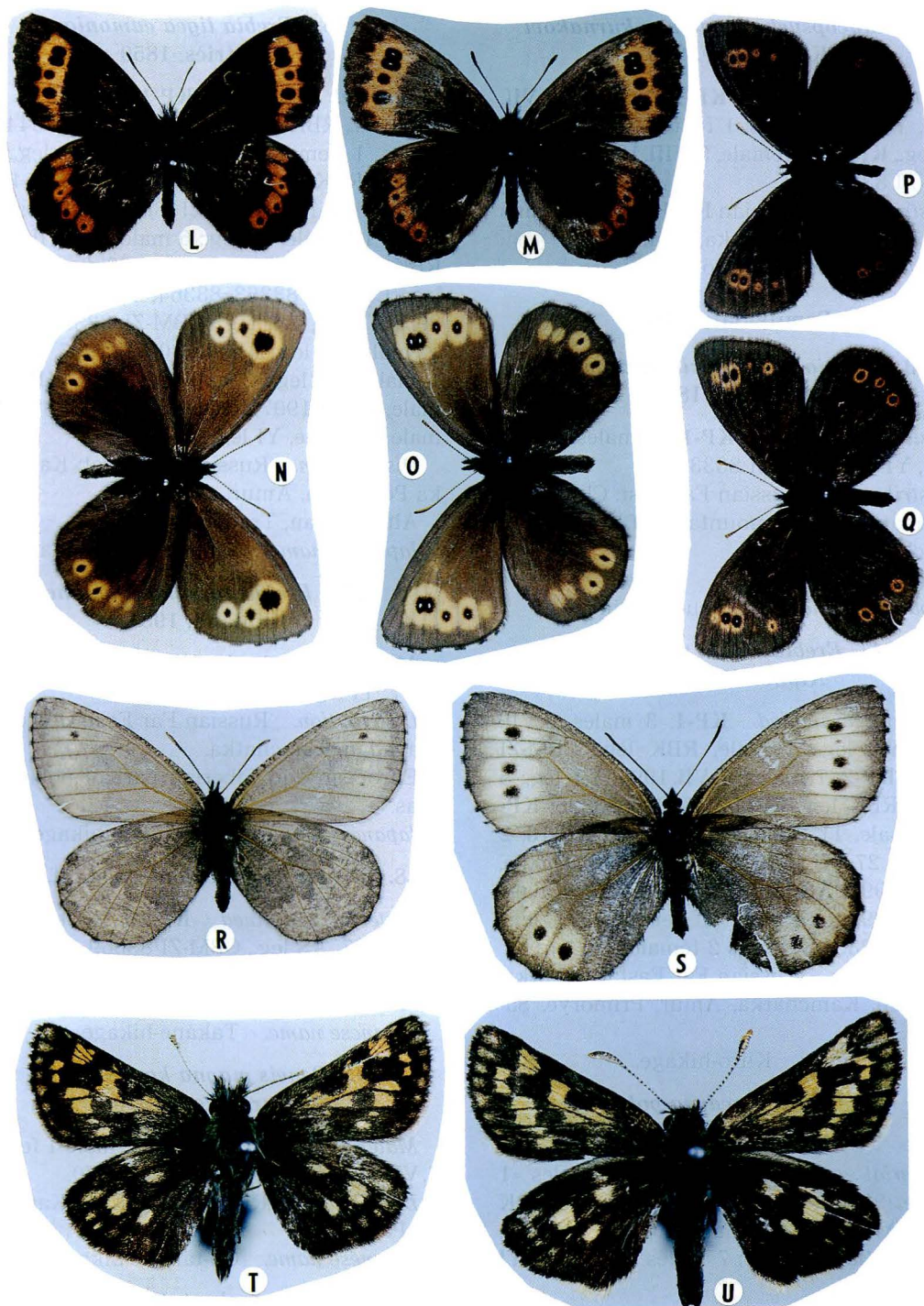


Fig. 3-2. Habitus of the butterflies recorded in this study. Length from apex of head to apex of forewing in parenthesis. *Erebia ligea eumonia* Ménètriés, L: male (22.5 mm), M: female (23.0 mm); *Erebia embla succulenta* Alphéraky, N: male (25.0 mm), O: female (25.3 mm); *Erebia medusa polaris* Staudinger, P: male (21.2 mm), Q: female (23.0 mm); *Oeneis norna chione* Austaut, R: female (26.0 mm); *Oeneis magna kamtschatica* Kurentzov, S: female (30.2 mm); *Carterocephalus palaemon albiguttata* Christoph, T: male (13.0 mm), U: female (13.2 mm).

**22. *Glaucopsyche lygdamus kurnakovi*
Kurentzov, 1970**

Material examined. **KP-1:** 1 male, 5.VII.1996, YT leg.; **KP-16:** 1 female, 27.VII.1997, YT leg.; **KP-21:** 1 female, 5.VIII.1997, AS leg., CBM-ZI 83332.

Distribution. Russian Far East: Mountains of Kolyma and Chukotka, Kamchatka.

Japanese name. Gin'iro-shijimi.

Family Satyridae

**23. *Erebia pawlowskii pawlowskii*
Ménétrières, 1859**

Material examined. **KP-19:** 2 males, 4.VIII.1997, YI leg., CBM-ZI 83333.

Distribution. Russian Far East: Chukotka, Magadan, Yakutia, mountains of Koryak and Kamchatka.

Transbaicalien.

Japanese name. Syajitsu-benihikage

**24. *Erebia embla succulenta*
Alphéraky, 1897**

Material examined. **KP-1:** 3 males, 6.VII.1996, YT leg.; 1 male, RBK leg., CBM-ZI 83334; **KP-2:** 7 males, 7.VII.1996, YT leg.; 5 males, RBK leg., CBM-ZI 83335–83336; **KP-22:** 1 male, 11.VII.1996, RBK leg.; **KP-16:** 2 females, 27.VII.1996, YI leg.; **KP-18:** 1 male, 29.VII.1997, AS leg., CBM-ZI 83337; 1 male, 30.VII.1997, YT leg.; 1 female, AS leg., CBM-ZI 83338; 2 males 2 females, YI leg.

Distribution. Russian Far East: Chukotka, Magadan, Kamchatka, Amur, Primorye, Sakhalin.

Japanese name. Kiirō-hikage.

**25. *Erebia medusa polaris*
Staudinger, 1871**

Material examined. **KP-18:** 9 males 1 female, 30.VII.1997, YT leg.; 1 male, RBK leg., CBM-ZI 83339; 5 males 1 female, AS leg., CBM-ZI 83340–83342; 7 males 2 females, YI leg.

Distribution. Russian Far East: Yakutia, Kamchatka Peninsula, northern Amur.

Northern Europe, Siberia.

Japanese name. Medusa-beni-hikage.

**26. *Erebia ligea eumonia*
Ménétrières, 1859**

Material examined. **KP-16:** 4 males, 26.VII.1997, RBK leg., CBM-ZI 83343–83344; 64 males 1 female, 27.VII.1997, YT leg.; 23 males, RBK leg., CBM-ZI 83345–83354; 10 males, AS leg., CBM-ZI 83355–83359; 139 males 1 female, YI leg.; 6 males, 28.VII.1997, RBK leg., CBM-ZI 83360–83362; 6 males, AS leg., CBM-ZI 83363–83364; **KP-18:** 3 males, 29.VII.1997, AS leg., CBM-ZI 83365–83366; 12 males, YI leg.; 1 male, 30.VII.1997, YT leg.; 1 male, AS leg.; 2 males, YI leg.; **KP-19:** 1 male, 4.VIII.1997, RBK leg., CBM-ZI 83367; 1 male 1 female, YI leg.

Distribution. Russian Far East: Kamchatka Peninsula, Amur.

Altai, Sayan, Transbaicalien.

Japanese name. Kumoma-beni-hikage.

**27. *Erebia rossi kuskoquima*
Holland, 1931**

Material examined. **KP-18:** 1 male, 30.VII.1997, YI leg., CBM-ZI 83368.

Distribution. Russian Far East: Chukotka, Magadan, Kamchatka.

European and Siberian part of polar tundras.

Japanese name. Kanbou-benihikage.

28. *Oeneis norna chione* Austaut, 1911

Material examined. **KP-19:** 1 female, 2.VIII.1997, AS leg., CBM-ZI 83369.

Distribution. Russian Far East: Kamchatka Peninsula (new record), Amur.

Japanese name. Takane-hikage.

**29. *Oeneis magna kamtschatica*
Kurentzov, 1970**

Material examined. **KP-2:** 1 male 1 female, 7.VII.1996, YT leg., CBM-ZI 83370.

Distribution. Russian Far East: Kamchatka Peninsula.

Japanese name. Oo-takane-hikage.

**30. *Coenonympha tullia mixturata*
Alphéraky, 1897**

Material examined. **KP-1:** 3 males, 4.VII.1996, YT leg.; **KP-9:** 1 male, 13.VII.1996, RBK leg., CBM-ZI 83371; **KP-16:** 2 males, 27.VII.1997, YT leg.; 4 males, RBK leg., CBM-ZI

83372–83373; 9 males, AS leg., CBM-ZI 83374–83377; 8 males, YI leg.; **KP-18**: 3 males, 29. VII. 1997, YT leg.; 5 males 1 female, AS leg., CBM-ZI 83378–83380; 1 male, YI leg.; 4 males 1 female, 30. VII. 1997, YT leg.; 2 males, RBK leg., CBM-ZI 83381; 3 males, YI leg.; 1 male 1 female, 31. VII. 1997, AS leg.; 3 males, YI leg.

Distribution. Russian Far East: Kamchatka Peninsula.

Japanese name. Tairiku-hime-hikage.

Family Hesperiiidae

31. *Carterocephalus palaemon alboguttata* Christoph, 1893

Material examined. **KP-1**: 1 male 1 female, 4. VII. 1996, YT leg.; 3 males, 5. VII. 1996, YT leg.; 1 male, 6. VII. 1996, RBK leg., CBM-ZI 83382; **KP-16**: 2 males, 27. VII. 1997, YT leg.

Distribution. Russian Far East: Yakutia, Magadan, Kamchatka, Amur, Primorye, Sakhalin.

Altai, Sayan, Transbaicalien, Siberia.

Japanese name. Takane-kimadara-seseri

32. *Carterocephalus sylvicola sylvicola* Meigen, 1828

Material examined. **KP-1**: 2 females, 5. VII. 1996, YT leg.; 2 males 1 female, 6. VII. 1996, RBK leg., CBM-ZI 83383; **KP-5**: 1 male, 10. VII. 1996, RBK leg., CBM-ZI 83384; **KP-22**: 2 males, 11. VII. 1996, RBK leg., CBM-ZI 83385; **KP-8**: 1 male, 12. VII. 1996, RBK leg., CBM-ZI 83386; **KP-9**: 2 males, 13. VII. 1996, YT leg.; **KP-21**: 1 male, 7. VII. 1997, RBK leg.

Distribution. Russian Far East: Kamchatka, Amur, Primorye, Sakhalin.

Northern Europe, Siberia, central Asia, Mongolia, northeastern China, Korea, Japan (Hokkaido).

Japanese name. Karafuto-takane-kimadara-seseri

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1996–1997 年に採集されたカムチャツカ 半島と千島のチョウ

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1996年と1997年に千葉県立中央博物館とロシア科学アカデミー極東支部が共同で実施したカムチャツカ半島と北千島の生物相調査で採集されたチョウを報告した。カムチャツカ半島では、32種に属する33亜種で、アゲハチョウ科2亜種、シロチョウ科5亜種、タテハチョウ科8亜種、ジャノメチョウ科8亜種、シジミチョウ科8亜種、セセリチョウ科2亜種が記録さ

れた。また北千島では、シロチョウ科1亜種、タテハチョウ科1亜種の2亜種が記録された。今回、カムチャツカ半島から *Oeneis norma chione* Austaut, 1911 (タカネヒカゲ) と *Colias tyche relictata* Kurenzov, 1970 (アムールモンキチョウ) が、初めて記録された。