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A Newly Compiled Checklist of the Vascular Plants of the Habomais, the Little Kurils

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Abstract The new floristic checklist of the Habomais, the Little Kurils, was compiled from Barkalov and Eremenko (2003) and Eremenko (2003), and supplemented by the specimens collected by Gage and Joneson in 1998 and Eremenko in 2002. In the checklist, 61 families, 209 genera and 332 species were recognized. Scientific and vernacular names commonly adopted in Russian and Japanese taxonomic references are listed and compared, and some taxonomic notes are also added. This list will contribute the future critical taxonomic and nomenclatural studies on the vascular plants in this region. The plants of each individual island in the Habomais are listed in the table.

Introduction

Flora of the vascular plants of the Habomais had been scarcely known except for Chernyaeva (1977) before the recent work of Barkalov and Eremenko (2003). The flora of the entire Habomai Islands was clarified by Barkalov and Eremenko (2003), but the knowledge on the flora of each individual island in the Habomais was incomplete yet. In the present study the data of the specimens collected by Gage, S., Joneson, S. L. and Eremenko N. A. on August 19-21, 1998 under the auspices of the International Kuril Island Project (IKIP) and Eremenko N. A. in 2001, 2002 and 2005 was added to those of Barkalov and Eremenko (2003). Thus, more complete floristic checklist was compiled for this region.

These islands (total area 102 km^2, maximum elevation less than 50 m) are situated near to Hokkaido, even the most far island Polonskogo lies only about 50km east of the Cape of Nosappu of the Nemuro peninsula in eastern Hokkaido. Geologically and geographically speaking, the Hobomais are regarded as the extension of the Nemuro peninsula. Thus, we can expect that most plant species of the Habomais are native to eastern Hokkaido. As we can comparatively easily recognize the plant species in common between the Habomais and Hokkaido, the correspondence of the plant scientific names between Russia and Japan was presented in the checklist. The checklist will contribute the future critical taxonomic and nomenclatural studies of the vascular plants in the northeastern Asia.

Materials and Methods

The checklist is the enumeration of the vascular plants of the Habomais. The Habomais are composed of five main islands (from west to east; Tanfilyeva, Anuchina, Iuriy, Zelenyj and Polonskogo) and small islands and rocks (Fig. 1 – 4). The circumscription and order of families in the angiosperms follows Melchior (1964), for the ferns and fern allies we follow Iwatsuki et al. (1995a). Within each family the species are listed in alphabetically.

Russian scientific names follow Barkalov and Eremenko (2003), here cited as [BE/R]. If the plants are not listed in Barkalov and Eremenko (2003), the literature is cited in the brackets like as [Eremenko (2003)]. The Japanese scientific names follow "Flora of Japan" (Iwatsuki et al. 1993, 1995a, 1995b, 1999, 2001), here cited as [FJ/J]; and/or "Wild Flowers of Japan" (Satake et al. 1981, 1982a, 1982b, 1989a, 1989b; Iwatsuki 1992), cited as [WF/J]. In this checklist the Russian scientific name is equivalent to the available Japanese scientific name, but the correct names are not necessarily insisted here. Future cooperative and critical taxonomic study will work out the disagreements of the scientific names adopted by Russia and Japan. Other Russian important opinions; Charkevicz (1985, 1987, 1988, 1992, 1995,

1996), Czerepanov (1995), and/or new opinions are noticed in the "Note" in case of necessity. Other Japanese opinions; for *Aconitum* by Kadota (1987), for Salicaceae by Ohashi (2000, 2001), for Poaceae by Osada (1989) and for *Sasa* by Ohwi and Kitagawa (1983), and so on are similarly noticed in the "Note". For the information on the naturalized plants to Japan, Shimizu (2003) was used.

The names of authors of the plant names follows Brummitt and Powell (1992) except for "Worosch." (see Takahashi et al. 2006). Distribution of the species within the Habomais is listed in Table 1.

Barkalov and Eremenko (2003) is based on the specimens collected by Eremenko, N. A., Ilushko, M. V. and Zhuravlev, Y. N. in 1998 (IKIP). Those are deposited in the Herbarium, Institute of Biology and Soil Science, Russian Academy of Sciences, Far Eastern Branch, Vladivostok (VLA) and in the Herbarium of the Natural Reserve "Kuril'sky" (Yuzhno-Kuril'sk). Furthermore the specimens of the other collectors; Chernyaeva, A. M., Khoroshailov, N. G., Butovsky, B. G., Rosenberg, V. A., Vassil'yev, N. G., Nevedomskaya, I. A., Popov, N. A., and Nechayev, V. A. are also used, and those are deposited in VLA and the Main Botanical Garden of RAS, Moscow (MHA) and Institute of Marine Geology and Geophysics of FEB RAS (Yuzhno-Sakhalinsk). And those by Gage and Joneson are in the Herbarium, Department of Botany, University of Washington, Seattle (WTU).

Results and Discussion

In the following checklist, 61 familis, 209 genera and 332 species were enumerated for the vascular plants of the Habomais. The dominant families are: Asteraceae (42 spp.), Poaceae (41 spp.), Rosaceae (20 spp.), Cyperaceae (18 spp.), Ranunculaceae (13 spp.), Polygonaceae (12 spp.), Apiaceae (11 spp.), Caryophyllaceae (10 spp.), Liliaceae (10 spp.), Juncaceae (10 spp.), Fabaceae (9 spp.), Lamiaceae (9 spp.), Brassicaceae (8 spp.) and Ericaceae (8 spp.). Other families contain less than seven species. The dominant genera including more than five species are: *Carex* (12 spp.), *Juncus* (9 spp.), *Artemisia* (7 spp.), *Agrostis* (6 spp.) and *Calamagrostis* (6 spp.).

Including the disagreement on the author names and the spelling, over 150 scientific names adopted in Russian

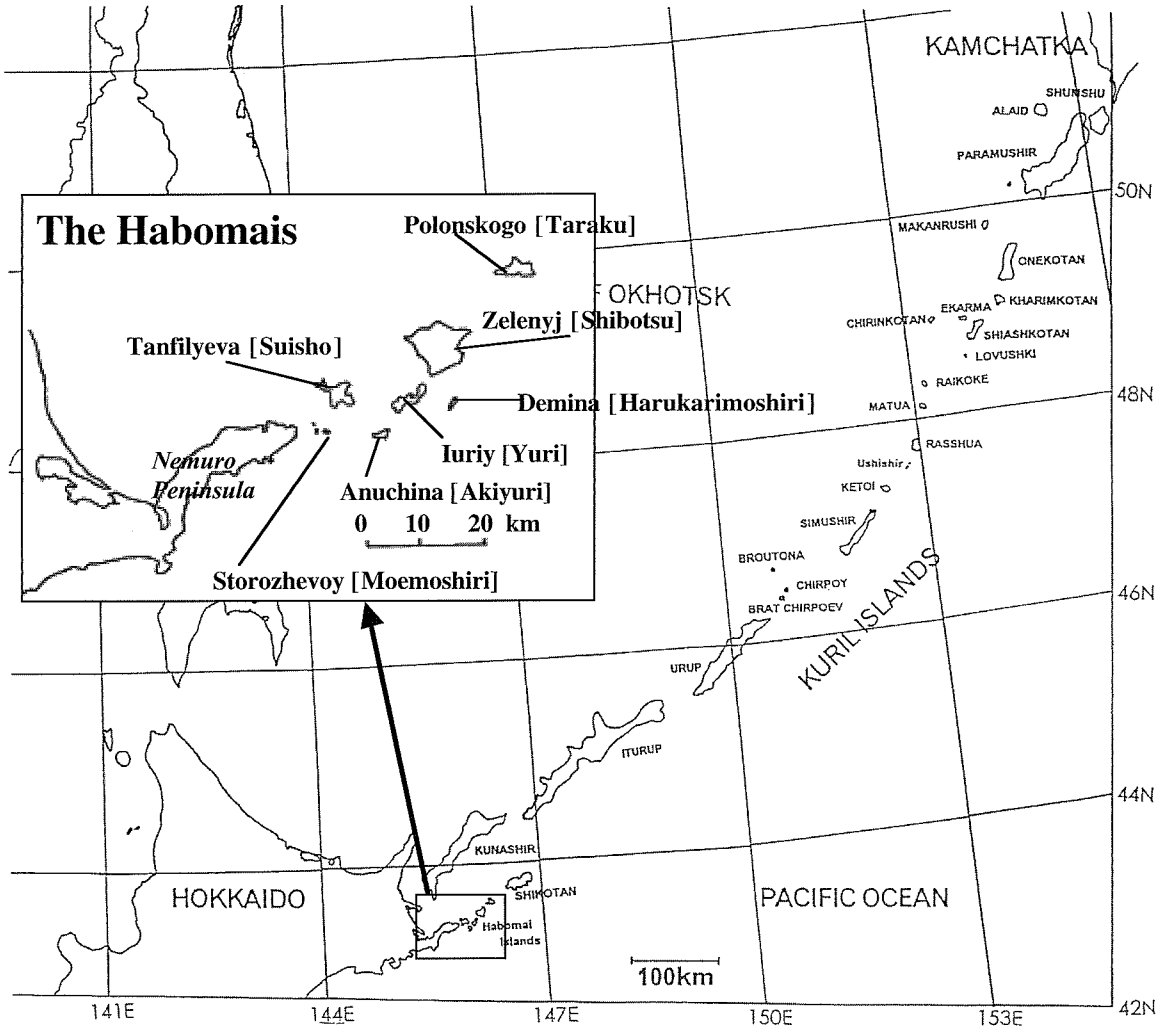

Figure 1. Map of the Habomai Islands.

Figure 2. Meadow with *Corydalis ambigua, Iris setosa* and *Veratrum grandiflorum* on Demina Island.

Figure 3. Seacoast on Storozhevoy Island.

Figure 4. Demina Island.

references (Barkalov and Eremenko 2003; Eremenko 2003) are in conflict with those adopted in at least one of commonly used Japanese references; "Flora of Japan" (Iwatsuki et al. 1999, 1993, 1995a, 1995b, 2001) or "Wild Flowers of Japan" (Satake et al. 1981, 1982a, 1982b, 1989a, 1989b; Iwatsuki 1992). These many disagreements constitute a significant obstacle to the progress of botany in Russia and Japan. The taxonomic and nomenclatural problems should be resolved through a new international scientific project.

Checklist of the Vascular Plants of the Habomais, the Little Kurils

1. LYCOPODIACEAE

1) Lycopodium clavatum L. [BE/R][FJ,WF/J]
Russian name: Plaun bulavovidnyj.
Japanese name: Hikageno-kazuda.

2. EQUISETACEAE

1) Equisetum arvense L. [BE/R][FJ,WF/J]
Russian name: Khvoshch polevoj.
Japanese name: Sugina.

2) Equisetum hyemale L. [BE/R][FJ,WF/J]
Russian name: Khvoshch zimuyushchij.
Japanese name: Tokusa.

3) Equisetum palustre L. [BE/R][FJ,WF/J]
Russian name: Khvoshch bolotnyj.
Japanese name: Inu-sugina.

3. OPHIOGLOSSACEAE

1) Botrychium robustum (Rupr.) Underw. [BE/R]; **Botrychium multifidum** (S.G.Gmel.) Rupr. var. **robustum** (Rupr. ex Milde) C.Chr. [FJ,WF/J]
Russian name: Grozdovnik mostchnyj.
Japanese name: Ezo-huyuno-hanawarabi.

4. HYMENOPHYLLACEAE

1) Mecodium wrightii (Bosch) Copel. [BE/R]; **Hymenophyllum wrightii** Bosch [FJ,WF/J]
Russian name: Mekodij Raita.
Japanese name: Koke-shinobu.

5. DENNSTAEDTIACEAE

1) Pteridium aquilinum (L.) Kuhn [BE/R]; **Pteridium aquilinum** (L.) Kuhn var. **latiusculum** (Desv.) Underw. ex Hell. [FJ,WF/J]
Russian name: Orlyak obyknovennyj.
Japanese name: Warabi.

6. THELYPTERIDACEAE

1) Thelypteris thelypteroides (Michx.) Holub [BE/R]; **Thelypteris palustris** (Salisb.) Schott [FJ,WF/J]
Russian name: Telipteris telipterisovidnyj.
Japanese name: Hime-shida.

7. WOODSIACEAE

1) Athyrium filix-femina (L.) Roth [BE/R]; **Athyrium melanolepis** (Franch. et Sav.) H.Christ [FJ,WF/J]
Russian name: Kochedyzhnik zhenskij.
Japanese name: Miyama-meshida

2) Athyrium sinense Rupr. [BE/R]; **Athyrium brevifrons** Nakai ex Kitagawa [FJ,WF/J]
Russian name: Kochedyzhnik kitaiskij.
Japanese name: Ezo-meshida.

3) Onoclea sensibilis L. [BE/R]; **Onoclea sensibilis** L. var. **interrupta** Maxim. [FJ,WF/J]
Russian name: Onokleya chuvstvitel'naya.
Japanese name: Kôya-warabi.

8. MYRICACEAE

1) Myrica tomentosa (DC.) Asch. et Graebn. [BE/R]; **Gale belgica** Duham. var. **tomentosa** (C.DC.) Yamazaki [WF/J]
Russian name: Voskovnik pushistyj.
Japanese name: Yachi-yanagi.
Note: Ohwi and Kitagawa (1983) adopted *Myrica gale* L. var. *tomentosa* C.DC. as the correct name.

9. SALICACEAE

1) Populus jesoensis Nakai [BE/R][WF/J]
Russian name: Topol' hokkaidskij.
Japanese name: Ezo-yama-narashi, Chôsen-yama-narashi.
Note: Ohashi (2001) regarded *Populus davidiana* Dode and *P. jesoensis* Nakai as a conspecific, and he adopted *P. tremula* L. var. *davidiana* (Dode) C.K.Schneid. as the correct name of this species.

2) Salix fuscescens Andersson [Chernyaeva (1977)/R]; **Salix paludicola** Koidz. [WF/J]
Russian name: Iva bureyushchaya.
Japanese name: Miyama-yachi-yanagi.
Note: This species was not listed in Barkalov and Eremenko (2003), but Czernyaeva (1977) recorded it from Zelenyj. In Hokkaido, this species is found only on alpine wet meadows of Mts. Taisetsu, and not found on the lowland of eastern Hokkaido. Ohashi (2000) adopted *Salix fuscescens* Andersson as the correct name instead of *S. paludicola* Koidz.

3) Salix gilgiana Seem. [BE/R]; **Salix miyabeana** Seemen [WF/J]
Russian name: Iva Gil'ga.
Japanese name: Ezo-no-kawa-yanagi.
Note: Ohashi (200, 2001) adopted *Salix miyabeana* Seemen subsp. *gilgiana* (Seemen) H.Ohashi as the correct name.

4) Salix hultenii Flod. [BE/R][WF/J]
Russian name: Iva Khul'tena.
Japanese name: Maruba-no-bakko-yanagi.
Note: Ohashi (2000, 2001) regarded *Salix hultenii* Flod. and *S. bakko* Kimura as a conspecific, and he adopted *S. caprea* L. as the correct name. Charkevicz (1995) mentioned *S. caprea* L. subsp. *hultenii* (Flod.) Kom. equivalent for this species listed here.

5) Salix udensis Trautv. et Mey. [BE/R]; **Salix sachalinensis** F.Schmidt [WF/J]
Russian name: Iva udskaya.
Japanese name: Onoe-yanagi.
Note: Recently Ohashi (2000, 2001) adopted *Salix udensis* Trautv. et Mey. as the correct name.

6) Salix yezoensis (C.K.Schneid.) Kimura [BE/R]; **Salix pet-susu** Kimura [WF/J]
Russian name: Iva iezskaya.
Japanese name: Ezo-no-kinu-yanagi.
Note: Ohashi (2000, 2001) adopted *Salix schwerinii* E.Wolf as the correct name. Charkevicz (1995) mentioned *S. schwerinii* E.Wolf subsp. *yezoënsis* (C.K.Schneid.) Worosch. equivalent for this species.

10. BETULACEAE

1) Alnus hirsuta (Spach) Fisch. ex Rupr. [BE/R]; **Alnus hirsuta** Turcz. [WF/J]
Russian name: Ol'ha volosistaya.
Japanese name: Ke-yama-han'noki.

2) Duschekia maximowiczii (Call. ex C.K.Schneid.) Pouzar [BE/R]; **Alnus maximowiczii** Call. [WF/J]
Russian name: Ol'khovnik Maksimovicha.
Japanese name: Miyama-han'noki.

11. URTICACEAE

1) Urtica platyphylla Wedd. [BE/R][WF/J]
Russian name: Krapiva ploskolistnaya.
Japanese name: Ezo-irakusa.

12. POLYGONACEAE

1) Acetosa lapponica (Hiitonen) Holub [BE/R]; **Rumex montanus** Desf. [WF/J]
Russian name: Shchavel' laplandskij.
Japanese name: Takane-suiba.

2) Acetosella angiocarpa (Murb.) A.Löve [BE/R]; **Rumex acetosella** L. [WF/J]–Naturalized
Russian name: Shchavelek pokrytoplodnyj.
Japanese name: Hime-suiba.
Note: Charkevicz (1989) recognized *Acetosella angiocarpa* (Murb.) A.Löve and *A. vulgaris* (Koch) Fourr. (= *Rumex acetosella* L. s.l.) as two separate species.

3) Persicaria maculata (Raf.) S.F.Gray [BE/R]; **Persicaria vulgaris** Webb et Moq. [WF/J]–Naturalized?
Russian name: Gorets pochechuinyj.
Japanese name: Haru-tade.
Note: In Japan, this species is not treated as the naturalized plant (Shimizu 2003), but Satake et al. (1982b) commented favorably on its naturalization from Europe. Barkalov and Eremenko (2003) treated it as one of the naturalized plants in the southern Kurils.

4) Persicaria scabra (Moench) Mold. [BE/R][WF/J]
Russian name: Gorets sherokhovatyj.
Japanese name: Sanae-tade.

5) Polygonum aviculare L. [BE/R][WF/J]–Naturalized
Russian name: Sporysh ptichij.
Japanese name: Michi-yanagi.
Note: This species is treated as the prehistoric naturalized plant in Japan (Shimizu 2003). Barkalov and Eremenko (2003) regarded it as one of the naturalized plants in the southern Kurils.

6) Rumex crispus L. [BE/R][WF/J]–Naturalized
Russian name: Shchavel'nik kurchavyj.
Japanese name: Nagaba-gishigishi.

7) Rumex gmelinii Turcz. ex Ledeb. [BE/R]; **Rumex gmelinii** Turcz. ["*gmelini*", WF/J]
Russian name: Shchavel'nik Gmelina.
Japanese name: Karafuto-no-daiô.

8) Rumex longifolius DC. [BE/R][WF/J]–Naturalized?
Russian name: Shchavel'nik dlinnolistnyj.
Japanese name: No-daiô.
Note: This species is not treated as the naturalized plant in Japan (Satake et al. 1982b, Shimizu 2003), but Barkalov and Eremenko (2003) regarded it as one of the naturalized plants in the southern Kurils.

9) Rumex obtusifolius L. [BE/R][WF/J]–Naturalized
Russian name: Shchavel'nik tupolistnyj.
Japanese name: Ezo-no-gishigishi.

10) Rumex ochotskius Rech.f. [BE/R]; **Rumex maritimus** L. [WF/J]
Russian name: Shchavel'nik okhotskij.
Japanese name: Kogane-gishigishi.
Note: Charkevicz (1989) recognized *Rumex ochotskius* Rech.f. and *R. maritimus* L. as two separate species.

11) Truellum sieboldii (Meisn.) Soják [BE/R]; **Persicaria sieboldii** (Meisn.) Ohki [WF/J]
Russian name: Kolyuchestebel'nik Zibol'da.
Japanese name: Akino-unagi-tsukami.

12) Truellum thunbergii (Siebold et Zucc.) Soják [BE/R]; **Persicaria thunbergii** (Siebold et Zucc.) H.Gross [WF/J]
Russian name: Kolyuchestebel'nik Tunberga.
Japanese name: Mizo-soba.

13. CARYOPHYLLACEAE

1) Cerastium fischerianum Ser. [BE/R][WF/J]
Russian name: Yaskolka Fishera.
Japanese name: Ôbana-miminagusa.

2) Cerastium holosteoides Fries [BE/R]; **Cerastium holosteoides** Fries var. **holosteoides** [WF/J]–Naturalized?
Russian name: Yaskolka dernistaya.
Japanese name: Ô-mimina-gusa.
Note: The other var. *hallaisanense* of this species is treated as the prehistoric naturalized plant in Japan (Shimizu 2003). Barkalov and Eremenko (2003) regarded this species as one of the naturalized plants in the southern Kurils.

3) Dianthus superbus L. [BE/R]; **Dianthus superbus** L. var. **superbus** [WF/J]
Russian name: Gvozdika pyshnaya.
Japanese name: Ezo-kawara-nadeshiko.

4) Fimbripetalum radians (L.) Ikonn. [BE/R]; **Stellaira radians** L. [WF/J]
Russian name: Bakhromchatolepestnik luchistyj.
Japanese name: Ezo-ôyama-hakobe.

5) Honkenya oblongifolia Torr. et Gray ["*Honckenya*", BE/R]; **Honkenya peploides** (L.) Ehrh. var. **major** Hook. [WF/J]
Russian name: Khonkeniya prodolgovatolistnaya.
Japanese name: Hama-hakobe.

6) Moehringia lateriflora (L.) Fenzl [BE/R][WF/J]
Russian name: Meringiya bokotsvetnaya.
Japanese name: Ôyama-fusuma.

7) Oberna behen (L.) Ikonn. [BE/R]; **Silene vulgaris** (Moench) Garcke [WF/J]–Naturalized
Russian name: Khlopushka obyknovennaya.
Japanese name: Shiratama-sô.

8) Sagina maxima A.Gray var. **crassicaulis** (S.Wats.) H.Hara [BE/R]; **Sagina maxima** A.Gray forma **crassicaulis** Mizush. [WF/J]
Russian name: Mshanka tolstostebelnaya.
Japanese name: Ezo-hama-tsumekusa.
Note: Charkevicz (1996) adopted *S. crassicaulis* S.Wats. as the correct name. The author name for var. *crassicaulis* is "(S.Wats.) Worosch." but not "(S.Wats.) H.Hara" in Charkevicz (1996).

9) Stellaria longifolia Muhl. ex Willd. [BE/R]; **Stellaria longifolia** L. [WF/J]
Russian name: Zvezdchatka dlinnolistnaya.
Japanese name: Nagaba-tsumekusa.
Note: The author name "Muhl." had been often written "Mühl." or "Muehl.", but here we followed Brummitt and Powell (1992).

10) Stellaria media (L.) Vill. [BE/R][WF/J]–Naturalized

Russian name: Zvezdchatka srednyaya or Mokritsa.
Japanese name: Hakobe, Ko-hakobe.
Note: This species is treated as the prehistoric naturalized plant in Japan (Shimizu 2003). Barkalov and Eremenko (2003) regarded it as one of the naturalized plants in the southern Kurils.

14. CHENOPODIACEAE

1) Atriplex patens (Litv.) Iljin [BE/R]; **Atriplex gmelinii** C.A.Mey. [WF/J]
Russian name: Lebeda ponikayushchaya.
Japanese name: Hosoba-hama-akaza.
Note: Charkevicz (1988) recognized *Atriplex patens* (Litv.) Iljin and *A. gmelinii* C.A.Mey. as two separate species.

2) Atriplex subcordata Kitag. [BE/R][WF/J]
Russsian name: Lebeda pochti-serdtsevidnaya.
Japanese name: Hama-akaza.

3) Chenopodium album L. [BE/R][WF/J]–Naturalized?
Russian name: Mar' belaya.
Japanese name: Shiroza.
Note: This species is not treated as the naturalized plant in Japan (Satake et al. 1982b, Shimizu 2003). Russian botanists regard it as one of the naturalized plants in the Kurils, but as the native plant in the mainland of the Far East.

4) Salsola komarovii Iljin [BE/R][WF/J]
Russian name: Solyanka Komarova.
Japanese name: Oka-hijiki.

15. RANUNCULACEAE

1) Aconitum kurilense Takeda [BE/R]; not listed [WF/J]
Russian name: Borets kuril'skij.
Japanese name: Shikotan-torikabuto.
Note: Kadota (1987) adopted *Aconitum maximum* Pall. ez DC. subsp. *kurilense* (Takeda) Kadota as the correct name.

2) Aconitum maximum Pall. ex DC. [BE/R]; not listed [WF/J]
Russian name: Borets bol'shoj.
Japanese name: Ô-chishima-torikabuto.
Note: Kadota (1987) recognized two subspecies; subsp. *maximum* and subsp. *kurilense* in *A. maximum*, and this taxon listed here is regarded as *A. maximum* subsp. *maximum* according to Kadota's opinion.

3) Aconitum sachalinense F.Schmidt [BE/R][WF/J]
Russian name: Borets sakhalinskij.
Japanese name: Karafuto-bushi.
Note: Kadota (1987) recognized two subspecies; subsp. *sachalinense* and subsp. *yezoense* in *A. sachalinense*, and this species listed here is regarded as *A. sachalinese* subsp. *sachalinense* in the Kadota's sense. Charkevicz (1995) mentioned *A. sachalinense* F.Schmidt subsp. *neokurilense* (Worosch.) Luferov equivalent for the plants of the Habomais.

4) Anemonastrum villosissimum (DC.) Starodub. [BE/R]; **Anemone narcissiflora** L. var. **sachalinensis** Miyabe et Miyake [WF/J]
Russian name: Vetrenik mokhnateishyj.
Japanese name: Ezo-no-hakusan-ichige.
Note: *Anemonastrum villosissimum* (DC.) Starodub. and *Anemonastrum sachalinensis* (Juz.) Starodub. (= *Anemone narcissiflora* L. var. *sachalinensis* Miyabe et Miyake, *A. sachalinensis* Juz.) are regarded as two different species in Charkevicz (1995). The author name for Russian scientific name is "(DC.) Holub" in Czerepanov (1995).

5) Anemonidium dichotomum (L.) Holub [BE/R]; **Anemone dichotoma** L. [WF/J]
Russian name: Vetrovnik vil'chatyj.
Japanese name: Futamata-ichige.

6) Anemonoides debilis (Fisch. ex Turcz.) Holub. [BE/R]; **Anemone debilis** Fisch. [WF/J]
Russian name: Vetrovochnik slabyj.
Japanese name: Hime-ichige.

7) Batrachium trichophyllum (Chaix) Bosch [BE/R]; ?**Ranunculus yezoensis** Nakai [WF/J]
Russian name: Shelkovnik volosistyj.
Japanese name: ?Chitose-baikamo.
Note: Charkevicz (1995; Fig. 35) recorded *Batrachium kauffmannii* (Clerc) V.I.Krecz. from the Habomais. The species distinction of *Batrachium* in the Habomais needs future clarification.

8) Cimicifuga simplex (Wormsk. ex DC.) Turcz. [BE/R]; **Cimicifuga simplex** Wormsk. [WF/J]
Russian name: Klopogon prostoj.
Japanese name: Sarashina-shôma.
Note: Nakai and Ohashi (1995) recognized the correct author name as "(DC.) Turcz." for this species.

9) Ranunculus quelpaertensis (H.Lév.) Nakai [BE/R]; **Ranunculus silerifolius** H.Lév. [WF/J]
Russian name: Lyutik chedjudinskij.
Japanese name: Kitsune-no-botan.

10) Ranunculus repens L. [collected by Eremenko in 2002/R][WF/J]
Russian name: Lyutik polzuchij.
Japanese name: Hai-kinpôge.

11) Ranunculus transochotensis H.Hara [BE/R]; **Ranunculus grandis** Honda var. **austrokurilensis** (Tatew.) H.Hara [WF/J]
Russian name: Lytik transokhotskij.
Japanese name: Shikotan-kinpôge.
Note: Charkevicz (1995) recognized this species listed here as *R. novus* H. Lév. et Vaniot. Future taxonomic study is necessary.

12) Thalictrum minus L. [BE/R]; **Thalictrum minus** L. var. **hypoleucum** (Siebold et Zucc.) Miq. [WF/J]
Russian name: Vasilistnik malyj.
Japanese name: Aki-karamatsu.
Note: *Thalictrum yezoense* Nakai cited by Barkalov and Eremenko (2003) needs further taxonomic clarification.

13) Thalictrum sachalinense Lecoy. [Eremenko (2003)/R][WF/J]
Russian name: Vasilistnik sakhalinskij.
Japanese name: Ezo-Karamatsu.

16. NYMPHAEACEAE

1) Nuphar pumila (Timm) DC. [BE/R]; **Nuphar**

pumilum (Timm) DC. [WF/J]
Russian name: Kubyshka malaya.
Japanese name: Nemuro-kôhone.
Note: Most Japanese literatures had adopted the specific epithet "pumilum" as neuter. But recent Japanese botanists (Kadono 1994, Takahashi et al. 2005) used feminine for this species following the determination by the Committee for Spermatophyta (see Taxon 49, 267).

17. CHLORANTHACEAE
1) Chloranthus japonicus Siebold [BE/R][WF/J]
Russian name: Khlorant yaponskij.
Japanese name: Hitori-shizuka.

18. HYPERICACEAE
1) Hypericum erectum Thunb. [BE/R][WF/J]
Russian name: Zveroboj pryamostoyachij.
Japanese name: Otogiri-sô.
2) Hypericum gebleri Ledeb. [BE/R]; **Hypericum ascyron** L. [WF/J]
Russian name: Zveroboj Geblera.
Japanese name: Tomoe-sô.
Note: Charkevicz (1987) recognized *Hypericum gebleri* Ledeb. and *H. ascyron* L. as two separate species.
3) Hypericum kamtschaticum Ledeb. [BE/R][WF/J]
Russian name: Zveroboj kamchatskij.
Japanese name: Hai-otogiri.

19. DROSERACEAE
1) Drosera rotundifolia L. [BE/R][FJ,WF/J]
Russian name: Rosyanka kruglolistnaya.
Japanese name: Môsen-goke.

20. PAPAVERACEAE
1) Corydalis ambigua Cham. et Schltdl. [BE/R][WF/J]
Russian name: Khokhlatka izmenchivaya.
Japanese name: Ezo-engosaku.

21. BRASSICACEAE
1) Arabis glauca H.Boissieu [Eremenko (2003)/R]; **Arabis serrata** Franch. et Sav. var. **glauca** (H.Boissieu) Ohwi [WF/J]
Russian name: Rezukha sizaya.
Japanese name: Ezo-no-iwahatazao.
2) Arabis stelleri DC. subsp. **japonica** (A.Gray) Worosch. [BE/R]; **Arabis stelleri** DC. var. **japonica** (A.Gray) F.Schmidt [WF/J]
Russian name: Rezukha yaponskaya.
Japanese name: Hama-hatazao.
Note: Charkevicz (1988) did not recognize the subspecies and adopted *Arabis stelleri* DC. as the correct name. Czerepanov (1995) recognized *A. japonica* (A.Gray) A.Gray at specific rank. Infraspecific variation and the distinctions between *A. stelleri* DC., *A. japonica* (A.Gray) A.Gray and *A. hirsuta* (L.) Scop. needs further clarification.
3) Barbarea orthoceras Ledeb. [Eremenko (2003)/R][WF/J]
Russian name: Surepka pryamorogaya.
Japanese name:Yama-garashi.
4) Capsella bursa-pastoris (L.) Medik. [BE/R]; **Capsella bursa-pastoris** Medik. [WF/J]–Naturalized
Russian name: Pastush'ya sumka obyknovennaya.
Japanese name: Nazuna.
Note: This species is treated as the prehistoric naturalized plant in Japan (Shimizu 2003). Barkalov and Eremenko (2003) regarded it as one of the naturalized plants in the southern Kurils.
5) Cardamine regeliana Miq. [Eremenko (2003)/R][WF/J]
Russian name: Serdechnik Regelya.
Japanese name: Ôba-tanetsukebana.
6) Cochlearia officinalis L. [BE/R]; **Cochlearia oblongifolia** DC. [WF/J]
Russian name: Lozhechnitsa lekarstvennaya.
Japanese name: Tomoshiri-sô.
7) Draba borealis DC. [BE/R][WF/J]
Russian name: Krupka severnaya.
Japanese name: Ezo-inu-nazuna.
8) Rorippa palustris (L.) Bess. [BE/R]; **Rorippa islandica** (Oeder) Borbás [WF/J]
Russian name: Zherushnik bolotnyj.
Japanese name: Sukashi-ta-gobô.

22. CRASSULACEAE
1) Rhodiola sachalinensis Boriss. [BE/R]; **Rhodiola rosea** L. [FJ,WF/J]
Russian name: Rodiola sakhalinskaya.
Japanese name: Iwa-benkei.
Note: *Rhodiola rosea* was recognized in Charkevicz (1995; Fig. 64) but *R. sachalinensis* was not recognized (Fig. 65) from the Habomais. In Iwatsuki et al. (2001) *R. rosea* was adopted as a widely distributed species with high variability and *R. sachalinensis* was regarded as a synonym of *R. rosea*.
2) Sedum erythrostictum Miq. [BE/R]; **?Hylotelephium erythrostictum** (Miq.) H.Ohba [FJ,WF/J]
Russian name: Ochitok krasnonispechrennyj.
Japanese name: ?Benkei-sô.
Note: *Sedum erythrostictum*. Miq. was regarded as a synonym of *Hylotelephium erythrostictum* (Miq.) H. Ohba in Iwatsuki et al. (2001), but this species is not native to Hokkaido but to Honshu. So it is doubtful whether this species is found in the Habomais. This needs further taxonomic study.
3) Sedum kurilense Worosch. [BE/R]; **Phedimus kamtschaticus** (Fisch. et C.A.Mey.) 't Hart [FJ/J]; **Sedum kamtschaticum** Fisch. [WF/J]
Russian name: Ochitok kurilskij.
Japanese name: Ezo-no-kirin-sô.
Note: Charkevicz (1995) recognized *Sedum kurilense* Worosch. and *S. kamtschaticum* Fisch. (= *Phedimus kamtschaticus* (Fisch. et C.A.Mey.) 't Hart) as two separate species.
4) Sedum telephium L. [BE/R]; **Hylotelephium pallescens** (Freyn) H.Ohba [FJ/J]; **Hylotelephium telephium** (L.) H.Ohba [WF/J]
Russian name: Ochitok zayachya kapusta.
Japanese name: Murasaki-benkei-sô.

Note: Nomenclature and the species distinction of the genus *Hylotelephium* in northeastern Asia needs further clarification. According to Cherepanov (1995) the correct name for this plant is *Hylotelephium triphyllum* (Haw.) Holub (= *H. telephium* (L.) H. Ohba, p.p., *Sedum purpurem* (L.) Schult., *S. telephium* sensu Czer.).

5) Sedum verticillatum L. [BE/R]; **Hylotelephium verticillatum** (L.) H.Ohba var. **verticillatum** [FJ,WF/J]

Russian name: Ochitok mutovchatyj.

Japanese name: Mitsuba-benkei-sô.

Note: Czerepanov (1995) treated *Hylotelephium verticillatum* (L.) H.Ohba as the correct name for this species.

23. SAXIFRAGACEAE

1) Hydrangea paniculata Siebold [BE/R][FJ/J]; **Hydrangea paniculata** Siebold et Zucc. [WF/J]

Russian name: Gortenziya metel'chataya.

Japanese name: Nori-utsugi.

2) Parnassia palustris L. [BE/R]; **Parnassia palustris** L. var. **palustris** [FJ/J]; **Parnassia palustris** L. var. **multiseta** Ledeb. [WF/J]

Russian name: Belozor bolotnyj.

Japanese name: Umebachi-sô.

3) Saxifraga bracteata D.Don [BE/R][FJ,WF/J]

Russian name: Kamnelomka pritsvetnikovaya.

Japanese name: Kiyoshi-sô.

24. ROSACEAE

1) Agrimonia japonica (Miq.) Koidz. [BE/R]; **Agrimonia pilosa** Ledeb. var. **pilosa** [FJ/J]; **Agrimonia pilosa** Ledeb. var. **japonica** (Miq.) Nakai [WF/J]

Russian name: Repyashok yaponskij.

Japanese name: Kin-mizuhiki.

Note: Charkevicz (1996) adopted *Agrimonia striata* Michx. as the correct name for this species. He also mentioned *A. striata* Michx. subsp. *viscidula* (Bunge) Rumjantsev equivalent for the east Eurasian plants.

2) Aruncus dioicus (Walter) Fernald [BE/R]; **Aruncus dioicus** (Walter) Fernald var. **kamtschaticus** (Maxim.) H.Hara [FJ/J]; **Aruncus dioicus** (Walter) Fernald var. **tenuifolius** (Nakai) H.Hara [WF/J]

Russian name: Volzhanka dvudomnaya.

Japanese name: Yamabuki-shôma.

3) Comarum palustre L. [BE/R][FJ/J]; **Potentilla palustris** (L.) Scop. [WF/J]

Russian name: Sabel'nik bolotnyj.

Japanese name: Kurobana-rôge.

4) Filipendula camtschatica (Pall.) Maxim. [BE/R][FJ/J]; **Filipendula kamtschatica** (Pall.) Maxim. [WF/J]

Russian name: Labaznik kamchatskij.

Japanese name: Oni-shimotsuke.

5) Fragaria yezoensis H.Hara [BE/R][WF/J]; **Fragaria nipponica** Makino [FJ/J]

Russian name: Zemlyanika iezskaya.

Japanese name: Ezo-no-kusa-ichigo (for *F. yezoensis*), Shirobana-no-hebiichigo (for *F. nipponica*).

Note: Charkevicz (1996) recognized *Fragaria nipponica* Makino and *F. yezoensis* H.Hara as two separate species. In Iwatsuki et al. (2001) *F. yezoensis* H.Hara is regarded as a synonym of *F. nipponica* Makino.

6) Geum aleppicum Jacq. [BE/R][FJ,WF/J]–Naturalized?

Russian name: Gravilat aleppskij.

Japanese name: Ô-daikon-sô.

Note: This species has not been treated as the naturalized plant in Japan (Satake et al. 1982b; Shimizu 2003), but Barkalov and Eremenko (2003) regarded it as one of the naturalized plants in the southern Kurils.

7) Geum fauriei H.Lév. [BE/R]; **Geum macrophyllum** Willd. var. **sachalinense** (Koidz.) H.Hara [FJ,WF/J]

Russian name: Gravilat Fori.

Japanese name: Karafuto-daikon-sô.

Note: Charkevicz (1996) adopted *Geum macrophyllum* Willd. as the correct name. But he also mentioned *G. macrophyllum* Willd. subsp. *fauriei* (H.Lév.) Worosch. equivalent for the plants of Kamchatka, Sakhalin, the Kurils and Japan.

8) Potentilla egedii Wormsk. var. **grandis** (Torr. et A.Gray) H.Hara [BE/R]; **Potentilla anserina** L. [FJ/J]; **Potentilla egedei** Wormsk. var. **grandis** (Torr. et A.Gray) H.Hara [WF/J]

Russian name: Lapchatka Egeda.

Japanese name: Ezo-tsuru-kinbai.

Note: Charkevicz (1996) adopted *Potentilla anserina* L. as the correct name. But he also mentioned *P. anserina* L. subsp. *egedii* (Wormsk.) Hiit. equivalent for the plants of Russian Far East.

9) Potentilla megalantha Takeda [BE/R][FJ,WF/J]

Russian name: Lapchatka krupnotsvetkovaya.

Japanese name: Chishima-kinbai.

Note: Charkevicz (1996) adopted *Potentilla fragiformis* Willd. ex Schltdl. as the correct name, but he also mentioned *P. fragiformis* Willd. ex Schltdl. subsp. *megalantha* (Takeda) Hult. equivalent for the plants of Sakhalin, the Kurils to Japan.

10) Potentilla stolonifera Lehm. ex Ledeb. [BE/R]; **Potentilla fragarioides** L. [FJ/J]; **Potentilla stolonifera** Lehm. [WF/J]

Russian name: Lapchatka pobegonosnaya.

Japanese name: Tsuru-kiji-mushiro.

Note: Charkevicz (1996) recognized *Potentilla stolonifera* Lehm. ex Ledeb. and *P. fragarioides* L. as two separate species. In Iwatsuki et al. (2001) the former species is considered as a synonym of the latter.

11) Rosa rugosa Thunb. [BE/R][FJ,WF/J]

Russian name: Shipovnik morshchinistyj.

Japanese name: Hama-nashi, Hama-nasu.

12) Rubus mesogaeus Focke ex Diels [BE/R]; **Rubus mesogaeus** Focke [FJ,WF/J]

Russian name: Malina nazemnaya.

Japanese name: Kuro-ichigo.

13) Rubus sachalinensis H.Lév. [BE/R]; **Rubus idaeus** L. [FJ/J]; **Rubus matsumuranus** H.Lév. et Vaniot. [WF/J]

Russian name: Malina sakhalinskaya.

Japanese name: Ezo-ki-ichigo, Ezo-ichigo.

14) Sanguisorba parviflora (Maxim.) Takeda [BE/R]; **Sanguisorba tenuifolia** Fisch. ex Link var. **tenuifolia** [FJ/J]; **Sanguisorba tenuifolia** Fisch. ex Link var. **alba**

Trautv. et Mey. [WF/J]
Russian name: Krovokhlebka melkotsvetkovaya.
Japanese name: Nagabo-no-waremokô (for *S. tenuifolia* var. *tenuifolia*), Nagabo-no-shiro-waremokô (for *S. tenuifolia* var. *alba*).

15) Sanguisorba tenuifolia Fisch. ex Link [BE/R]; **Sanguisorba tenuifolia** Fisch. ex Link var. **grandiflora** Maxim. [FJ,WF/J]
Russian name: Krovokhlebka tonkolistnaya.
Japanese name: Chishima-waremokô.
Note: Infraspecific variation and the specific distinction of the *Sanguisorba tenuifolia* complex needs clarification.

16) Sorbaria stellipila (Maxim.) S.K.Schneid. [BE/R]; **Sorbaria sorbifolia** (L.) A.Br. var. **stellipila** Maxim. [FJ/J]; **Sorbaria sorbifolia** (L.) A.Br. [WF/J]
Russian name: Ryabinolistnik zvezdchato-volosistyj.
Japanese name: Hozaki-nanakamado.
Note: Charkevicz (1996) adopted *Sorbaria sorbifolia* (L.) A.Br. as the correct name, but he also mentioned *S. sorbifolia* (L.) A.Br. var. *stellipila* Maxim. for the plants of the southern Kurils and Japan.

17) Sorbus sambucifolia Cham. et Schltdl. [BE/R]; **Sorbus sambucifolia** (Cham. et Schltdl.) M.Roem. [FJ,WF/J]
Russian name: Ryabina buzinolistnaya.
Japanese name: Takane-nanakamado.

18) Spiraea beauverdiana C.K.Schneid. [BE/R]; **Spiraea betulifolia** Pall. var. **aemiliana** (C.K.Schneid.) Koidz. [FJ/J]; **Spiraea betulifolia** Pall. subsp. **aemiliana** (C.K.Schneid.) H.Hara [WF/J]
Russian name: Tavolga Bovera.
Japanese name: Ezo-maruba-shimotsuke.

19) Spiraea betulifolia Pall. [BE/R]; **Spiraea betulifolia** Pall. var. **betulifolia** [FJ,WF/J]
Russian name: Tavolga berezolistnaya.
Japanese name: Maruba-shimotsuke.

20) Spiraea salicifolia L. [BE/R][FJ,WF/J]
Russian name: Tavolga ivolistnaya.
Japanese name: Hozaki-shimotsuke.

25. FABACEAE

1) Lathyrus japonicus Willd. [BE/R]; **Lathyrus japonicus** Willd. subsp. **japonicus** [FJ,WF/J]
Russian name: China yaponskaya.
Japanese name: Hama-endô.

2) Lathyrus pilosus Cham. [BE/R]; **Latyrus palustris** L. subsp. **pilosus** (Cham.) Hultén [FJ,WF/J]
Russian name: China volosistaya.
Japanese name: Ezo-no-renri-sô.

3) Lespedeza bicolor Turcz. [BE/R][FJ,WF/J]
Russian name: Lespedetsa dvutsvetnaya.
Japanese name: Yama-hagi.

4) Thermopsis lupinoides (L.) Link [BE/R][FJ,WF/J]
Russian name: Termopsis lyupinovidnyj.
Japanese name: Sendai-hagi.

5) Trifolium hybridum L. [BE/R][FJ,WF/J]–Naturalized
Russian name: Klever gibridnyj.
Japanese name: Tachi-oranda-genge.

6) Trifolium pratense L. [BE/R][FJ,WF/J]–Naturalized
Russian name: Klever lugovoy or Klever krasnyi.
Japanese name: Murasaki-tsumekusa.

7) Trifolium repens L. [BE/R][FJ,WF/J]–Naturalized
Russian name: Klever polzuchij or Klever belyi.
Japanese name: Shiro-tsumekusa.

8) Vicia cracca L. [BE/R][FJ,WF/J]
Russian name: Goroshek myshinyj.
Japanese name: Kusa-fuji.

9) Vicia unijuga A.Braun [BE/R][WF/J]; **Vicia unijuga** A.Braun [FJ/J]
Russian name: Goroshek odnoparnyj.
Japanese name: Nanten-hagi.

26. GERANIACEAE

1) Geranium erianthum DC. [BE/R][FJ,WF/J]
Russian name: Geran' volosistotsvetkovaya.
Japanese name: Chishima-fûro.

2) Geranium sibiricum L. [BE/R][FJ,/J]; **Geranium sibiricum** L. var. **glabrius** (H.Hara) Ohwi [WF/J]–Naturalized?
Russian name: Geran' sibirskaya.
Japanese name: Ichige-fûro.
Note: Barkalov and Eremenko (2003) regarded it as one of the naturalized plants in the Habomais, but it is not treated as the naturalized plant in Japan (Satake et al. 1982b; Shimizu 2003).

3) Geranium yesoense Franch. et Sav. [BE/R]; **Geranium yesoense** Franch. et Sav. var. **yesoense** [FJ,WF/J]
Russian name: Geran' iezskaya.
Japanese name: Ezo-fûro.

27. CELASTRACEAE

1) Celastrus strigillosa Nakai [BE/R]; **Celastrus orbiculatus** Thunb. var. **strigillosus** (Nakai) Makino [FJ,WF/J]
Russian name: Drevogubets shchyotkovidnyj.
Japanese name: Oni-tsuru-umemodoki.

28. VITACEAE

1) Vitis coignetiae Pulliat ex Planch. [BE/R][FJ,WF/J]
Russian name: Vinograd Kon'ye.
Japanese name: Yama-budô.

29. VIOLACEAE

1) Viola patrinii Ging. [BE/R]; **Viola patrinii** DC. ex Ging. [FJ/J]; **Viola patrinii** DC. [WF/J]
Russian name: Fialka Patrena.
Japanese name: Shiro-sumire.

2) Viola sacchalinensis H.Boissieu [BE/R][FJ,WF/J]
Russian name: Fialka sakhalinskaya.
Japanese name: Ainu-tachitsubo-sumire.

30. LYTHRACEAE

1) Lythrum salicaria L. [BE/R][WF/J]; **Lythrum salicaria** L. subsp. **salicaria** [FJ/J]
Russian name: Derbennik ivolistnyj.
Japanese name: Ezo-miso-hagi.

31. ONAGRACEAE

1) Chamaenerion angustifolium (L.) Scop. [BE/R][WF/

J]; **Chamerion angustifolium** (L.) Holub subsp. **angustifolium** [FJ/J]
Russian name: Ivan-chai uzkolistnyj.
Japanese name: Yanagi-ran.
2) Circaea alpina L. [BE/R][WF/J]; **Circaea alpina** L. subsp. **alpina** [FJ/J]
Russian name: Dvulepestnik al'pijskij.
Japanese name: Miyama-tanitade.
3) Epilobium amurense Hausskn. [BE/R][WF/J]; **Epilobium amurense** Hausskn. subsp. **amurense** [FJ/J]
Russian name: Kiprej amurskij.
Japanese name: Kegon-akabana.
4) Epilobium cephalostigma Hausskn. [BE/R][WF/J]; **Epilobium amurense** Hausskn. subsp. **cephalostigma** (Hausskn.) C.J.Chen, P.C.Hoch et P.H.Raven [FJ/J]
Russian name: Kiprej golovchatoryltsevyj.
Japanese name: Iwa-akabana.
5) Epilobium maximowiczii Hausskn. [BE/R]; **Epilobium ciliatum** Raf. subsp. **ciliatum** [FJ/J]; **Epilobium glandulosum** Lehm. var. **asiaticum** H.Hara [WF/J]
Russian name: Kiprej Maksimovicha.
Japanese name: Karafuto-akabana.
6) Oenothera biennis L. [BE/R][FJ,WF/J]–Naturalized
Russian name: Enotera dvuletnyaya.
Japanese name: Me-matsuyoigusa.

32. HIPPURIDACEAE
1) Hippuris vulgaris L. [BE/R][FJ,WF/J]
Russian name: Khvostnik obyknovennyj or Vodyanaya sosenka obyknovennaya.
Japanese name: Suginamo.

33. CORNACEAE
1) Chamaepericlymenum suecicum (L.) Asch. et Graebn. [BE/R][FJ,WF/J]
Russian name: Dyoren shvedskij.
Japanese name: Ezo-gozen-tachibana.

34. APIACEAE
1) Angelica genuflexa Nutt. ex Torr. et A.Gray [BE/R][FJ/J]; **Angelica genuflexa** Nutt. [WF/J]
Russian name: Dudnik prelomlennyj.
Japanese name: Ôba-senkyû.
2) Angelica gmelinii (DC.) M.Pimen. [BE/R]; **Coelopleurum gmelinii** (DC.) Ledeb. [FJ,WF/J]
Russian name: Dudnik Gmelina.
Japanese name: Ezo-no-shishiudo.
3) Angelica sachalinensis Maxim. [BE/R]; **Angelica anomala** Avé-Lall. subsp. **sachalinensis** (Maxim.) H.Ohba [FJ/J]; **Angelica anomala** Avé-Lall. [WF/J]
Russian name: Dudnik sakhalinskij.
Japanese name: Ezo-no-yoroigusa.
4) Anthriscus sylvestris (L.) Hoffm. [BE/R][FJ/J]; **Anthriscus aemula** Schischk. [WF/J]
Russian name: Kupyr' lesnoi.
Japanese name: Shaku.
5) Buplerurum longiradiatum Turcz. [BE/R]; **Bupleurum longiradiatum** Turcz. var. **breviradiatum** F.Schmidt [FJ/J]; **Bupleurum longeradiatum** Turcz. subsp. **sachalinense** (F.Schmidt) Kitag. var. **sachalinense** [WF/J]
Russian name: Volodushka dlinnoluchevaya.
Japanese name: Hotaru-saiko (for *B. longiradiatum* var. *breviradiatum*), Ezo-hotaru-saiko (for *B. longeradiatum* subsp. *sachalinense* var. *sachalinense*).
Note: According to Japanese literature *Bupleurum longiradiatum* var. *shikotanense* (M.Hiroe) Ohwi is native to Shikotan.
6) Cicuta virosa L. [BE/R][FJ,WF/J]
Russian name: Vekh yadovityj.
Japanese name: Doku-zeri.
7) Conioselinum chinense (L.) Britt., Pogg. et Sterns [BE/R]; **Conioselinum kamtschaticum** Rupr. [FJ,WF/J]
Russian name: Girchovnik kitajskij.
Japanese name: Karafuto-ninjin.
Note: *C. chinense* (L.) Britt., Pogg. et Sterns is the correct name (see Takahashi et al. 1999, 2002).
8) Glehnia littoralis F.Schmidt ex Miq. [BE/R] [WF/J]; **Glehnia littoralis** F.Schmidt [FJ/J]
Russian name: Gleniya pribrezhnaya.
Japanese name: Hama-bôfû.
9) Heracleum lanatum Michx. [BE/R]; **Heracleum sphondylium** L. subsp. **montanum** (Schleich. ex Gaudin) Briq. [FJ/J]; **Heracleum dulce** Fisch. [WF/J]
Russian name: Borshchevik sherstistyj.
Japanese name:Ô-hana-udo.
10) Ligusticum scoticum L. [BE/R]; **Ligusticum hultenii** Fernald [FJ,WF/J]
Russian name: Ligustikum shotlandskij.
Japanese name: Maruba-tôki.
11) Pleurospermum uralense Hoffm. [BE/R]; **Pleurospermum austriacum** Hoffm. subsp. **uralense** (Hoffm.) Sommier [FJ/J]; **Pleurosperumum camtschaticum** Hoffm. [WF/J]
Russian name: Rebroplodnik ural'skij.
Japanese name: Ô-kasamochi.

35. ERICACEAE
1) Chamaedaphne calyculata (L.) Moench [BE/R][FJ,WF/J]
Russian name: Bolotnyj mirt.
Japanese name: Yachi-tsutsuji.
2) Ledum hypoleucum Kom. [BE/R]; **Ledum palustre** L. subsp. **diversipilosum** (Nakai) H.Hara [FJ/J]; **Ledum palustre** L. subsp. **diversipilosum** (Nakai) H.Hara var. **diversipilosum** [WF/J]
Russian name: Bagul'nik podbel.
Japanese name: Karafuto-iso-tsutsuji.
Note: In Charkevicz (1991) *Ledum hypoleucum* Kom. and *L. palustriforme* Khokhr. et Mazurenko were recorded from the southern Kurils. Infraspecific variation and the distinctions between the *Ledum* species needs reexamination.
3) Oxycoccus microcarpus Turcz. ex Rupr. [BE/R]; **Vaccinium microcarpum** (Turcz. ex Rupr.) Schmalh. [FJ/J]; **Vaccinium microcarpum** (Turcz.) Schmalh. [WF/J]
Russian name: Klyukva melkoplodnaya.

Japanese name: Hime-tsuru-kokemomo.

4) Oxycoccus palustris Pers. [BE/R]; **Vaccinium oxycoccus** L. [FJ,WF/J]

Russian name: Klyukva bolotnaya.

Japanese name: Tsuru-kokemomo.

5) Rhodococcum vitis-idaea (L.) Avrorin [BE/R]; **Vaccinium vitis-idaea** L. [FJ,WF/J]

Russian name: Brusnika obyknovennaya.

Japanese name: Koke-momo.

Note: Czerepanov (1995) adopted the latter, *Vaccinium vitis-idaea* L. as the correct name.

6) Vaccinium axillare Nakai [BE/R]; **Vaccinium ovalifolium** Sm. [FJ,WF/J]

Russian name: Chernika pazushnaya.

Japanese name: Kuro-usugo.

7) Vaccinium praestans Lamb. [BE/R][FJ,WF/J]

Russian name: Krasnika.

Japanese name: Iwa-tsutsuji.

8) Vaccinium uliginosum L. [BE/R][FJ,WF/J]

Russian name: Golubika.

Japanese name: Kuromame-no-ki (in the broad sense).

36. EMPETRACEAE

1) Empetrum albidum V.Vassil. [BE/R]; **Empetrum nigrum** L. var. **japonicum** K.Koch [FJ,WF/J]

Russian name: Shiksha belovataya.

Japanese name: Gankô-ran.

2) Empetrum sibiricum V.Vassil. [BE/R]; **Empetrum nigrum** L. var. **japonicum** K.Koch [FJ,WF/J]

Russian name: Shiksha sibirskaya.

Japanese name: Gankô-ran.

Note: Russian botanists classified *Empetrum* into several species in the Russian Far East, but most Japanese regarded it as a single species in the Northern Hemisphere.

37. PRIMULACEAE

1) Glaux maritima L. [BE/R]; **Glaux maritima** L. var. **obtusifolia** Fernald [FJ,WF/J]

Russian name: Glauks primorskij.

Japanese name: Umi-midori.

2) Lysimachia davurica Ledeb. [BE/R]; **Lysimachia vulgaris** L. var. **davurica** (Ledeb.) Kunth [FJ,WF/J]

Russian name: Verbejnik daurskij.

Japanese name: Kusa-redama.

3) Naumburgia thyrsiflora (L.) Rchb. [BE/R][FJ/J]; **Lysimachia thyrsiflora** L. [WF/J]

Russian name: Naumburgiya kistetsvetkovaya.

Japanese name: Yanagi-tora-no-o.

4) Primula fauriei Franch. [BE/R]; **Primula modesta** Bisset et Moore var. **fauriei** (Franch.) Takeda [FJ,WF/J]

Russian name: Pervotsvet Fori.

Japanese name: Yukiwari-kozakura.

38. GENTIANACEAE

1) Gentiana axillariflora H.Lév. et Vaniot [BE/R]; **Gentiana triflora** Pall. var. **japonica** (Kusn.) H.Hara [FJ,WF/J]

Russian name: Gorechavka pazushnaya.

Japanese name: Ezo-rindô.

2) Gentianella auriculata (Pall.) Gillett [BE/R][FJ,WF/J]

Russian name: Gorechavochka ushastaya.

Japanese name: Chishima-rindô.

3) Halenia corniculata (L.) Cornaz [BE/R][FJ,WF/J]

Russian name: Galeniya rozhkovidnaya.

Japanese name: Hana-ikari.

4) Ophelia tetrapetala (Pall.) Grossh. [BE/R]; **Swertia tetrapetala** Pall. [FJ,WF/J]

Russian name: Ofeliya chetyrekhlepestnaya.

Japanese name: Chishima-senburi.

39. MENYANTHACEAE

1) Menyanthes trifoliata L. [BE/R][FJ,WF/J]

Russian name: Vakhta trekhlistnaya.

Japanese name: Mitsu-gashiwa.

40. RUBIACEAE

1) Galium boreale L. [BE/R][FJ/J]; **Galium boreale** L. var. **kamtschaticum** Maxim. [WF/J]

Russian name: Podmarennik severnyj.

Japanese name: Ezo-kinuta-sô.

2) Galium ruthenicum Willd. [BE/R]; **Galium verum** L. var. **trachycarpum** DC. [FJ,WF/J]

Russian name: Podmarennik russkij.

Japanese name: Ezo-kawara-matsuba.

3) Galium trifidum L. [BE/R]; **Galium trifidum** L. var. **brevipedunculatum** Regel [FJ,WF/J]

Russian name: Podmarennik trekhrazdelnyj.

Japanese name: Hosobano-yotsuba-mugura.

4) Rubia jesoensis (Miq.) Miyabe et Miyake [BE/R][FJ,WF/J]

Russian name: Marena iezskaya.

Japanese name: Akane-mugura.

41. BORAGINACEAE

1) Mertensia maritima (L.) S.F.Gray [BE/R]; **Mertensia maritima** (L.) S.F.Gray subsp. **asiatica** Takeda [FJ,WF/J]

Russian name: Mertenziya primorskaya.

Japanese name: Hama-benkei-sô.

2) Myosotis sachalinensis M.Pop. [BE/R]; **Myosotis sylvatica** Ehrh. ex Hoffm. [FJ/J]; **Myosotis sylvatica** (Ehrh.) Hoffm. [WF/J]

Russian name: Nezabudka sakhalinskaya.

Japanese name: Ezo-murasaki.

42. LAMIACEAE

1) Clinopodium chinense (Benth.) O.Kuntze [BE/R]; **Clinopodium chinense** (Benth.) O.Kuntze var. **parviflorum** (Kudô) H.Hara [FJ/J]; **Clinopodium chinense** (Benth.) O.Kuntze subsp. **grandiflorum** (Maxim.) H.Hara var. **parviflorum** (Kudô) H.Hara [WF/J]

Russian name: Pakhuchka kitajskaya.

Japanese name: Kuruma-bana.

Note: *Clinopodium kunashirense* Prob. (Charkevicz, 1995) needs further comparison with Japanese plants.

2) Clinopodium sachalinense (F.Schmidt) Koidz. [BE/R][WF/J]; **Clinopodium micranthum** (Regel) H.Hara var. **sachalinense** (F.Schmidt) Yamazaki et Murata [FJ/

J]
Russian name: Pakhuchka sakhalinskaya.
Japanese name: Miyama-tôbana.
3) Lycopus lucidus Turcz. ex Benth. [BE/R]; **Lycopus lucidus** Turcz. [FJ, WF/J]
Russian name: Zyuznik blestyashchij.
Japanese name: Shirone.
4) Lycopus uniflorus Michx. [BE/R][FJ,WF/J]
Russian name: Zyuznik odnotsvetkovyj.
Japanese name: Ezo-shirone.
5) Mentha canadensis L. var. **piperascens** (Malinv. ex Holmes) H.Hara [BE/R]; **Mentha arvensis** L. subsp. **piperascens** (Malinv.) H.Hara [FJ/J]; **Mentha arvensis** L. var. **piperascens** Malinv. [WF/J]
Russian name: Myata kanadskaya.
Japanese name: Hakka.
Note: Charkevicz (1995) adopted *Mentha canadensis* L. as the correct name.
6) Prunella asiatica Nakai [BE/R]; **Prunella vulgaris** L. subsp. **asiatica** (Nakai) H.Hara [FJ,WF/J]
Russian name: Chernogolovka aziatskaya.
Japanese name: Utsubo-gusa.
7) Scutellaria strigillosa Hemsl. [BE/R][FJ,WF/J]
Russian name: Shlemnik shchetinistyj.
Japanese name: Namiki-sô.
8) Scutellaria yezoënsis Kudô [BE/R]; **Scutellaria yezoensis** Kudô [FJ/J]; **Scutellaria strigilosa** Hemsl. var. **yezoensis** (Kudô) Kitam. [WF/J]
Russian name: Shlemnik iezskij.
Japanese name: Ezo-namiki-sô.
9) Stachys aspera Michx. [BE/R]; **Stachys riederi** Cham. var. **riederi** [FJ/J]; **Stachys riederi** Cham. var. **villosa** (Kudô) H.Hara [WF/J]
Russian name: Chistets sherokhovatyj.
Japanese name: Ezo-inugoma.

43. SCROPHULARIACEAE
1) Euphrasia yezoensis H.Hara [BE/R]; **Euphrasia maximowiczii** Wettst. var. **yezoensis** H.Hara [FJ,WF/J]
Russian name: Ochanka iezskaya.
Japanese name: Ezo-kogome-gusa.
2) Linaria japonica Miq. [BE/R][FJ,WF/J]
Russian name: L'nyanka yaponskaya.
Japanese name: Unran.
3) Pedicularis resupinata L. [BE/R]; **Pedicularis resupinata** L. subsp. **teucriifolia** (Bieb. ex Steven) Yamazaki [FJ/J]; **Pedicularis resupinata** L. var. **resupinata** [WF/J]
Russian name: Mytnik perevernutyj.
Japanese name: Birôdo-shiogama (for *P. resupinata* subsp. *teucriifolia*), Shiberia-shiogama (for *P. resupinata* var. *resupinata*).
4) Scrophularia grayana Maxim. ex Kom. [BE/R][FJ/J]; **Scrophularia grayana** Maxim. [WF/J]
Russian name: Norichnik Greya.
Japanese name: Ezo-hinano-usutsubo.

44. PLANTAGINACEAE
1) Plantago camtschatica Link [BE/R]; **Plantago camtschatica** Cham. ex Link [FJ/J]; **Plantago camtschatica** Cham. [WF/J]
Russian name: Podorozhnik kamchatskij.
Japanese name: Ezo-ôbako.
2) Plantago cornuti Gouan [BE/R]; **Plantago asiatica** L. [FJ,WF/J]
Russian name: Podorozhnik Kornuga
Japanese name: Ôbako.
Note: Czerepanov (1995) adopted *Plantago cornuti* Gouan, on the other hand Chakevicz (1996) adopted *P. asitatica* L. as the correct name.
3) Plantago japonica Franch. et Sav. [Czerepanov (1995), Charkevicz (1996)/R]; **Plantago major** L. var. **japonica** (Franch. et Sav.) Miyabe [FJ,WF/J]
Russian name: Podorozhnik yaponskij.
Japanese name: Tô-ôbako.

45. CAPRIFOLIACEAE
1) Lonicera caerulea L. [BE/R]; **Lonicera caerulea** L. subsp. **edulis** (Turcz.) Hultén [FJ,WF/J]
Russian name: Zhimolost' golubaya.
Japanese name: Ke-yonomi.
Note: Charkevicz (1987; Fig. 92) regarded *Lonicera edulis* Turcz. ex Freyn as the plants growing more inland regions of northeastern Asia, and regarded *L. caerulea* L. as those of the Okhotsk Sea regions. These treatmens may be contrary between Russia and Japan.
2) Lonicera sachalinensis (F.Schmidt) Nakai [BE/R]; **Lonicera maximowiczii** (Rupr. ex Maxim.) Rupr. ex Maxim. var. **sachalinensis** F.Schmitd [FJ,WF/J]
Russian name: Zhimolost' sakhalinskaya.
Japanese name: Benibana-hyôtanboku.
3) Sambucus sieboldiana (Miq.) Schwer. var. **miquelii** (Nakai) H.Hara [BE/R]; **Sambucus racemosa** L. subsp. **kamtschatica** (E.Wolf) Hultén [FJ,WF/J]
Russian name: Buzina Mikeli.
Japanese name: Ezo-niwatoko.
Note: Charkevicz (1987) adopted *S. sieboldiana* (Miq.) Schwer. as the correct name.
4) Viburnum sargentii Koehne [BE/R]; **Viburnum opulus** L. var. **calvescens** (Rehder) H.Hara [FJ,WF/J]
Russian name: Kalina Sarzhenta.
Japanese name: Kanboku.

46. ADOXACEAE
1) Adoxa moschatellina L. [BE/R][FJ,WF/J]
Russian name: Adoksa muskusnaya.
Japanese name: Renpuku-sô.

47. VALERIANACEAE
1) Patrinia scabiosifolia Fisch. ex Link [BE/R]; **Patrinia scabiosifolia** Fisch. ex Trevir. [FJ/J]; **Patrinia scabiosaefolia** Fisch. [WF/J]
Russian name: Patreniya skabiozolistnaya.
Japanese name: Ominaeshi.

48. CAMPANULACEAE
1) Adenophora triphylla (Thunb.) A.DC. [BE/R]; **Adenophora triphylla** (Thunb.) A.DC. var. **japonica** (Regel) H.Hara ["Thunb. ex Murray", FJ/J]; **Adenophora triphylla** (Thunb.) A.DC. var. **japonica** (Regel) H.Hara

[WF/J]

Russian name: Bubenchik trekhlistnyj.

Japanese name: Tsurigane-ninjin.

Note: The author name "Thunb. ex Murray" should be cited as "Thunb." (Bartholomew et al. 1997).

2) Campanula langsdorffiana Fisch. ex Trautv. et C.A.Mey. [BE/R]; not listed [FJ,WF/J]

Russian name: Kolokol'chik Langsdorfa.

Japanese name: Hosoba-no-iwa-gikyô.

Note: This species is not native to Hokkaido but found in Sakhalin. This species is very rare in the Kurils, Charkevicz (1996) recorded it from the Habomais only within the Kurils. Miyabe (1890) referred to the specimen collected by Mertens from Urup, but Tatewaki (1957) did not list this species from the Kurils

3) Campanula lasiocarpa Cham. [BE/R][FJ,WF/J]

Russian name: Kolokol'chik pushistoplodnyj.

Japanese name: Iwa-gikyô.

4) Lobelia sessilifolia Lamb. [BE/R][FJ,WF/J]

Russian name: Lobeliya sidyachelistnaya.

Japanese name: Sawa-gikyô

49. ASTERACEAE

1) Achillea millefolium L. [BE/R][WF/J]–Naturalized

Russian name: Tysyachelistnik obyknovennyj.

Japanese name: Seiyô-nokogiri-sô.

2) Anaphalis margaritacea (L.) A.Gray [BE/R]; **Anaphalis margaritacea** (L.) Benth. et Hook.f. [FJ,WF/J]

Russian name: Anafalis zhemchuzhnyj.

Japanese name: Yama-hahako.

3) Artemisia gmelinii Weber ex Stechm. [BE/R][FJ/J]; **Artemisia iwayomogi** Kitam. [WF/J]

Russian name: Polyn' Gmelina.

Japanese name: Iwa-yomogi.

4) Artemisia koidzumii Nakai [BE/R][FJ, WF/J]

Russian name: Polyn' Koidzumi.

Japanese name: Hiroha-urajiro-yomogi.

5) Artemisia laciniata Willd. [BE/R][FJ,WF/J]

Russian name: Polyn' dol'chataya.

Japanese name: Shikotan-yomogi.

6) Artemisia littoricola Kitam. [BE/R]; **Artemisia japonica** Thunb. subsp. **littoricola** (Kitam.) Kitam. [FJ,WF/J]

Russian name: Polyn' pribrezhnaya.

Japanese name: Hama-otoko-yomogi.

7) Artemisia montana Pamp. [BE/R]; **Artemisia montana** (Nakai) Pamp. [FJ,WF/J]

Russian name: Polyn' gornaya.

Japanese name: Ô-yomogi, Ezo-yomogi.

8) Artemisia stelleriana Besser [BE/R][FJ,WF/J]

Russian name: Polyn' Stellera.

Japanese name: Shiro-yomogi.

9) Artemisia unalaskensis Rydb. [BE/R][FJ,WF/J]

Russian name: Polyn' unalyashkinskaya.

Japanese name: Chishima-yomogi.

10) Aster glehnii F.Schmidt [BE/R]["*glehni*", FJ,WF/J]

Russian name: Astra Glena.

Japanese name: Ezo-gomana.

11) Cacalia kamtschatica (Maxim.) Kudô [BE/R]; **Parasenecio auriculata** (DC.) H.Koyama var. **kamtschatica** (Maxim.) H.Koyama [FJ/J]; **Cacalia auriculata** DC. var. **kamtschatica** (Maxim.) Matsum. [WF/J]

Russian name: Kakaliya kamchatskaya.

Japanese name: Mimi-kômori.

12) Cacalia robusta Tolm. [BE/R]; **Parasenecio hastata** (L.) H.Koyama subsp. **orientalis** (Kitam.) H.Koyama var. **orientalis** [FJ/J]; **Cacalia hastata** L. subsp. **orientalis** Kitam. [WF/J]

Russian name: Kakaliya moshnaya.

Japanese name: Yobusuma-sô.

Note: Charkevicz (1992) recognized *Cacalia hastata* L. and *C. robusta* Tolm. as two separate species. According to him, the former is more northern and continental species, and the latter is native to southern regions of Sakhalin and the Kurils.

13) Chorisis repens (L.) DC. [BE/R]; **Ixeris repens** (L.) A.Gray [FJ,WF/J]

Russian name: Khorizis polzuchij.

Japanese name: Hama-nigana.

14) Cichorium intybus L. [BE/R][Shimizu (2003)/J]–Naturalized

Russian name: Tsikorij obyknovennyj.

Japanese name: Kiku-nigana.

15) Cirsium charkeviczii Barkalov [BE/R]; not listed [FJ,WF/J]

Russian name: Bodyak Kharkevicha.

Japanese name: ?Ezo-no-sawa-azami (in the broad sense).

Note: This taxon is not recognized in the Japanese botanists, and it may be possibly included in the infraspecific variation of *Cirsium pectinellum* A.Gray in the sense of Japanese.

16) Cisrsium kamtschaticum Ledeb. ex DC. [BE/R][FJ/J]; **Cirsium kamtschaticum** Ledeb. [WF/J]

Russian name: Bodyak kamchatskij.

Japanese name: Chishima-azami.

17) Cirsium pectinellum A.Gray [BE/R][FJ/J]; **Cirsium kamtschaticum** Ledeb. subsp. **pectinellum** (A.Gray) Kitam. [WF/J]

Russian name: Bodyak grebenchatyj.

Japanese name: Ezo-no-sawa-azami, Shikotan-azami.

Note: The Habomai plants may be equivalent to *Cirsium pectinellum* A.Gray var. *shikotanense* Miyabe et Tatew. which is considered as a synonym of *C. pectinellum* A.Gray (Iwatsuki et al. 1995b).

18) Erigeron kamtschaticus DC. [Eremenko (2003)/R]; **Erigeron acer** L. var. **kamtschaticus** (DC.) Herder [FJ, WF/J]

Russian name: Melkolepestnik kamchatskij.

Japanese name: Mukashi-yomogi.

19) Erigeron sachalinensis Botsch. [BE/R]; **Erigeron acer** L. var. **acer** [FJ,WF/J]

Russian name: Melkolepestnik sakhalinskij.

Japanese name: Ezo-mukashi-yomogi.

Note: Charkevicz (1992) recognized *Erigeron sachalinensis* Botsch. and *E. acris* L. (=*E. acer* L.) as two separate speices. The former is regarded as the plants of Sakhalin and the southern Kurils, and the latter is as

the plants which are not found in those regions. Further taxonomic study on the *E. acer* group is necessary.

20) Gnaphalium uliginosum L. [BE/R][FJ,WF/J]–Naturalized?

Russian name: Sushenitsa topyanaya.

Japanese name: Hime-chichiko-gusa.

Note: In Japan this species is not treated as the naturalized plant (Satake et al. 1981; Shimizu 2003), but Barkalov and Eremenko (2003) considered it as one of the naturalized plants in the southern Kurils. Charkevicz (1992) recorded two similar species; *G. uliginosum* L. and *G. pilulare* Wahlenb. from Sakhalin and the southern Kurils. Future critical determination is necessary.

21) Hieracium umbellatum L. [BE/R][WF/J]; **Hieracium umbellatum** L. var. **japonicum** H.Hara [FJ/J]

Russian name: Yastrebinka zontichnaya.

Japanese name: Yanagi-tanpopo.

22) Lagedium sibiricum (L.) Soják [BE/R]; **Lactuca sibirica** (L.) Benth. ex Maxim. [FJ/J]; **Lactuca sibirica** (L.) Benth. [WF/J]

Russian name: Lagedium sibirskij.

Japanese name: Ezo-murasaki-nigana.

Note: Czerepanov (1995) adopted *Lactuca sibirica* (L.) Maxim. as the correct name.

23) Lepidotheca suaveolens (Pursh) Nutt. [BE/R]; **Matricaria matricarioides** (Less.) Porter [FJ,WF/J]–Naturalized

Russian name: Lepidoteka dushistaya.

Japanese name: Ko-shika-giku.

24) Ligularia hodgsonii Hook.f. [BE/R][FJ,WF/J]

Russian name: Buzul'nik Khodzhsona.

Japanese name: Tôge-buki.

25) Petasites amplus Kitam. [BE/R]; **Petasites japonicus** (Siebold et Zucc.) Maxim. subsp. **giganteus** (F.Schmidt ex Trautv.) Kitam. [FJ/J]; **Petasites japonicus** (Siebold et Zucc.) Maxim. subsp. **giganteus** (F.Schmidt) Kitam. [WF/J]

Russian name: Belokopytnik shirokij.

Japanese name: Akita-buki.

26) Picris japonica Thunb. [BE/R]; **Picris hieracioides** L. subsp. **japonica** (Thunb.) Krylov var. **japonica** [FJ/J]; **Picris hieracioides** L. subsp. **japonica** (Thunb.) Krylov [WF/J]

Russian name: Gorlyukha yaponskaya.

Japanese name: Kôzori-na.

27) Pilosella aurantiaca (L.) Schulz et Sch. Bip. [BE/R]; **Hieracium aurantiacum** L. [FJ, WF/J]–Naturalized

Russian name: Yastrebinochka oranzhevaya.

Japanese name: Kôrin-tanpopo, Efude-giku.

28) Ptarmica camtschatica (Ledeb.) Kom. ex Heimerl [BE/R]; **Achillea alpina** L. subsp. **camtschatica** (Heimerl) Kitam. [FJ,WF/J]

Russian name: Chikhotnik kamchatskij.

Japanese name: Shumushu-nokogiri-sô.

29) Ptarmica japonica (Heimerl) Worosch. [BE/R]; **Achillea alpina** L. subsp. **japonica** (Heimerl) Kitam. [FJ,WF/J]

Russian name: Chikhotnik yaponskij.

Japanese name: Horoman-nokogiri-sô, Kita-nokogiri-sô.

30) Ptarmica macrocephala (Rupr.) Kom. [BE/R]; **Achillea ptarmica** L. subsp. **macrocephala** (Rupr.) Heimerl var. **macrocephala** [FJ/J]; **Achillea ptarmica** L. subsp. **macrocephala** (Rupr.) Heimerl [WF/J]

Russian name: Chikhotnik krupnogolovyj.

Japanese name: Ezo-nokogiri-sô.

31) Saussurea riederi Herder [BE/R]; **Saussurea riederi** Herder subsp. **yezoensis** (Maxim.) Kitam. var. **yezoensis** [FJ/J]; **Saussurea riederii** Herder subsp. **yezoensis** (Maxim.) Kitam. [WF/J]

Russian name: Sossyureya Ridera.

Japanese name: Nagaba-kita-azami.

32) Senecio cannabifolius Less. [BE/R][FJ,WF/J]

Russian name: Krestovnik konoplelistnyj.

Japanese name: Hangon-sô.

33) Senecio nemorensis L. [BE/R][FJ,WF/J]

Russian name: Krestovnik dubravnyj.

Japanese name: Kion.

34) Senecio pseudoarnica Less. [BE/R][FJ; "*pseudo-arnica*", WF/J]

Russian name: Krestovnik lzhearnikovyj.

Japanese name: Ezo-oguruma.

35) Solidago dahurica Kitag. [BE/R]; **Solidago virgaurea** L. subsp. **leiocarpa** (Benth.) Hultén var. **leiocarpa** [FJ/J]; **Solidago virgaurea** L. subsp. **leiocarpa** (Benth.) Hultén f. **japonalpestris** Kitam. [WF/J]

Russian name: Zolotarnik daurskij.

Japanese name: Miyama-aki-no-kirin-sô, Kogane-giku.

36) Sonchus arenicola Worosch. [BE/R]; ?**Sonchus brachyotus** DC. [FJ,WF/J]

Russian name: Osot peskolyubivyj.

Japanese name: ?Hachijô-na.

37) Sonchus arvensis L. [Eremenko (2003)/R]; **Sonchus arvensis** L. var. **uliginosus** Trautv. [Shimizu (2003)/J]–Naturalized

Russian name: Osot polevoj.

Japanese name: Arechi-nogeshi.

38) Taraxacum officinale Wigg. [BE/R]; **Taraxacum officinale** Weber [WF/J]–Naturalized

Russian name: Oduvanchik aptechnyj.

Japanese name: Seiyô-tanpopo.

39) Taraxacum shikotanense Kitam. [BE/R][FJ,WF/J]

Russian name: Oduvanchik shikotanskij.

Japanese name: Shikotan-tanpopo.

40) Taraxacum yetrofuense Kitam. [BE/R]; not listed [FJ,WF/J]

Russian name: Oduvanchik iturupskij.

Japanese name: Etorofu-tanpopo.

Note: This species has not been recorded from Hokkaido until now. Charkevicz (1992) adopted *Taraxacum platycranum* Dahlst. as the correct name.

41) Tripleurospermum perforatum (Mérat) M.Lainz [BE/R]; **Matricaria perforata** Mérat [Shimizu (2003)/J]–Naturalized

Russian name: Trekhrebrosemyannik prodyryavlennyj.

Japanese name: Inu-kamitsure.

42) Tripleurospermum tetragonospermum (F.Schmidt) Pobed. [BE/R]; **Matricaria**

tetragonosperma (F.Schmidt) H.Hara [FJ/J]; **Matricaria tetragonosperma** (F.Schmidt) H.Hara et Kitam. [WF/J]
Russian name: Trekhrebrosemyannik chetyrekhugol'nosemyannyj.
Japanese name: Shika-giku.

50. POTAMOGETONACEAE
1) Potamogeton perfoliatus L. [collected by Eremenko in 2002/R]; [WF/J]
Russian name: Rdest pronzyonnolistnyj.
Japanese name: Hiroha-no-ebimo.

51. ZOSTERACEAE
1) Phyllospadix iwatensis Makino [BE/R][WF/J]
Russian name: Fillospadiks ivatinskij.
Japanese name: Sugamo.
2) Zostera cespitosa Miki [BE/R]; **Zostera caespitosa** Miki [WF/J]
Russian name: Vzmornik dernistyj.
Japanese name: Suge-amamo.

52. LILIACEAE
1) Allium ochotense Prokh. [BE/R]; **Allium victorialis** L. subsp. **platyphyllum** Hultén [WF/J]
Russian name: Luk okhotskij or Cheremsha.
Japanese name: Gyôja-nin'niku.
2) Convallaria keiskei Miq. [BE/R][WF/J]
Russian name: Landysh Keizke
Japanese name: Suzuran.
3) Fritillaria camschatcensis (L.) Ker Gawl. [BE/R]["*camtschatcensis*", WF/J]
Russian name: Ryabchik kamchatskij.
Japanese name: Kuro-yuri.
4) Gagea nakaiana Kitag. [BE/R]; **Gagea lutea** (L.) Ker Gawl. [WF/J]
Russian name: Gusinyj luk Nakai.
Japanese name: Kibana-no-amana.
5) Hemerocallis esculenta Koidz. [BE/R]; **Hemerocallis dumortieri** Morr. var. **esculenta** (Koidz.) Kitam. [WF/J]
Russian name: Krasodnev s'yedobnyj.
Japanese name: Zenteika, Ezo-kanzô.
6) Hosta rectifolia Nakai [BE/R]; **Hosta albomarginata** (Hook.) Ohwi ["*albo-marginata*", WF/J]
Russian name: Khosta pryamolistnaya.
Japanese name: Koba-gibôshi (for *H. albomarginata*), Tachi-gibôshi (for *H. rectifolia*).
Note: In Satake et al. (1982a) *Hosta albomarginata* is regarded as a species with wide variability, and *H. rectifolia* Nakai is included in it. Our Russian author (V. Y. Barkalov) recognizes that *Hosta albomarginata* (Hook.) Ohwi (= *H. lancifolia* Engl. in Charkevicz 1987) and *H. rectifolia* Nakai are well differentiated species in morphological features and habitat (also see Czerepanov 1995). *Hosta albomarginata* occurs rarely in Russia, only in the south of Amurskaya and Primorsky Territories, but *H. rectifolia* is distributed in Sakhlin and the Kurils.
7) Lilium debile Kittlitz [BE/R]; **Lilium medeoloides** A.Gray [WF/J]
Russian name: Liliya slabaya.
Japanese name: Kuruma-yuri.
8) Maianthemum dilatatum (Wood) A.Nelson et J.F.Macbr. [BE/R][WF/J]
Russian name: Majnik shirokolistnyj.
Japanese name: Maizuru-sô.
9) Trillium camschatcense Ker Gawl. [BE/R]; **Trillium kamtschaticum** Pall. [WF/J]
Russian name: Trillium kamchatskij.
Japanese name: Ôbana-no-enrei-sô.
Note: The correct name is *T. camschatcense* Ker Gawl. (Nakai and Ito 1991).
10) Veratrum grandiflorum (Maxim. ex Baker) Loes.f. [BE/R]; **Veratrum album** L. subsp. **oxysepalum** Hultén [WF/J]
Russian name: Chemeritsa krupnotsvetkovaya.
Japanese name: Baikei-sô.
Note: Charkevicz (1987) recognized *Veratrum grandiflorum* (Maxim. ex Baker) Loes.f. and *V. oxysepalum* Turcz. (= *V. album* L. subsp. *oxysepalum* (Turcz.) Hultén) as two separate species.

53. AMARYLLIDACEAE
1) Narcissus poeticus L. [Eremenko (2003)/R][WF/J]—Escaped
Russian name: Narciss poeticheskij or Narciss belyj.
Japanese name: Kuchibeni-zuisen.
2) Narcissus pseudonarcissus L. [Eremenko (2003)/R]["*pseudo-narcissus*", WF/J]—Escaped
Russian name: Narciss lozhnyj or Narciss zholtyj.
Japanese name: Rappa-zuisen.

54. IRIDACEAE
1) Iris ensata Thunb. [BE/R]; **Iris ensata** Thunb. var. **spontanea** (Makino) Nakai [WF/J]
Russian name: Kasatik mechevidnyj.
Japanese name: No-hana-shôbu.
2) Iris laevigata Fisch. et C. A. Mey. [BE/R]; **Iris laevigata** Fisch. [WF/J]
Russian name: Kasatik gladkij.
Japanese name: Kakitsubata.
3) Iris pseudacorus L. [BE/R][WF/J]–Escaped
Russian name: Kasatik lozhnoairnyj.
Japanese name: Ki-shôbu.
4) Iris setosa Pall. ex Link [BE/R]; **Iris setosa** Pall. [WF/J]
Russian name: Kasatik shchetinistyj.
Japanese name: Hi-ôgi-ayame.

55. JUNCACEAE
1) Juncus bufonius L. [BE/R][WF/J]–Naturalized?
Russian name: Sitnik zhabij.
Japanese name: Hime-kôgai-zekishô.
Note: In Japan, this species has not been treated as the naturalized plant (Satake et al. 1982a; Shimizu 2003). Barkalov and Eremenko (2003) regarded it as one of the naturalized plants in the southern Kurils.
2) Juncus decipiens (Buchenau) Nakai [BE/R]; **Juncus effusus** L. var. **decipiens** Buchenau [WF/J]
Russian name: Sitnik somnitel'nyj.
Japanese name: Igusa, I.

3) Juncus gracillimus (Buchenau) V. Krecz. et Gontsch. [BE/R][WF/J]
Russian name: Sitnik tonchajshyi.
Japanese name: Doro-i.
4) Juncus haenkei E. Mey. [BE/R][WF/J]
Russian name: Sitnik Genke.
Japanese name: Hama-i.
5) Juncus papillosus Franch. et Sav. [BE/R][WF/J]
Russian name: Sitnik sosochkovyj.
Japanese name: Ao-kôgai-zekishô.
6) Juncus prominens (Buchenau) Miyabe et Kudô [BE/R][WF/J]
Russian name: Sitnik vydayushchijsya.
Japanese name: Sekishô-i.
7) Juncus tatewakii Satake [BE/R]; not listed [WF/J]
Russian name: Sitnik Tatevaki.
Japanese name: Kunashiri-kôgai.
Note: This species is native to Kunashir and the Habomais, but has not been recorded from Hokkaido. *Juncus articulatus* L. in Charkevicz (1985) may be this species.
8) Juncus tenuis Willd. [BE/R][WF/J]–Naturalized
Russian name: Sitnik tonkij.
Japanese name: Kusa-i.
Note: In Japan this species is treated as the prehistoric naturalized plant (Shimizu 2003). Barkalov and Eremenko (2003) regarded it as one of the naturalized plants in the southern Kurils.
9) Juncus yokoscensis (Franch. et Sav.) Satake [BE/R][WF/J]
Russian name: Sitnik iokosukskij.
Japanese name: Inu-i, Hira-i.
10) Luzula capitata (Miq.) Kom. [BE/R]; **Luzula capitata** (Miq.) Miq. [WF/J]
Russian name: Ozhika golovchataya.
Japanese name: Suzume-no-yari.

56. POACEAE
1) Achnatherum extremiorientale (H.Hara) Keng ex Tzvel. [BE/R]; **Stipa pekinensis** Hance [WF/J]
Russian name: Chij dal'nevostochnyj.
Japanese name: Hane-gaya.
2) Agrostis clavata Trin. [BE/R][WF/J]
Russian name: Polevitsa bulavovidnaya.
Japanese name: Yama-nukabo.
3) Agrostis flaccida Hack. [BE/R][WF/J]
Russian name: Polevitsa gibkaya.
Japanese name: Miyama-nukabo.
4) Agrostis gigantea Roth [BE/R]; **Agrostis alba** L.[WF/J]–Naturalized
Russian name: Polevitsa gigantskaya.
Japanese name: Konuka-gusa.
Note: Osada (1989) adopted *A. gigantea* Roth as the correct name.
5) Agrostis scabra Willd. [BE/R][WF/J]
Russian name: Polevitsa sherokhovataya.
Japanese name: Ezo-nukabo.
6) Agrostis stolonifera L. [BE/R][WF/J]–Naturalized
Russian name: Polevitsa pobegoobrazuyushchaya.
Japanese name: Hai-konuka-gusa.
7) Agrostis tenuis Sibth. [BE/R]; **Agrostis capillaris** L. [Shimizu (2003)/J]–Naturalized
Russian name: Polevitsa tonkaya.
Japanese name: Ito-konuka-gusa.
Note: Czerepanov (1995) adopted *A. capillaris* L. as the correct name.
8) Arctopoa eminens (C.Presl) Prob. [BE/R]; **Poa eminens** C.Presl. [WF/J]
Russian name: Arktomyatlik vydelyayushchyjsya.
Japanese name: Oni-ichigotsunagi.
9) Beckmannia syzigachne (Steud.) Fern. [BE/R][WF/J]
Russian name: Bekmaniya vostochnaya.
Japanese name: Kazunoko-gusa.
10) Calamagrostis barbata V.Vassil. [BE/R]; **?Calamagrostis langsdorffii** (Link) Trin. [WF/J]
Russian name: Vejnik borodatyj.
Japanese name: ?Iwa-nogariyasu (in the broad sense).
Note: This taxon is not usually recognized in Japan and may be included in *Calamagrostis langsdorffii* s.l. (cf., Osada 1989).
11) Calamagrostis extremiorientalis (Tzvel.) Prob. [BE/R]; **Calamagrostis epigeios** (L.) Roth [WF/J]
Russian name: Vejnik dal'nevostochnyj.
Japanese name: Yama-awa.
12) Calamagrostis hakonensis Franch. et Sav. [BE/R][WF/J]
Russian name: Vejnik khakonskij.
Japanese name: Hime-nogariyasu.
13) Calamagrostis inexpansa A.Gray [BE/R]; **Calamagrostis neglecta** (Ehrh.) G.Gaetrn., B.Mey. et Scherb. var. **aculeolata** (Hack.) Miyabe et Kudô [WF/J]
Russian name: Vejnik szhatometel'chatyj.
Japanese name: Chishima-gariyasu.
Note: Czerepanov (1995), Barkalov and Eremenko (2003) regarded the above-mentioned Japanese species name as a synonym of the Russian species name.
14) Calamagrostis langsdorffii (Link) Trin. [BE/R][WF/J]
Russian name: Vejnik Langsdorfa.
Japanese name: Iwa-nogariyasu.
15) Calamagrostis neglecta (Ehrh.) G.Gaertn., B.Mey. et Scherb. [BE/R]; not listed [WF/J]
Russian name: Vejnik nezamechennyj.
Japanese name: ?Chishima-gariyasu (in the broad sense).
Note: On *Calamagrostis neglecta* s.l., further taxonomic study is necessary.
16) Dactylis glomerata L. [BE/R][WF/J]–Naturalized
Russian name: Yezha sbornaya.
Japanese name: Kamo-gaya.
17) Elymus dahuricus Turcz. ex Griseb. [BE/R]; **Elymus dahuricus** Turcz. [WF/J]
Russian name: Pyrejnik daurskij.
Japanese name: Hama-mugi.
Note: Osada (1989) adopted the author names "Turcz. ex Griseb.".
18) Elymus woroschilowii Prob. [BE/R]; not listed [WF/J]
Russian name: Pyrejnik Voroshilova.

Note: This is the new name for *Elymus dahuricus* subsp. *pacificus* Prob. (Charkevicz, 1985), which is not clear to Japanese botanists. Charkevicz (1985) recognized three species of the *E. dahuricus* complex; *E. dahuricus* Turcz. ex Griseb., *E. excelsus* Turcz. ex Griseb. and *E. woroschilowii* Prob. from the Habomais. This needs future clarification.

19) Elytrigia repens (L.) Nevski [BE/R]; **Agropyron repens** (L.) Beauv. [WF/J]–Naturalized?

Russian name: Pyrej polzuchij.

Japanese name: Shiba-mugi.

Note: Osada (1989) adopted *Elymus repens* (L.) Gould as the correct name. This species is treated as one of the naturalized plants in Japan (Shimizu 2003).

20) Festuca ovina L. [BE/R][WF/J]

Russian name: Ovsyanitsa ovech'ya.

Japanese name: Ushinoke-gusa.

21) Festuca pratensis Huds. [BE/R]; **Festuca elatior** L. [WF/J]–Naturalized

Russian name: Ovsyanitsa lugovaya.

Japanese name: Hiroha-no-ushinokegusa.

Note: Osada (1989) adopted the scientific name *Festuca pratensis* Huds., but recent Russian botanists (Tzvelev 1999, Barkalov and Taran 2004) adopt *Schedonorus pratensis* (Huds.) P.Beauv. as the correct name.

22) Festuca rubra L. [BE/R][WF/J]

Russian name: Ovsyanitsa krasnaya.

Japanese name: Ô-ushinoke-gusa.

23) Hierochloë sachalinensis (Printz.) Worosch. [BE/R]; **Hierochloe odorata** (L.) P.Beauv. var. **pubescens** Krylov [WF/J]

Russian name: Zubrovka sakhalinskaya.

Japanese name: Kôbô.

Note: Infraspecific variation and the species distinction of *Hierochloe odorata* s.l. and the related species needs clarification.

24) Holcus lanatus L. [BE/R][WF/J]–Naturalized

Russian name: Bukharnik sherstistyj.

Japanese name: Shirage-gaya.

25) Hordeum jubatum L. [BE/R][Shimizu (2003)/J]–Naturalized

Russian name: Yachmen' grivastyj.

Japanese name: Hoso-noge-mugi.

Note: Osada (1989) also adopted the species name *H. jubatum* L., but recent Russian botanists (Tzvelev 1999, Barkalov and Taran 2004) adopt *Critesion jubatum* (L.) Nevski as the correct name.

26) Leymus mollis (Trin.) H.Hara [BE/R]; **Elymus mollis** Trin. [WF/J]

Russian name: Kolosnyak myagkij.

Japanese name: Tenki-gusa, Hama-nin'niku.

Note: Hara's recombination was published as a synonym, so this is an invalid name. Therefore *Leymus mollis* (Trin.) Pilger is the correct name (Osada 1989).

27) Miscanthus sinensis Anderss. [BE/R][WF/J]

Russian name: Veerotsvetnik kitajskij or Miskantus kitajskij.

Japanese name: Susuki.

28) Molinia japonica Hack. [BE/R]; **Molinia japonica** (Hack.) Hayata [WF/J]

Russian name: Moliniya yaponskaya.

Japanese name: Numa-gaya.

Note: Czerepanov (1995) adopted *Molinopsis japonica* (Hack.) Hayata as the correct name.

29) Phalaroides arundinacea (L.) Rausch. [BE/R]; **Phalaris arundinacea** L. [WF/J]

Russian name: Rogoznik trostnikovidnyj.

Japanese name: Kusa-yoshi.

30) Phleum pratense L. [BE/R][WF/J]–Naturalized

Russian name: Timofeevka lugovaya.

Japanese name: Ô-awagaeri.

31) Phragmites australis (Cav.) Trin. ex Steud. [BE/R]; **Phragmites communis** Trin. [WF/J]

Russian name: Trostnik yuzhnyj.

Japanese name: Yoshi.

32) Poa annua L. [BER][WF/J]–Naturalized

Russian name: Myatlik odnoletnij.

Japanese name: Suzume-no-katabira.

Note: Most Japanese plants of this species have been naturalized since the Meiji era, but some plants are considered to be native to Japan (Shimizu 2003).

33) Poa macrocalyx Trautv. et C. A. Mey. [BE/R][WF/J]

Russian name: Myatlik krupnocheshujnyj.

Japanese name: Karafuto-ichigotsunagi.

34) Poa palustris L. [BE/R][WF/J]

Russian name: Myatlik bolotnyj.

Japanese name: Numa-ichigotsunagi.

35) Poa pratensis L. [BE/R][WF/J]–Naturalized

Russian name: Myatlik lugovoj.

Japanese name: Nagaha-gusa.

36) Poa tatewakiana Ohwi [BE/R]; not listed [WF/J]

Russian name: Myatlik Tatevaki.

Japanese name: Hosobana-somosomo (for *P. macrocalyx* var. *tatewakiana*).

Note: Osada (1989) adopted *Poa macrocalyx* Trautv. et Mey. var. *tatewakiana* (Ohwi) Ohwi as the correct name. Further taxonomic study is necessary for the *Poa macrocalyx* complex.

37) Puccinellia kurilensis (Takeda) Honda [BE/R]; **Puccinellia pumila** (Vasey) Hitchc. [WF/J]

Russian name:Beskilnitsa kurilskaya.

Japanese name: Chishima-dojyôtsunagi.

Note: Osada (1989) adopted *Puccinellia kurilensis* (Takeda) Honda as the correct name.

38) Sasa depauperata (Takeda) Nakai [BE/R]; not listed [WF/J]

Russian name: Saza melkometel'chataya.

Japanese name: Shikotan-zasa.

Note: The species concept of the genus *Sasa* is not consistent among the botanists. Ohwi and Kitagawa (1983) adopted *Sasa yahikoensis* Makino var. *depauperata* (Takeda) S. Suzuki as the correct name.

39) Sasa kurilensis (Rupr.) Makino et Shibata [BE/R][WF/J]

Russian name: Saza kuril'skaya.

Japanese name: Chishima-zasa.

40) Sasa senanensis (Franch. et Sav.) Rehder [BE/R]; not listed [WF/J]

Russian name: Saza sinanskaya.
Japanese name: Kumai-zasa.
Note: Ohwi and Kitagawa (1983) adopted *S. senanensis*.

41) Trisetum umbratile (Kitag.) Kitag. [BE/R]; ?**Trisetum sibiricum** Rupr. [WF/J]
Russian name: Trishchetinnik tenevoj.
Japanese name: ?Chishima-kanitsuri (in the broad sense).
Note: This species is also recognized as *Trisetum sibiricum* subsp. *umbratile* (Kitag.) Tzvelev (Tzvelev 1976). But this taxon is not clear to Japanese botanists (cf., Osada 1989)

57. ARACEAE

1) Arisaema japonicum Blume [BE/R]; **Arisaema serratum** (Thunb.) Schott [WF/J]
Russian name: Arizema yamonskaya.
Japanese name: Mamushi-gusa.
Note: Ohashi and Murata (1980) regarded *A. japonicum* Blume as a synonym of *A. serratum* (Thunb.) Schott.

2) Calla palustris L. [BE/R][WF/J]
Russian name: Belokryl'nik bolotnyj.
Japanese name: Hime-kaiu.

3) Lysichiton camtschatcense (L.) Schott [BE/R][WF/J]
Russian name: Lizikhiton kamchatskij.
Japanese name: Mizu-bashô.

4) Symplocarpus renifolius Schott ex Tzvelev [BE/R]; **Symplocarpus foetidus** Nutt. var. **latissimus** (Makino) H.Hara [WF/J]
Russian name: Simplokarpus pochkolistnyj.
Japanese name: Zazen-sô.

58. LEMNACEAE

1) Lemna trisulca L. [BE/R][WF/J]
Russian name: Ryaska troichataya.
Japanese name: Hinjimo.
Note: Recent Russian botanists (Tzvelev 1999, Barkalov and Taran 2004) adopted *Staurogeton trisulcus* (L.) Schur as the correct name. This species is distributed in Zelenyj due to the distribution map, but not noted from the Habomais in the text (Barkalov and Eremenko 2003).

59. TYPHACEAE

1) Typha latifolia L. [BE/R][WF/J]
Russian name: Rogoz shirokolistnyj.
Japanese name: Gama.

60. CYPERACEAE

1) Carex aomorensis Franch. [BE/R]; **Carex capillacea** Boott var. **sachalinensis** (F.Schmidt) Ohwi [WF/J]
Russian name: Osoka aomorijskaya.
Japanese name: Michinoku-hari-suge.

2) Carex cespitosa L. [BE/R]; **Carex caespitosa** L. ["*caespitosa*", WF/J]
Russian name: Osoka dernistaya.
Japanese name: Kabu-suge.

3) Carex cryptocarpa C.A.Mey. [BE/R]; **Carex lyngbyei** Hornem. [WF/J]
Russian name: Osoka skrytoplodnaya.
Japanese name: Yarame-suge.

4) Carex gmelinii Hook. et Arn. [BE/R][WF/J]
Russian name: Osoka Gmelina.
Japanese name: Nemuro-suge.

5) Carex koidzumii Honda [BE/R]; **Carex lasiocarpa** Ehrh. var. **occultans** (Franch.) Kük. [WF/J]
Russian name: Osoka Koidzumi.
Japanese name: Mujina-suge.

6) Carex macrocephala Willd. ex Spreng. [BE/R]; **Carex macrocephala** Willd. [WF/J]
Russian name: Osoka krupnoplodnaya.
Japanese name: Ezo-no-kôbô-mugi.

7) Carex pumila Thunb. [BE/R][WF/J]
Russian name: Osoka maloroslaya.
Japanese name: Kôbô-shiba.

8) Carex rhynchophysa C.A.Mey. [Eremenko (2003)/R][WF/J]
Russian name: Osoka vzdutonosaya.
Japanese name: Ô-kasa-suge.

9) Carex sabynensis Less. ex Kunth [BE/R]; **Carex sabynensis** Less. [WF/J]
Russian name: Osoka shabinskaya.
Japanese name: Kamikawa-suge.

10) Carex scabrinervia Franch. [BE/R]; **Carex scita** var. **riishirensis** (Franch.) Kük. [WF/J]
Russian name: Osoka sherokhovatozhilkovaya.
Japanese name: Shikotan-suge (for *C. scabrinervia*), Rishiri-suge (for *C. scita* var. *riishirensis*).
Note: This species was not recognized in Satake et al. (1982a), but Akiyama (1955) recognized it.

11) Carex schmidtii Meinsh. [BE/R][WF/J]
Russian name: Osoka Shmidta.
Japanaese name: Shumitto-suge.

12) Carex viridula Michx. [BE/R][WF/J]
Russian name: Osoka zelyonen'kaya.
Japanese name: Ezo-sawa-suge.

13) Eleocharis kamtschatica (C. A. Mey.) Kom. [BE/R][WF/J]
Russian name: Bolotnitsa kamchatskaya.
Japanese name: Hime-hari-i.

14) Eleocharis palustris (L.) Roem. et Schult. [BE/R]; **Eleocharis intersita** Zinserl. [WF/J]
Russian name: Bolotnitsa bolotnaya.
Japanese name: Kuro-numa-hari-i.

15) Eleocharis wichurae Boeck [BE/R][WF/J]
Russian name: Bolotnitsa Vikhury.
Japanese name: Shikaku-i.

16) Eriophorum gracile Koch [BE/R][WF/J]
Russian name: Pushitsa strojnaya.
Japanese name: Sagi-suge.

17) Eriophorum vaginatum L. [BE/R][WF/J]
Russian name: Pushitsa vlagalishchnaya.
Japanese name: Wata-suge.

18) Scirpus tabernaemontani C.C.Gmel. [BE/R][WF/J]
Russian name: Kamysh Tabernemontana.
Japanese name: Futo-i.

61. ORCHIDACEAE

1) Dactylorhiza aristata (Fisch. ex Lindl.) Soó [Eremenko (2003)/R]; **Orchis aristata** Fisch. [WF/J]
Russian name: Pal'chatokorennik ostistyj.
Japanese name: Hakusan-chidori.

2) Gymnadenia conopsea (L.) R.Br. [BE/R][WF/J]
Russian name: Kokushnik komarnikovyj.
Japanese name: Tegata-chidori.

3) Platanthera ditmariana Kom. [Eremenko (2003)/R]; **Platanthera chorisiana** (Cham.) Rchb.f. var. **elata** Finet [WF/J]
Russian name: Lyubka Ditmara.
Japanese name: Miyake-ran.

4) Platanthera extremiorientalis Nevski [BE/R]; **Platanthera metabifolia** F.Maek. [WF/J]
Russian name: Lyubka dal'nevostochnaya.
Japanese name: Ezo-chidori.

5) Platanthera hologlottis Maxim. [BE/R][WF/J]
Russian name: Lyubka tsel'nogubaya.
Japanese name: Mizu-chidori.

6) Spiranthes sinensis (Pers.) Ames [BE/R]; **Spiranthes sinensis** (Pers.) Ames var. **amoena** (M. Bieb.) H.Hara [WF/J]
Russian name: Skruchennik kitajskij.
Japanese name: Neji-bana.

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Table 1. The distribution of the vascular plants in the Habomais.
The species are ordered alphabetically. Naturalized or escaped plants within parenthesis.

Taxa	Anu.	Iur.	Pol.	Tan.	Zel.	Dem.	Sto.
Acetosa lapponica			B				
(Acetosella angiocarpa)				B, J	B		
(Achillea millefolium)					CH		
Achnatherum extremiorientale		B					
Aconitum kurilense	B	B				B	
Aconitum maximum				G		B	
Aconitum sachalinense	B	B	B	B	B		
Adenophora triphylla	B, J	B, G	G	B, J	B		
Adoxa moschatellina				B		B	
Agrimonia japonica	J	B, G	B	B, J			
Agrostis clavata	B	B	B		B		
Agrostis flaccida		B	B	B, G	B, G		
(Agrostis gigantea)		B	B		B		
Agrostis scabra	B, G	G	B, G, J	B	B		
(Agrostis stolonifera)	B	G		G	B		
(Agrostis tenuis)		J			B, J		
Allium ochotense						B	
Alnus hirsuta		B					
Anaphalis margaritacea	B	B, G	B	B	B		
Anemonastrum villosissimum					B		
Anemonidium dichotomum					G		
Anemonoides debilis				B			
Angelica genuflexa	J	B			B		
Angelica gmelinii	B, G	B		B	B	B	B
Angelica sachalinensis		G	G				
Anthriscus sylvestris		B				B	
Arabis glauca						E	
Arabis stelleri ssp. japonica			G	B	B	B	
Arctopoa eminens	B	B	J	G	J		
Arisaema japonicum		B			B		
Artemisia gmelinii		B			B		
Artemisia koidzumii		B, G		B			
Artemisia laciniata		B, G		B			

Taxa	Anu.	Iur.	Pol.	Tan.	Zel.	Dem.	Sto.
Artemisia littoricola		B		B			
Artemisia montana		B	B	B	B	B	B
Artemisia stelleriana	B, G			B, G	B		
Artemisia unalaskensis			B				
Aruncus dioicus	B, G	B, J		B, G	B		
Aster glehnii		B	B, G	G, J	B		
Athyrium filix-femina		B	B	B	B		
Athyrium sinense		B					
Atriplex patens			B			B	
Atriplex subcordata	G	B				B	
Barbarea orthoceras		E				E	
Batrachium trichophyllum					B		
Beckmannia syzigachne	B	B	B, J	G	B, J		
Botrychium robustum	B			B			
Bupleurum longiradiatum	B	B, G		B			
Cacalia kamtschatica		B	B, G	B	B		
Cacalia robusta		G	G	G, J		B	
Calamagrostis barbata				B			
Calamagrostis extremiorientalis		B	B		B		
Calamagrostis hakonensis				G	B		
Calamagrostis inexpansa			B		B		
Calamagrostis langsdorffii	B, G	B	B, J	B	B	B	
Calamagrostis neglecta				B	B, G		
Calla palustris			B				
Campanula langsdorffiana				B			
Campanula lasiocarpa					B		
(Capsella bursa-pastoris)							B
Cardamine regeliana						E	
Carex aomorensis				G			
Carex cespitosa					B		
Carex cryptocarpa	B, G	G	J	G	B		
Carex gmelinii			B				
Carex koidzumii			J		B		

Taxa	Anu.	Iur.	Pol.	Tan.	Zel.	Dem.	Sto.
Carex macrocephala			G	B, J	B		
Carex pumila		B, G	B	J			
Carex rhynchophysa					E		
Carex sabynensis				B			
Carex scabrinervia		B					
Carex schmidtii					B		
Carex viridula	B			B, G			
Celastrus strigillosa		B			B		
Cerastium fischerianum		B					
(Cerastium holosteoides)	G	G		B, G			
Chamaedaphne calyculata				B			
Chamaenerion angustifolium		B			B		
Chamaepericlymenum suecicum		B, J	B		B		
(Chenopodium album)	G	B	B	B	G	B	
Chloranthus japonicus		B					
Chorisis repens				B, G			
(Cichorium intybus)					B		
Cicuta virosa			J	G	B, G		
Cimicifuga simplex	J	B, G	B, G	B, J			
Circaea alpina		B			B		
Cirsium charkeviczii			B				
Cirsium kamtschaticum	B		B	B	B	B	
Cirsium pectinellum	B, G	B, J	G	B, G	B, J		B
Clinopodium chinense		B					
Clinopodium sachalinense		B					
Cochlearia officinalis	B					B	
Comarum palustre		B		G			
Conioselinum chinense	B					B	
Convallaria keiskei		B			B		
Corydalis ambigua				B		B	B
(Dactylis glomerata)				B	B		
Dactylorhiza aristata		E					
Dianthus superbus	B	B		B, G	B		
Draba borealis		B				B	
Drosera rotundifolia		G	G	B, G, J			
Duschekia maximowiczii			B				

Taxa	Anu.	Iur.	Pol.	Tan.	Zel.	Dem.	Sto.
Eleocharis kamtschatica	J		B	B, G, J	J		
Eleocharis palustris					B, J		
Eleocharis wichurae					B		
Elymus dahuricus	B	B		B	B		
Elymus woroschilowii			B				
Elytrigia repens		G			B′		
Empetrum albidum		B	(G)	B, (G)	B, (G)		
Empetrum sibiricum			B, (G)	B, (G)	(G)		
Epilobium amurense		B					
Epilobium cephalostigma				B			
Epilobium maximowiczii			B				
Equisetum arvense	B, J	B, J	B	B, J	B		
Equisetum hyemale		B					
Equisetum palustre					B		
Erigeron kamtschaticus					E		
Erigeron sachalinensis		B					
Eriophorum gracile			J		B		
Eriophorum vaginatum				B			
Euphrasia yezoensis		B		B	B		
Festuca ovina		B					
(Festuca pratensis)					B		
Festuca rubra	B, G	B			B		
Filipendula camtschatica		B, G	B, G				
Fimbripetalum radians	B				G		
Fragaria yezoensis		B			B		
Fritillaria camschatcensis				B		B	
Gagea nakaiana				B		B	B
Galium boreale					B		
Galium ruthenicum		B, G		B, G	B, G		
Galium trifidum	B		J, G		B		
Gentiana axillariflora		B	B	B	B, J		
Gentianella auriculata					B		
Geranium erianthum	G	B, G	B	J	B		
(Geranium sibiricum)		B	B	B			
Geranium yesoense	B	B		B			
(Geum aleppicum)		B	B	B	B		

Taxa	Anu.	Iur.	Pol.	Tan.	Zel.	Dem.	Sto.
Geum fauriei				G			
Glaux maritima			B, J				
Glehnia littoralis				B			
(Gnaphalium uliginosum)				J			
Gymnadenia conopsea		B		B, G			
Halenia corniculata	J	B, G		B, J	B, G		
Hemerocallis esculenta		G	B	J	B		
Heracleum lanatum	B, J	G	J	G	B, J		B
Hieracium umbellatum			J		J		
Hierochloë sachalinensis				B			
Hippuris vulgaris			B				
(Holcus lanatus)				B	B		
Honkenya oblongifolia	B					B	
(Hordeum jubatum)	B				B		
Hosta rectifolia				B			
Hydrangea paniculata		B	G				
Hypericum erectum		B	B	B	B		
Hypericum gebleri		B					
Hypericum kamtschaticum		B					
Iris ensata					B		
Iris laevigata					B		
(Iris pseudacorus)					B		
Iris setosa	B	B	B	B, G	B, J		
(Juncus bufonius)	G		B	B	G		
Juncus decipiens	B	B		B, G	B		
Juncus gracillimus					B		
Juncus haenkei	B		B	G	B, J		
Juncus papillosus		B			B		
Juncus prominens			B				
Juncus tatewakii	B	B		B	B		
(Juncus tenuis)	B	B	B	B			
Juncus yokoscensis		B, J	J		B, G		
Lagedium sibiricum			B		B		
Lathyrus japonicus	G		B, G	B, G	B, G	B	
Lathyrus pilosus	B	B		B, J	B		
Ledum hypoleucum		B	B, G	B, G	B		

Taxa	Anu.	Iur.	Pol.	Tan.	Zel.	Dem.	Sto.
Lemna trisulca					B		
(Lepidotheca suaveolens)	J		B	B, J			
Lespedeza bicolor	B	B, G	B	B	B		
Leymus mollis	B, J		G	B, G	B, G	B	B
Ligularia hodgsonii	B, J	B, G	B, G	B, J	B, G		
Ligusticum scoticum	B, J	B, G	B, G	B	G	B	
Lilium debile				B			
Linaria japonica	B, G	B, G	B, G	B, J	B, G		
Lobelia sessilifolia		B	B, J	B, G	B		
Lonicera caerulea		B	B	B	B		
Lonicera sachalinensis					B		
Luzula capitata		J	B, G	B, G	G		
Lycopodium clavatum				B			
Lycopus lucidus					B, J		
Lycopus uniflorus				G	B		
Lysichiton camtschatcense	G	B, G	B, J				
Lysimachia davurica		B					
Lythrum salicaria		B		B, G	B, G		
Maianthemum dilatatum		B			B		
Mecodium wrightii					B		
Mentha canadensis var. piperascens		B	B		B, G		
Menyanthes trifoliata		B	B				
Mertensia maritima	B		B	B	B		
Miscanthus sinensis		B		B	B		
Moehringia lateriflora					B, G		
Molinia japonica				B			
Myosotis sachalinensis		B					
Myrica tomentosa			B, G	B, G	B		
(Narcissus poeticus)		E					
(Narcissus pseudonarcissus)		E					
Naumburgia thyrsiflora				G	G		
Nuphar pumila			B				
(Oberna behen)					B		
(Oenothera biennis)		J		B, G			
Onoclea sensibilis		B, G, J	B, J	B, G			
Ophelia tetrapetala				B			

Taxa	Anu.	Iur.	Pol.	Tan.	Zel.	Dem.	Sto.
Oxycoccus microcarpus				B			
Oxycoccus palustris		B	G		B		
Parnassia palustris			B, J	B, J	B		
Patrinia scabiosifolia	J						
Pedicularis resupinata	B, G	J		B, G			
(Persicaria maculata)				G			
Persicaria scabra			B				
Petasites amplus	G	J		G			
Phalaroides arundinacea		G	B, J		B, G	B	
(Phleum pratense)	B, G	B, G	B	B	B, G		
Phragmites australis			G-obs	B	B, G-obs		
Phyllospadix iwatensis	B						
Picris japonica	B, J	B, G	B	B, G	J	B	
(Pilosella aurantiaca)	B						
Plantago camtschatica	B, G	B, G	B, G	B, G	B, J	B	
Plantago cornuti	B	B		B, J	B		
Plantago japonica		G			G		
Platanthera ditmariana		E					
Platanthera extremiorientalis				B			
Platanthera hologlottis		B					
Pleurospermum uralense	B, G	G	G	B, G		B	
(Poa annua)	G						B
Poa macrocalyx		B					
Poa palustris					B		
(Poa pratensis)		G			B		
Poa tatewakiana	B	B			B		
(Polygonum aviculare)	G			J			
Populus jesoensis					B		
Potamogeton perfoliatus		E					
Potentilla egedii var. grandis	B	G	B, J		B, G		
Potentilla megalantha	B	G				B	
Potentilla stolonifera	B, G	B		B			
Primula fauriei	B, J	B, G, J		B			
Prunella asiatica		B, G			B		
Ptarmica camtschatica		B	B				
Ptarmica japonica	B	B, G	B, G	B, G, J	B, G	B	B

Taxa	Anu.	Iur.	Pol.	Tan.	Zel.	Dem.	Sto.
Ptarmica macrocephala	B, G	G		B			
Pteridium aquilinum		B, G		B	B		
Puccinellia kurilensis			B		B		
Ranunculus quelpaertensis				G			
Ranunculus repens		E					
Ranunculus transochotensis	B, G			B			
Rhodiola sachalinensis	B, J	B				B	
Rhodococcum vistis-idaea			B	B	B, G		
Rorippa palustris			B, J				
Rosa rugosa	B, G	B	B, G	B, G	B, G		
Rubia jesoensis		B, G	J	G	B, G		
Rubus mesogaeus		B					
Rubus sachalinensis		B					
(Rumex crispus)			B			B	
Rumex gmelinii		B, J	B				
(Rumex longifolius)		G		G			
(Rumex obtusifolius)	J						
Rumex ochotskius			B				
Sagina maxima var. crassicaulis	B	B		G			
Salix fuscescens					CH		
Salix gilgiana		B			B		
Salix hultenii		B					
Salix udensis					B		
Salix yezoensis				B			
Salsola komarovii	B	B	J		B		
Sambucus sieboldiana var. miquelii				B			
Sanguisorba parviflora					B		
Sanguisorba tenuifolia	B, J	B, G	B, G	J	B, G		
Sasa depauperata				B	B		
Sasa kurilensis					B		
Sasa senanensis	B						
Saussurea riederi		B, G	B				
Saxifraga bracteata	B			B		B	
Scirpus tabernaemontani				J	B, J		
Scrophularia grayana		B, G	G	B, J	G	B	
Scutellaria strigillosa			B	B	B		

Taxa	Anu.	Iur.	Pol.	Tan.	Zel.	Dem.	Sto.
Scutellaria yezoënsis		B, G	B, G	B, J	B, G		
Sedum erythrostictum	B						
Sedum kurilense		B					
Sedum telephium		B					
Sedum verticillatum		B					
Senecio cannabifolius		B, G	B, J	G			
Senecio nemorensis		G		G, J	B		
Senecio pseudoarnica	B, J	B, G	B, G	B, G	G	B	B
Solidago dahurica		B, G	B	B, G	B		
Sonchus arenicola	B, J	B	B		B		
(Sonchus arvensis)	E						
Sorbaria stellipila		B					
Sorbus sambucifolia		B, G		B	B		
Spiraea beauverdiana		B	B	B, G	B		
Spiraea betulifolia		B	B		B		
Spiraea salicifolia		B	B	B	B		
Spiranthes sinensis		B		J	J		
Stachys aspera		B, G	B, G	B, J	B, J		
Stellaria longifolia			J				
(Stellaira media)	B						B
Symplocarpus renifolius		G	B, J	B, G			
(Taraxacum officinale)		B			B		
Taraxacum shikotanense	G		B	B		B	
Taraxacum yetrofuense		B			B		
Thalictrum minus	B	B, G	B, G	B, J	B		
Thalictrum sachalinense				E			
Thelypteris thelypteroides		B	B	B	B		
Thermopsis lupinoides	B, J	B	B	B	B, G		
(Trifolium hybridum)				B	B		
(Trifolium pratense)	B			B, J	B		
(Trifolium repens)	B	B, G	B	B, J	B, G		
Trillium camschatcense		B		B	B		
(Tripleurospermum perforatum)					B		
Tripleurospermum tetragonospermum	B	B, G	B, G	B, G	B, G		B
Trisetum umbratile		B, J	G	G			
Truellum sieboldii				G	B, J		

Taxa	Anu.	Iur.	Pol.	Tan.	Zel.	Dem.	Sto.
Truellum thunbergii	B				B		
Typha latifolia				B			
Urtica platyphylla			J	G		B	B
Vaccinium axillare			G				
Vaccinium praestans		B, G, J		B	B		
Vaccinium uliginosum		B	B	B	B		
Veratrum grandiflorum				B, G		B	
Viburnum sargentii		B					
Vicia cracca	B	B			B	B	
Vicia unijuga	B, G	B			B		
Viola patrinii		B		G	B		
Viola sacchalinensis		B					
Vitis coignetiae		B, G		G	B, G		
Zostera cespitosa					B		

Anu., Anuchina [Akiyuri, 秋勇留]; Iur., Iuriy [Yuri, 勇留]; Pol., Polonskogo [Taraku, 多楽]; Tan., Tanfilyeva [Suisho, 水晶]; Zel., Zelenyj (Zelenyi) [Shibotsu, 志発]; Dem., Demina [Harukarimosiri, ハルカリモシリ (small island, 3km east of Yuri)]; Sto., Storozhevoy [Moemoshiri, 萌茂尻(small island, 3km south-west of Signal'nyy, 貝殻島)]

B—Barkalov & Eremenko (2003)
CH—Report only by Chernyaeva (1977)
G—Collection by S. Gage
J—Collection by S. L. Joneson
In *Empetrum*, (G) regarded the single species.
obs means observation only.