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BIODIVERSITY STUDIES

Vascular plants of Baikalsky Reserve and adjacent territories (Republic of Buryatia, Russia)

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ABSTRACT

We present a critical revision of the vascular flora of the Baikalsky State Nature Biosphere Reserve and its adjacent territories (Republic of Buryatia, Russia). An updated checklist was compiled based on original floristic data and an extensive review of all available publications and herbarium collections. The flora comprises 1 200 plant species, including 245 species recorded by the authors for the study area. Furthermore, the study provides scientific justification for excluding 149 species from the check-list. An original database with precise geographic coordinates was developed, containing 77 600 occurrence records, a major subset of which (74 000 records) has been published as a GBIF dataset. The study provides comprehensive data on the altitudinal and vegetation-belt distribution of species. Analysis of these data revealed a pronounced altitudinal gradient in floristic richness, the primary patterns of spatial and altitudinal differentiation of the flora, and altitude-specific trends in the distribution of plant life forms.

Keywords: vascular flora, Lake Baikal region, Khamar-Daban Range, biodiversity, database, altitudinal gradient, species richness

РЕЗЮМЕ

Гамова Н.С., Дудов С.В. Сосудистые растения Байкальского заповедника и прилегающих территорий (Республика Бурятия, Россия). Проведена ревизия флоры Байкальского заповедника и прилегающих территорий. Составлен новый список видов для этой территории с учетом авторских флористических данных, а также всех доступных опубликованных материалов и коллекций, включающий 1200 видов, из которых 245 видов впервые найдены авторами, и обосновано исключение 149 видов из списка флоры. Составлена авторская база данных с географическими координатами встреч всех видов флоры, включающая 77,6 тыс. записей, и датасет в GBIF (74,0 тыс. записей). Получены данные по высотному и высотно-поясному распределению видов на территории. Анализ этих данных позволил выявить строгий высотный градиент в распределении богатства флоры, основные закономерности пространственной и высотной дифференциации флоры территории, а также высотно-поясные закономерности в распределении жизненных форм.

Ключевые слова: флора, Байкал, Хамар-Дабан, база данных, биоразнообразие, высотный градиент, видовое богатство

The Baikalsky State Nature Biosphere Reserve was established in 1969 to protect the flora and plant communities of Southern Baikal region, and it has since become a key area for biodiversity conservation in the region (Boichenko et al. 2000). In 1986, the Reserve was designated a biosphere reserve, and in 1996 it was incorporated into the "Lake Baikal" UNESCO World Natural Heritage Site (UNESCO World Heritage Centre 2025). The territory is located within a mountainous macro-region of southern Siberia. According to the physiographic regionalization maps, this area is assigned to the mountains of Southern Siberia, the Cisbaikalia and Transbaikalia regions, or Baikalian Siberia (Gerasimov 1965, Mihailov 1968, Makunina 1985, Gvozdetskii 1986, Gvozdetskii & Mihailov 1987).

The first records on the flora of the study area date back to the mid-19th century (Turczaninow 1842, 1856). In the mid-20th century, the "Synopsis of the Flora of the Lake Baikal Coasts" (Popov & Busik 1966) was published – a compilation that provides numerous specific occurrences and herbarium specimens. Several botanical studies containing extensive data on the flora and vegetation of the Khamar-Daban Range (Epova 1956, 1957, 1960a,b, 1961), as well as research on the alpine flora (Ivanova 1967) were published in the same period. Since the establishment of the Baikalsky Reserve in 1969, three checklists of vascular plants have been published (Vasil'chenko et al. 1978, Krasnopevtseva et al. 2006, Abramova & Volkova 2011), reporting 777, 886, and 991 taxa, respectively. Following the publication of the third checklist, 27 additional papers focusing on various floristic additions to the study area have been published by early 2026.

Despite this long history of exploration, the data accumulated to date require a critical revision in accordance with modern taxonomic concepts. Furthermore, a significant portion of the floristic information published before the GPS navigation lacks precise geographic coordinates, which has previously limited the possibilities for spatial analysis.

The aim of this study was a revision of the flora of the Baikalsky Reserve and adjacent territories, producing a verified annotated checklist of vascular plants and compiling a georeferenced database for all species. This has enabled, for the first time, a quantitative analysis of the key patterns of floristic differentiation in the Khamar-Daban Range and provides a basis for long-term monitoring of vegetation transformation under a changing climate. The importance of this aspect is revealed in numerous floristic studies focusing on various mountain regions (Lamprecht et al. 2018, Sciandrello et al. 2020) and, specifically, on the Lake Baikal area, where climatic trends are documented (Lipka et al. 2025).

In the course of this study, we addressed the following tasks: (i) compiling an up-to-date database on the distribution of vascular plants based on original field research, literature sources, and herbarium collections; (ii) conducting a revision of the vascular plant flora in accordance with modern taxonomic concepts; and (iii) identifying the key patterns of floristic differentiation in the mountain territory with respect to species richness, life forms, and the herbaceous/woody plant ratio.

MATERIAL AND METHODS

Study area

The Baikalsky Reserve is located in the central part of the Khamar-Daban Range (Kabanskii, Dzhidinskii, and Selenginskii districts, Republic of Buryatia) (Fig. 1A). The total area of our research is 2 069 km², comprising the Reserve proper (1 679 km²), its buffer zone (348 km²), and an adjacent section of the Lake Baikal coastline (42 km²). The Khamar-Daban Range, the main structure on the southern Baikal coast, extends sublatitudinally for over 350 km. The study area thus encompasses two major geological units: the mountains of the Khamar-Daban and the Baikal graben (Voskresenskii 1962, Gerasimov 1965). Elevations range from Lake Baikal's level at 458 m a.s.l. to Mount Sokhor, the highest point at 2 316.7 m a.s.l. (Sochava 1967). Most of the Reserve lies between 1000 and 1500 m a.s.l., classified as mid-mountain terrain (Voskresenskii 1962) (Fig. 1B). The main watershed divides the territory into northern and southern macro-slopes. On the northern slope, elevations up to 530 m are occupied by the Baikal terraces – gently undulating foothill plains intersected by numerous tributaries. The southern slope lacks piedmont plains; its boundary follows the Temnik River valley at 1100–840 m a.s.l. (Boichenko et al. 2000). The topography is rugged, with narrow V-shaped valleys; relative ridge heights above valleys reach 500–800(1200) m (Gerasimov 1965). Drainage density is 0.28 km/km² overall (Project 1981).

The Khamar-Daban Range is characterized by a great diversity of rock types; however, its central part has distinctive features (Obruchev 1935–1938). Approximately 70 % of the study territory is composed of Proterozoic amphibole-biotite granites, which in the upper part of the northern slope are complicated by Mesozoic (Early Cretaceous) intrusive complexes of syenites and diorites; small inclusions of Paleozoic granites also occur. Thus, rocks of acidic composition absolutely predominate (Platov et al. 2009), in contrast to the western Khamar-Daban, where carbonate outcrops are far more common (Gerasimov 1965). Baikal terraces are composed of Neogene sedimentary rocks (clays, sands, conglomerates, gravels, brown coals, basalts). The Quaternary deposits of the study area are clearly differentiated by grain size: fine-grained lacustrine, alluvial, and glacial sediments occur on the terraces and in river valleys, whereas the mountain slopes and watersheds are dominated by coarse clastic colluvial and eluvial material (grus, rubble, boulders) (Gerasimov 1956, Platov et al. 2009).

During the Neopleistocene, mountain-valley glaciations (Zyryanka/Ermakovo and Sartan, 71 and 29 ka BP) shaped the alpine-type landforms (e.g., trough valleys, cirques) of the central Khamar-Daban highlands (Zamoruev 1971, Platov et al. 2009). The ice-free river valleys on the northern macro-slope acted as refugia, enabling the survival of relict flora (Kiseleva 1978, Chepinova et al. 2017, Protopopova et al. 2025). No modern glaciers exist, though snowfields – some of which persist year-round at high elevations – are common (Boichenko et al. 2000).

The climate differs sharply between the humid, near-maritime northern macro-slope and the dry, continental southern macro-slope (Gerasimov 1965). The northern slope receives up 900–1500 mm of precipitation annually, with snow depth reaching 180 cm at the treeline, while the southern slope receives 500–800 mm with snow depths of 70–90 cm (Sochava 1967). Mean annual temperatures range from -0.3°C on the coast to -5°C on the southern slope, with growing degree days' heat sum above 10° generally below 1000° (Ladeishchikov 1977, Bakshaeva et al. 1974). Permafrost is sporadic, more common on the southern slope (Nekrasov 1976). Under the Köppen-Geiger classification (Peel et al. 2007), the area historically belonged to cold types (Dwc, Dwf). However, 21st-century warming is shifting coastal areas toward temperate types (Cwc, Cwb) with mean annual temperatures above 0°C and four months >10°C), with implications for ecosystem resilience (Lipka et al. 2024, 2025).

The soils are highly mosaic, primarily differing between the humid northern and continental southern macro-slope. Using the World Reference Base for Soil Resources (WRB) as a framework (Mantel et al. 2023), soils can be provisionally classified as follows. Northern slopes feature predominantly brown soils (Cambisols), while southern slopes are characterized by Podzols, Podburs, and Gleysols. Altitudinal zonation includes mountain meadow soils (Umbrisols) in the lower alpine belt, giving way to skeletal alpine soils (Leptosols) in the upper alpine belt. Across most of the study area, soils are relatively shallow (typically < 50 cm deep) and saturated with coarse clastic material (Skeletic qualifier in the WRB). Fluvisols and Histosols occur in lowland floodplains and wetlands.

In terms of floristic division, the Khamar-Daban Range belongs to the Circumboreal Region of the Boreal Subkingdom (Takhtajan 1986). Within Asian Russia, it is distinguished as the Southern Buryat Floristic District of the Baikal Hemiboreal Province (Malyshev et al. 2000). The

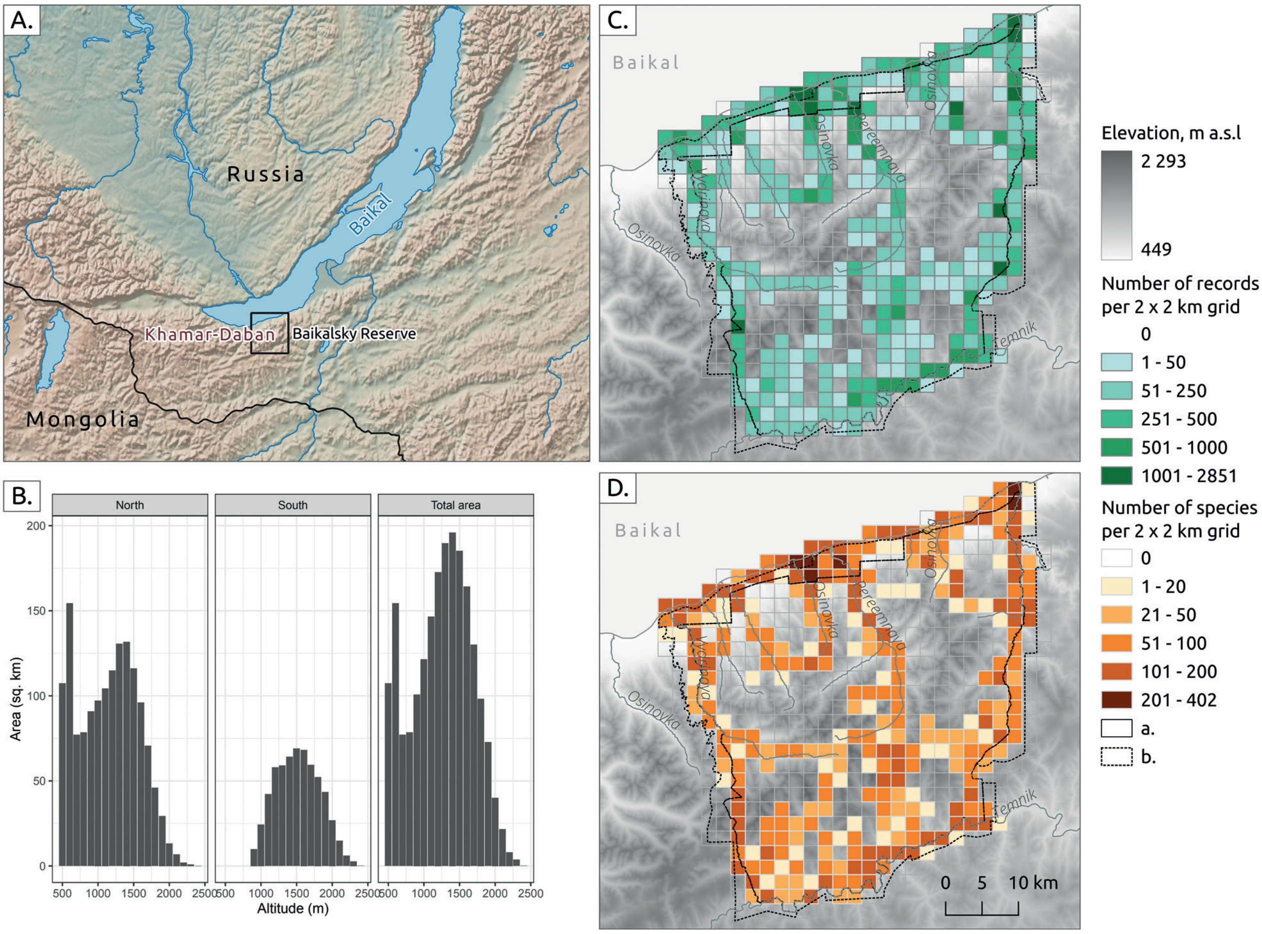

Figure 1 The study area. A – Baikalsky Reserve; B – distribution of the study area by elevation belts (hypsometric levels, 100-meter interval); C – number of floristic records per 2 × 2 km grid; D – number of species per 2 × 2 km grid

flora is generally typical of boreal floras in its family spectrum (Malyshev & Peshkova 1984). According to the map "Zones and Altitudinal Zonality Types of Vegetation of Russia and Adjacent Territories" (Ogureeva et al. 1999), the range is assigned to the Khamar-Daban geographic variant of the East Sayan type of altitudinal zonality. It exhibits the humid Baikal type of zonality (Tyulina 1976), linking it to the "Chern" (black) taiga of the Altai and Sayan foothills (Nazimova et al. 2014). The main vegetation patterns of Khamar-Daban are described by Epova (1960a, 1961), Solodkova (1959) and Molozhnikov (1986), who emphasize the widespread occurrence of dark coniferous taiga dominated by fir, which distinguishes this area from adjacent parts of the Baikal region (Sochava 1980). Synthesizing the cited studies, we distinguish three vegetation belts (Fig. 2). To align Russian (subgoltsy, goltsy, tundra) and international terminology, we follow Körner et al. (2011): the subalpine/subgoltsy belt corresponds to the lower alpine, and the alpine/goltsy-tundra belt to the upper alpine.

The mountain taiga belt covers about 65 % of the territory (Project 1981). On the northern macro-slope, it extends from the Lake Baikal coast (458 m a.s.l.) to ca. 1350 m a.s.l.; on the southern slope, from 830 m a.s.l. to ca. 1550 m a.s.l. Three sub-belts are distinguished on each slope. On the northern macro-slope, the sub-belts are: (1) forests of the Baikal terraces (458–530 m a.s.l.); (2) dark coniferous (*Pinus sibirica*, *Abies sibirica*) forests of the lower and mid-mountains (530–1000 m a.s.l.); and (3) sparse fir forests (1000–1350 m a.s.l.) (for vascular plants nomenclature, see Appendix I). The terraces, originally covered by dark coniferous forests and interspersed with bogs on waterlogged watersheds (Fig. 2A), are now largely replaced by secondary birch forests and meadows due to historical logging and fires. Mountain slopes are dominated by dark coniferous forests (*Abies sibirica*), with frequent tall-herb, fern, and anemone variants alongside typical taiga associations (Martusova 1988) (Fig. 2C). The treeline is formed by sparse fir woodlands interspersed with tall-herb meadows. On the southern macro-slope, the lower sub-belt (840–1100 m a.s.l.) comprises light coniferous forests (*Pinus sylvestris*, *Larix sibirica*) and steppe-like grasslands with *Ulmus pumila* on rocky slopes (Fig. 2B). The middle sub-belt (1100–1350 m a.s.l.) features mixed larch–pine forests. The upper sub-belt (1350–1550 m a.s.l.) is formed by Siberian pine forests (Fig. 2D), sometimes with Scots pine and Siberian larch. In contrast to the northern slope, tall-herb forests are absent; forests with dwarf shrubs, *Bergenia crassifolia*, small herbs and mosses in ground cover are widespread.

In river valleys, forests with *Populus suaveolens* occur. On the northern slope, they are confined to the largest rivers up to their middle reaches; on the southern slope, mainly to the River Temnik valley and its lower tributaries.

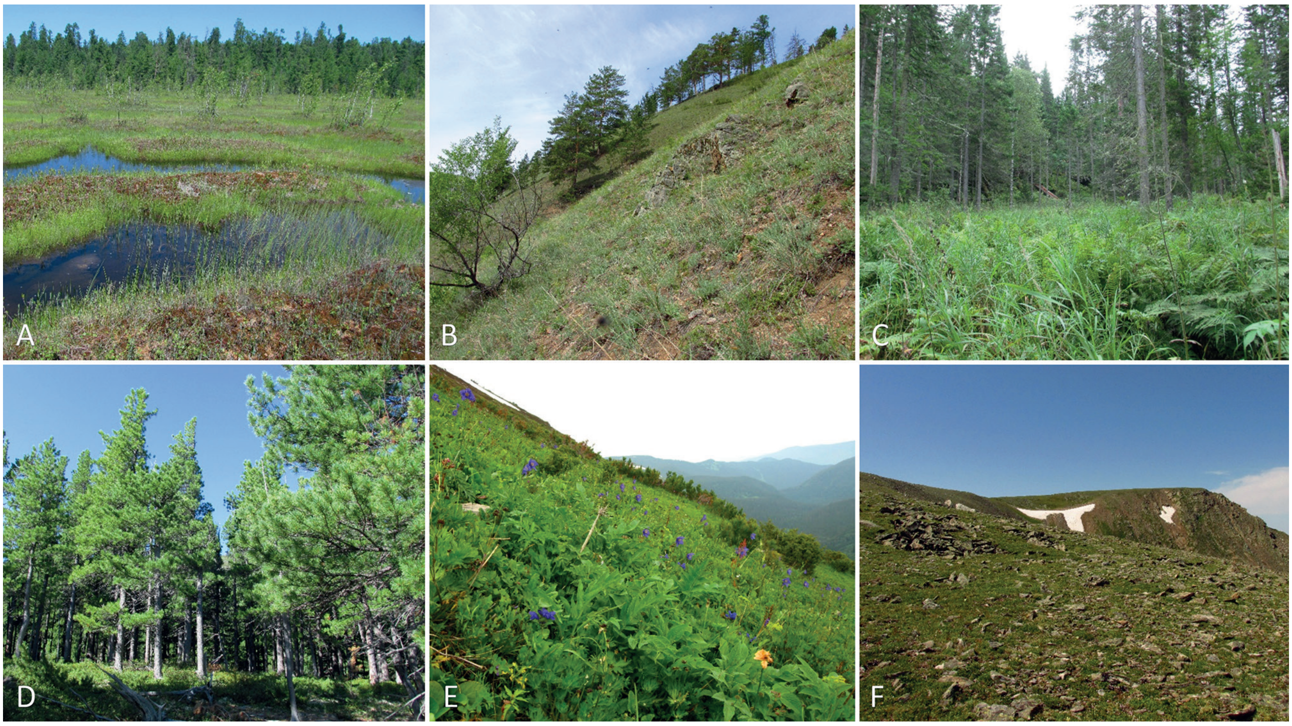

Figure 2 Vegetation belts and plant communities. A – dark coniferous forests interspersed with bogs on waterlogged watersheds on Baikal terraces; B – light coniferous forests and steppe-like grasslands (lower sub-belt of mountain taiga belt of southern macro-slope); C – Siberian fir tall-herb taiga on the northern macro-slope; D – Siberian pine taiga (upper sub-belt of mountain taiga belt of southern macro-slope); E – alpine meadows with *Aquilegia glandulosa* and *Pinus pumila* thickets (lower alpine belt of nortnhern macro-slope); F – dwarf shrub – forb tundra and snow bed on the main watershed (upper alpine belt)

The treeline elevation differs between the two macro-slopes. On the northern slope, it lies at 1300–1400 m a.s.l., varying from 1150–1250 m a.s.l. on ridges closest to Lake Baikal to ca. 1450(1500) m a.s.l. further inland. This pattern, noted by Galazii (1954) and Molozhnikov (1975), is likely due to increased humidity near the lake, which makes the climate more severe and depresses the treeline. On the southern slope, under more continental conditions, the treeline averages 1500–1600 m a.s.l. The transitional zone, where forest patches alternate with subalpine vegetation, extends to 1450–1500 m a.s.l. on the northern slope and to 1600–1650 m a.s.l. on the southern slope.

The lower alpine belt covers about 30 % of the area, occurring at 1450–1700(1750) m a.s.l. on the northern slope and 1600–1800(1850) m a.s.l. on the southern slope. On the southern slope, the belt is narrower due to the limited extent of meadows and the more compact distribution of Siberian dwarf pine (*Pinus pumila*). The subalpine communities of the two slopes are more similar to each other than are the forests. This belt features extensive stands of Siberian dwarf pine, subalpine crooked forests with *Betula tortuosa* (Krummholz), shrub thickets (*Duschekia fruticosa*, *Salix krylovii*, *Juniperus sibirica*, etc.), and alpine meadows (*Geranium krylovii*, *Aquilegia glandulosa*, *Viola altaica*, *Doronicum altaicum*), along with widespread rock fields (kurums) and avalanche tracks (Fig. 2E).

The upper alpine belt occupies the main watershed and the uppermost parts of both macro-slopes (above 1750 m a.s.l. on the northern, 1850 m a.s.l. on the southern). It covers just over 5 % of the territory, and is characterized by tundra communities (*Salix nummularia*, *Festuca ovina*, *Carex ledebouriana*, *Gentiana algida*) and nival meadows adjacent to snowbeds (*Gentiana grandiflora*, *Schulzia crinita*, *Sibbaldia procumbens*) (Fig. 2F). The highest, most severe sites support screes with lichen (*Cladonia* spp.) and dryad (*Dryas oxyodonta*) tundra. Lower down, dwarf shrub and forb tundra occur, while in waterlogged areas, sedge-moss tundra is found (Martusova 1988).

Most of the study area is not affected by anthropogenic activity and is identified as part of intact forest landscapes (Intact Forest Landscapes 2025). Anthropogenic disturbance is confined to a narrow strip along the Lake Baikal coastline, near settlements and infrastructure, while the mountain territory remains undisturbed.

Floristic data

This study is based on materials from original field research conducted by N.S. Gamova in 2009–2024. Field routes were designed to cover the maximum diversity of altitudinal vegetation belts and individual plant communities across the entire study area. The main route lines followed existing trails along river valleys; additionally, radial routes were established to reach the most remote parts of the Reserve. Along the routes, we conducted floristic records. For each visually identified habitat type, we recorded geographic coordinates and elevation using Garmin eTrexH and Garmin GPSmap 64 St GNSS receivers and documented all plant species within a radius of approximately 10 m. We also used relevés from 10 × 10 m and 20 × 20 m plots established as part of biodiversity monitoring studies in the Reserve. We conducted most of the fieldwork during the summer (June–August); with occasional observations at the beginning (May) or end (September) of the growing season.

During 2009–2021, our main efforts were focused on surveying as many sites and habitats within the Reserve as possible. After compiling the first dataset for the Reserve (39 000 records) (Gamova 2021) and its subsequent analysis (Gamova 2022), certain gaps in the data became evident, both geographically and taxonomically. Therefore, in 2022–2024, fieldwork was aimed at filling these gaps, resulting in 13 300, 11 500, and 11 700 records per year, respectively. In 2022–2023, we paid special attention to the species of conservation concern within the preparation of the 4th edition of the Red Data Book of the Republic of Buryatia (Anenkhonov 2023).

We used the iNaturalist platform as a source of citizen science data (iNaturalist community 2026). The Reserve, in accordance with its regulations, is a strictly protected area closed to free public access; therefore, large-scale use of citizen science data is not possible within its boundaries. However, areas of the buffer zone on the Baikal terraces, where the Reserve's ecological trails are located, and the unprotected section of the adjacent Lake Baikal coast are fully accessible to all iNaturalist participants. We created the project "Flora of the Baikalsky Reserve" (https://www.inaturalist.org/projects/flora-baykalskogo-zapovednika-flora-of-baikalsky-reserve), comprising three parts (the Reserve proper, the buffer zone, and the Lake Baikal coast). For this study, we included all observations by other researchers, published under licenses permitting non-commercial use of data (CC-BY type). Observations not identified to species (or hybrid) level were excluded. The iNaturalist project provided 2 713 Research Grade observations, verified by the first author.

The author's own herbarium collections from the Baikalsky Reserve and its vicinity comprise more than 4 000 specimens (MW). Identification of these specimens was performed by the authors for approximately 95 % of the collected material. For verification of identifications in taxonomically difficult groups, we consulted with relevant specialists. In several cases (*Potamogeton*, *Sparganium*, *Utricularia*), identification became possible only due to large-scale revisions of these genera across Northern Eurasia undertaken in recent years (Bobrov et al. 2022, 2023, Volkova et al. 2024). Herbarium specimens already available from our territory were also completely re-examined. Particular attention was paid to single records and species from taxonomically challenging groups. This work enabled the detection of several earlier misidentifications and the corresponding corrections to the floristic checklist. To ensure the most complete inclusion of all available data from the study area, we conducted an additional search for specimens of the taxa rarely found in the study area, in herbarium collections. Materials from the herbaria MW, LE, NSK, IRK, IRKU, UUH, and TK were examined. In total, 338 specimens were included in the study.

For the floristic revision, we compiled and systematized all literature sources pertaining to the study area. A complete list of published works on the flora of the Baikalsky Reserve and adjacent territories is presented in the Supplement. It includes 50 sources. This enabled us, for the first time, to synthesize all available publications.

Database and check-list

The database is presented in Darwin Core Archive (DwC-A) format (2021) and is published in Global Biodiversity Information Facility (GBIF) (Gamova 2026). Species occurrence coordinates were determined using two methods. For new herbarium collections, we entered the coordinates provided on the labels into the database. For older herbarium collections, locality coordinates were matched as precisely as possible based on the label text, and the corresponding coordinate uncertainty was assigned. Specimens for which the location could not be determined with an uncertainty of less than 10 000 m (i.e., those with only coarse locality descriptions, such as "Khamar-Daban Range, fir forest") were excluded from the database. This value was therefore used as the maximum acceptable coordinate uncertainty for inclusion. For iNaturalist observations, in the absence of a specified uncertainty or when the indicated value was less than 10 m, we adopted a GNSS receiver uncertainty of 10 m; when the indicated uncertainty exceeded 10 m, we used the actual value (this parameter ranged from 11 to 15 598 m). Of the iNaturalist observations, 1 869 had positional uncertainty of up to 10 m, and a further 445 had an uncertainty of up to 100 m inclusive. We also performed an additional verification of observation locations in iNaturalist; when an observation was clearly inconsistent with its possible location, these data were excluded from consideration (based on expert assessment). Consequently, 98 % of the records in the database had an accuracy of ±10 m (corresponding to the stated instrumental accuracy of the GNSS receiver), ensuring high data processing precision. The elevation (m a.s.l.) of occurrence points for our own observations, as well as for new herbarium collections with coordinates, was determined using a GNSS receiver. For observations from old herbarium specimens and for iNaturalist observations, elevation information was derived from the SRTM digital elevation model (Reuter et al. 2007).

A characteristic feature of all checklists of vascular plants of the Baikalsky Reserve (and publications with additions) is that the considered territory always encompassed not only the Reserve within its strict boundaries but also adjacent areas; consequently, the exact number of species within the Reserve itself was not known. We performed additional work to separate the flora of the Reserve proper from the overall study area based on textual descriptions and georeferencing. Species occurring only in the buffer zone and those known only from the adjacent unprotected coastal area were also compiled into separate lists.

In this study, we accepted species records only if documented by a reliably identified herbarium specimen and/or photographic evidence (iNaturalist). Literature records without voucher specimens were excluded. Taxonomy (family level) follows APG IV (World Flora Online 2025); species names primarily follow POWO (2025), with reference to Chepinoga et al. (2024). The species were categorized into three groups: native species, apophytes (i.e., native species that have expanded into man-made habitats), and alien species.

The checklist includes the following categories: species (hybrid, subspecies, variety) name; if necessary, widely used synonyms; species elevation range, m a.s.l. (minimum, maximum, mean, and standard deviation); conservation status (Red Data Books of the Republic of Buryatia and the Russian Federation); endemism (Baikalian Siberia and mountains of Southern Siberia); species distribution across vegetation belts (and sub-belts); species status (native/apophyte/alien); and species recorded after the publication of the 3rd checklist (Abramova & Volkova 2011). In some cases, additional comments are provided.

For the analysis of species life forms distribution, we defined groups according to a modified Raunkiaer classification based on a range of studies (Raunkiaer 1937, Serebryakov 1962, Bezdelev & Bezdeleva 2006, Zhmylev et al. 2017).

Data analysis

Data analysis was performed for species of the native flora (including apophytes), as they follow natural distribution patterns. For this purpose, we overlaid the database of species occurrence points with the raster product of elevation distribution, attached this information to all observations, and ultimately obtained species lists of the native flora for each elevation band. In constructing diagrams of the elevational distribution of species of different life forms, the proportion (%) of each life form within a given elevation band was calculated.

Data analysis was conducted in the R software environment version 4.5.2 (R Core Team 2025) using the packages tidyverse (Wickham et al. 2019), sf (Pebesma 2018, Pebesma & Bivand 2023), and terra (Hijmans 2025). For the analysis of species elevational distribution, the upper and lower recorded limits of distribution were determined for each species. The "median" elevation of species occurrence and the elevational interval within which 50 % of observations for a given species occurred (including the standard error of the mean) were also calculated.

For data analysis, we created shapefiles in the QGIS software environment (2026) for the following subdivisions of the study area: (1) the Reserve within its strict (cadastral) boundaries; (2) the Reserve's buffer zone; and (3) the adjacent unprotected section of the Lake Baikal coastline. For the analysis of species elevational distribution, the study area was divided by expert judgment into sectors based on key boundaries: the piedmont plains (Baikal terraces); the northern and southern macro-slopes separated by the watershed; and the treeline. Thus, this division delimits: the Baikal plain areas from the mountain slopes proper (northern macro-slope); the northern macro-slope within its forested part; the communities of the upper parts of the northern and southern macro-slopes and the main watershed above the treeline; and the southern macro-slope within its forested part.

Additionally, the entire study area was subdivided into 100 m elevation bands based on the SRTM digital elevation model (Reuter et al. 2007). Using these data, we developed a raster map with elevation and macro-slope divisions. In the naming of elevation bands, we used "N" for the northern macro-slope and "S" for the southern macro-slope; the elevation band is denoted by its upper limit. For example, the elevation band on the northern macro-slope from 701 to 800 m a.s.l. is designated N800, and the band on the southern slope from 1201 to 1300 m a.s.l. is designated S1300. All such designations are presented uniformly throughout the text below.

Data were also processed using the following methods: (1) regression analysis using a linear model; (2) turnover component of Sørensen (βsim) and Jaccard (βjtu) dissimilarity, implemented in the betapart package (Baselga 2010, Baselga & Orme 2012); (3) hierarchical clustering using Ward's method, and (4) non-metric multidimensional scaling (MDS) ordination, using the vegan package version 2.5-6 (Oksanen et al. 2022).

RESULTS AND DISCUSSION

Database of the flora of the Baikalsky Reserve and the current species checklist

The database used for data processing contains 77 606 records. Of these, the author's own data comprise 74 025 records (95.4 %), data from the iNaturalist platform total 2 713 records (of which 697 observations made by Baikalsky Reserve staff), 530 records of species of conservation concern, and 338 records for herbarium specimens of other collectors.

Divided into 2 × 2 km squares, the study area comprises 572 cells, of which data are available for 305 cells (53.3 %). 221 cells (38.6 %) have more than 50 records; 100 cells (17.5 %) have more than 250 records (Fig. 1C). Eleven cells have more than 1 000 records, of which three are in the vicinity of Tankhoy village and its surroundings; two are in the vicinity of the bird ringing station; the remaining six are located within the Reserve's territory and are associated with the most frequently visited sites annually (research stations, etc.). 247 cells (43.2 %) contain records of more than 20 species; 188 cells (32.8 %) contain records of more than 50 species; 84 cells (14.7 %) contain records of more than 100 species (Fig. 1D). Six cells contain records of more than 200 species; all of them are located in the most thoroughly studied areas. The cell containing both the maximum number of records (2 851) and species (402) is located in Tankhoy village.

In total, the database and checklist contains 1 200 taxa (species, hybrids, subspecies, or varieties) belonging to 452 genera and 95 families, according to World Plants (2025). Of these, 245 species were recorded by the authors, and 86 species are known only from findings by other researchers. Among the species not found by the authors, 28 are casual occurrences restricted to roadsides and railway embankments; 27 belong to very rare native species; and the remainder are represented by 2--3 herbarium specimens and, apparently, also have a very limited distribution within the study area. Compared to previously published summaries, the flora of the study area has increased by more than 200 taxa. The most recent summary for the territory listed 991 taxa (Abramova & Volkova 2011). A total of 149 species proved to be erroneous records and have been excluded from the checklist (see Appendix II for the complete list and reasons for exclusion). Approximately 300 species represent new findings from the period 2012–2025 and re-identifications of herbarium specimens (Gamova et al. 2025a, b). Thus, despite a "quantitative" change in the flora of ca. 200 taxa (from 991 to 1200), the "qualitative" change approaches 400 taxa, i.e., constitutes about 30 % of the complete floristic list currently known.

Among all species, members of the genus *Alchemilla* are a special case with 43 species known, including 20 alien species, based on indications provided by A.V. Chkalov in the "Checklist of the flora of Asian Russia" (Chepinoga et al. 2024). Since the study of *Alchemilla* diversity in the Baikal Region is incomplete, for further analysis all of them are treated at the genus level. Thus, native species of the local flora comprise 1 031 taxa (including 51 species of apophytes). Most often, the apophyte group is represented by steppe plant species found on the Lake Baikal coast on railway embankments / highway roadsides in the absence of actual steppe habitats in the coastal area.

Main patterns of native flora differentiation

Vascular plant species richness declines consistently with elevation (Fig. 3). On the northern macro-slope, the highest richness is associated with the elevation band N500 (636 species), followed by N600 (429 species). Richness then gradually decreases up to the treeline, with the exception of band N2000, which shows lower richness than both adjacent bands. On the southern macro-slope, maximum richness occurs not in the lowest band (S900, 296 species), but in bands S1000–S1200 (333–345 species). Further upslope, richness declines to a minimum in the highest band S2400 (11 species); no data are available for band N2400. For ten elevation bands, the total number of known species does not exceed 100; all of these bands are confined to the upper alpine belt (S2100–S2400 and N1800–N2300). The high species richness is associated with habitat diversity: on the northern slope, the terraces of Lake Baikal;

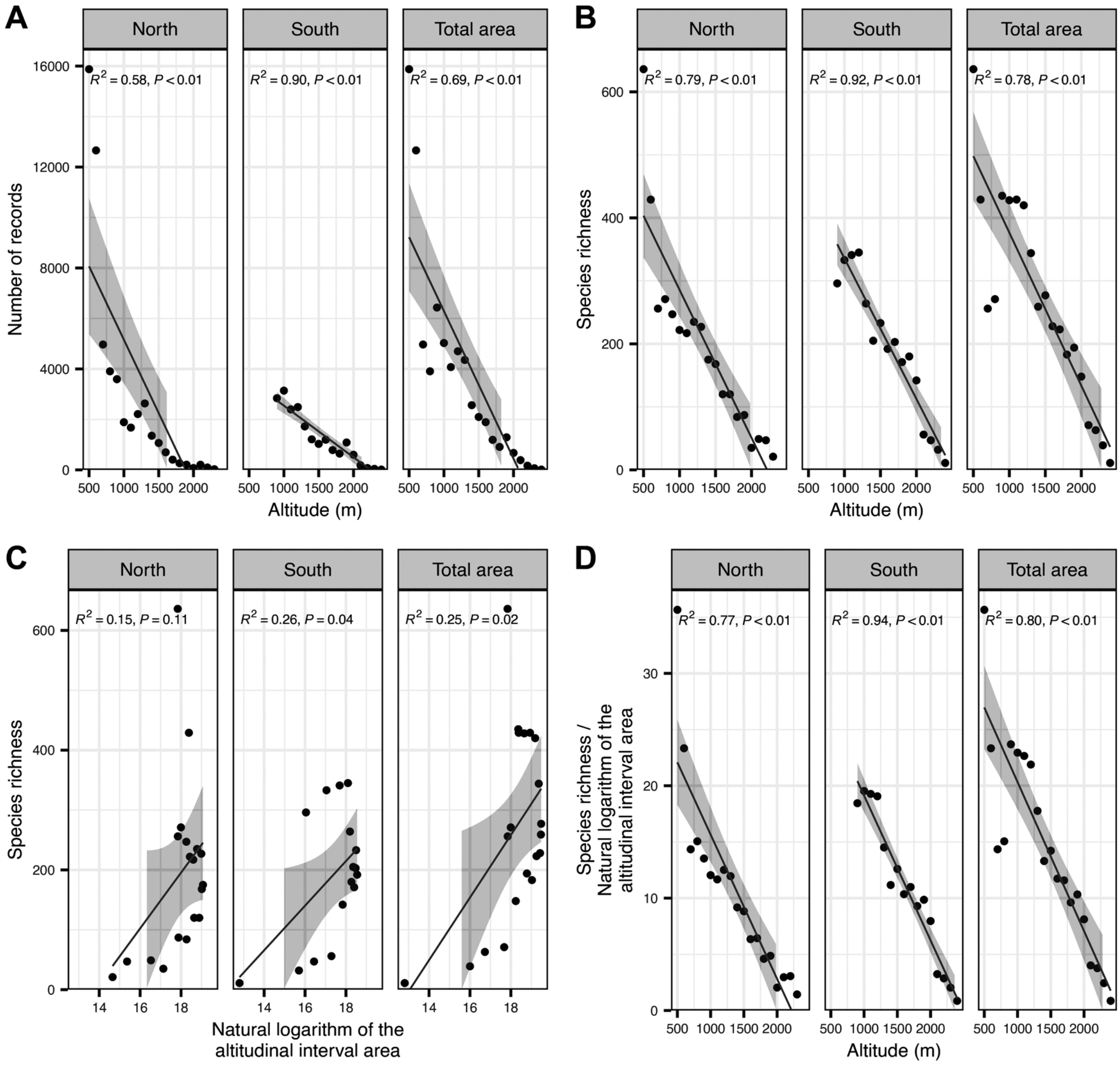

Figure 3 Distribution patterns of the native flora along the elevational gradient on the northern and southern macro-slopes of the Khamar-Daban Range. A – sampling effort (number of records); B – species richness; C – area of elevation bands (km²); D – species richness corrected for area. The very high coefficient of determination (R^2 = 0.80) in D indicates the predominance of the elevational gradient

on the southern slope, to the River Temnik valley. The low richness of N2000 is likely due to data deficiency, as this area is difficult to survey. The very low richness of the highest bands (S2400, and presumably N2400) reflects the small area of these summit habitats.

Both the distribution of the number of records across altitudinal belts and species richness show a significant dependence on absolute altitude with linear trend (Fig. 3A,B). At the same time, the distribution of species richness has a higher coefficient of determination (R^2 = 0.79 and 0.58 for the northern macro-slope, respectively, and 0.92 and 0.90 for the southern one). The relationship between the species richness of altitudinal belts and their area is insignificant for the entire territory (Fig. 3C) and shows low R^2 values (0.15 for the northern macro-slope and 0.26 for the southern one). At the same time, species richness adjusted for the logarithm of the altitudinal belt's area (Fig. 3D) has high R^2 values (0.77 for the northern macro-slope and 0.94 for the southern one). Thus, the vascular plant species richness of the study area is directly related to elevation. It can be concluded that the observed patterns are associated precisely with the prevailing elevational gradient in species richness, rather than with the level of sampling effort.

The structure of the flora is also related to the altitude above sea level and the position on the northern or southern macroslope. (Fig. 4A,B). The main divisions of the resulting dendrograms coincide with the known boundaries of altitudinal vegetation belts, thereby emphasizing the validity of their delineation. In the figure presenting the results of MDS ordination (Fig. 5), a distinct group is formed by the floras of the southern macro-slope foothills (S900, S1000, S1100), while the floras of the higher elevation bands, S1200 and S1300, occupy an intermediate position. The former are distinguished by the presence of steppe-like habitats, uburs, which harbor a distinctive flora. The latter correspond to the belt of light coniferous (pine and larch) forests. At the opposite ends of the MDS1 axis, the forest floras of the northern macro-slope and the floras of high-mountain areas (lower alpine and upper alpine) are grouped, respectively. The floras of bands adjacent to the treeline and those of the middle and lower parts of the alpine belt occupy an intermediate position between the forest and tundra floras.

It should be noted that both βsim and βjtu dissimilarity measures yield similar results regarding the relative arrangement of individual floras and comparable values of dissimilarity between them. The two largest clusters distinguished in the dendrograms correspond to the division into elevational levels above the treeline and below the treeline. Within the group above the treeline, individual floras are united into small subclusters without clear boundaries. The group of floras from elevational levels below the treeline is internally heterogeneous and comprises three subclusters. The first includes the floras of the lower belt of the southern macro-slope of the Khamar-Daban Range, where areas of rocky steppe-like communities and pine forests occur; this group stands apart from the others. The second and third clusters are forest floras. The second unites the floras of the northern macro-slope from the Lake Baikal coast up

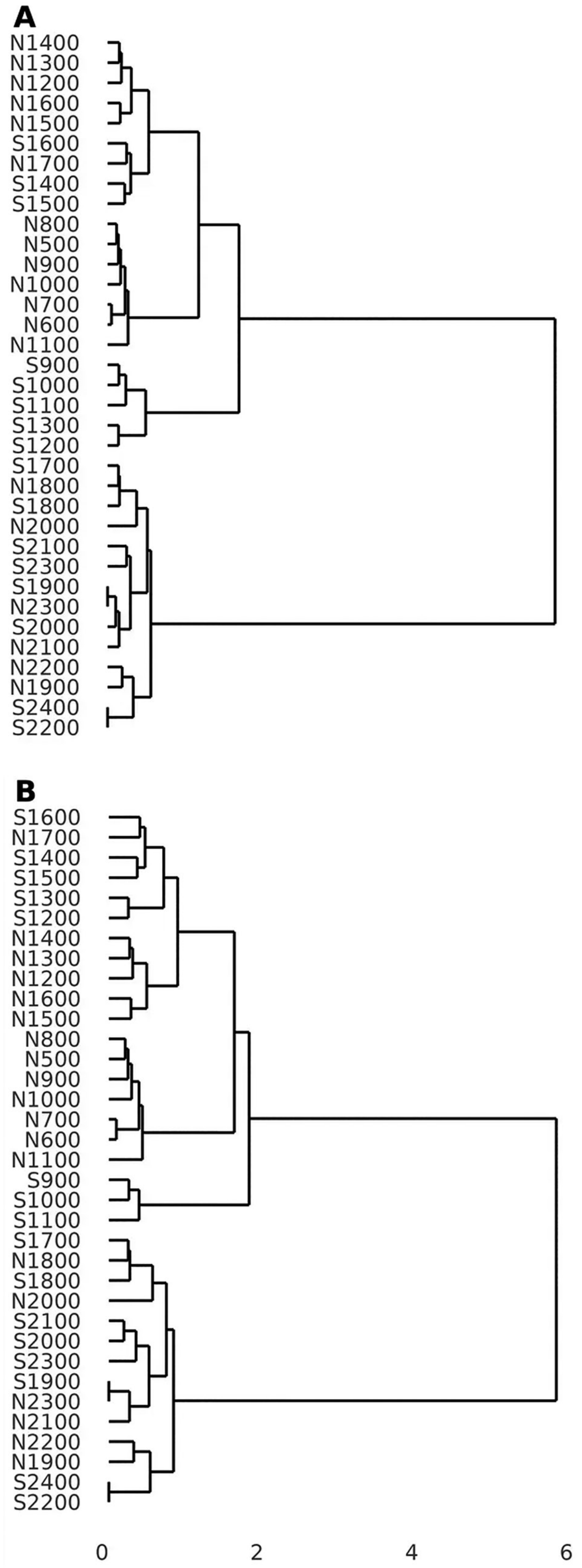

Figure 4 Hierarchical clustering of 100 m elevation bands floras (Ward's method) based on two measures of pairwise dissimilarity: A – Simpson dissimilarity matrix (βsim), representing spatial turnover, and B – the turnover component of Jaccard dissimilarity (βjtu), as defined by Baselga (2012)

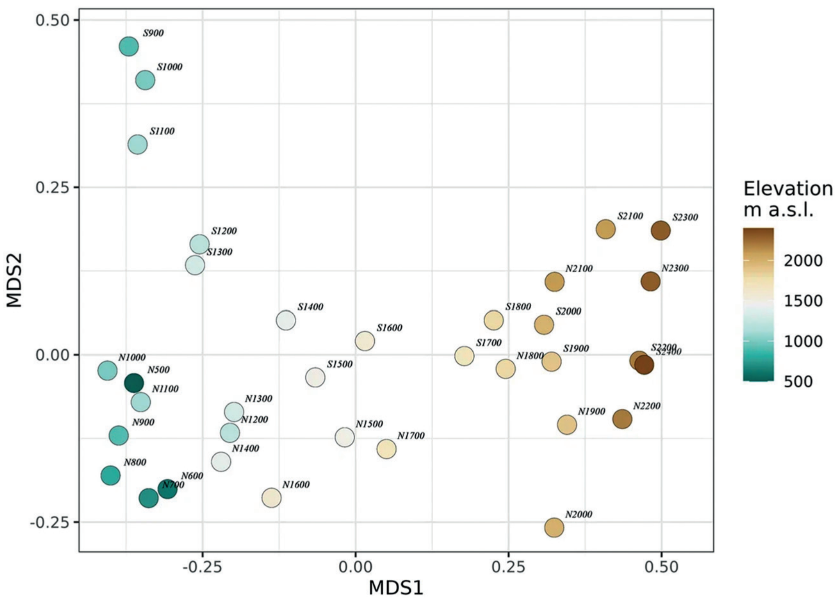

Figure 5 MDS ordination diagram of 100 m elevation bands floras based on Simpson dissimilarity matrix (βsim, Baselga 2012), (stress value = 0.11)

to elevations of 1100 m, i.e., the floras of the foothills and the lower part of the forest belt. The third comprises forest floras of both the northern and southern macro-slopes in the upper part of the forest belt (1100–1600 m). Thus, the largest and most distinct clusters of elevation band floras fully conform to the logic of the natural subdivisions of the study area.

Distribution of life forms

Life form distribution shows clear elevational trends (Fig. 6A). Ten life form groups were distinguished, with hemicryptophytes and chamaephytes occurring in all 35 elevation bands; geophytes (34 bands) and phanerophytes (32 bands) are also widespread. Aquatic and semi-aquatic groups are the rarest, recorded in only 12 bands.

Hemicryptophytes dominate all bands (51.7–84.4 %), their proportion increasing with elevation and peaking in the highest tundra areas (N2300, S2400, S2300). Chamaephytes similarly increase above the treeline. A slight decrease in hemicryptophytes occurs at N2000–N2100 and S2100 – transitional zones with steep slopes, screes, and kurums, where conditions favor shrubs and dwarf shrubs over herbs.

Phanerophytes are absent only in the three highest bands (N2300, S2400, S2300), where woody plants are represented solely by dwarf shrubs (chamaephytes). On the northern slope, maximum life form diversity (8–10 groups) occurs in the foothills and lower slopes (N500–N800). On the southern slope, hydrotherophytes are absent; the highest diversity (8–9 groups) is at S1100, S1300, and S1500, with a more scattered distribution likely linked to lake distribution. Therophytes and pseudotherophytes are mainly confined to lower elevations on both slopes. Aquatic plants are much rarer on the southern slope but occur more diffusely within the forest and lower alpine belts, reflecting small forest lake patterns.

Woody/herbaceous plants ratio shows strong connection with the elevation (Fig. 6B). The maximum proportion of woody plants occurs in the transitional zone from lower alpine belt to upper alpine: at N2000 on the northern slope and at S2100–S2200 on the southern slope. Herbaceous plants show a contrasting pattern: on the northern slope, their abundance decreases from the foothills to the lower alpine belt, then increases sharply in the upper alpine belt. On the southern slope, the same trend is less pronounced due to fewer elevation bands within the mountain taiga belt.

Species of conservation concern

Within the study area, 49 species of vascular plants included in the Red Data Book of the Republic of Buryatia (Anenkhonov 2023) are known, 12 of which are also listed in the Red Data Book of the Russian Federation (Geltman 2024). For *Hammarbya paludosa*, a locality in the Baikalsky Reserve was discovered in 2024 after the publication of the republican Red Data Book (Gamova et al. 2025b). Additionally, in 2023, the only record for Buryatia of *Galium odoratum* was found (Gamova et al. 2024), a species we will recommend for inclusion in the next edition of the Red Data Book of the Republic of Buryatia. Two of the species rare in Buryatia are known only from the Baikalsky Reserve (*Asplenium sajanense* from the federal Red Data Book; *Chimaphila umbellata* from the republican Red Data Book).

Other plants species of conservation concern, many confined to the northern macro-slope and associated with fir forests, occur in the region (Kiseleva 1978, Malyshev & Peshkova 1984, Boikov 1999, 2005). The flora includes 21 endemics of Baikalian Siberia and 20 endemics of the mountains of Southern Siberia. Narrow local endemics include *Tridactylina kirilowii* and *Swertia baicalensis*, known only from the Khamar-Daban Range. However, not all endemics are listed in Red Data Books, and conversely, many Red Data Book species (e.g., most Orchidaceae) are not endemics. Elevational distribution of endemics reveals several patterns. Some species (e.g., *Ranunculus altaicus*, *Hedysarum cisbaicalense*) are confined to the upper alpine belt, mainly on the southern slope. Others (e.g., *Dracocephalum olchonense*, *Cotoneaster lucidus*) are restricted to the lowest elevations (Baikal coast). A few, such as *Anemone baicalensis* and *Eranthis sibirica*, have broad elevational ranges, occurring in forest and lower alpine belts on both slopes.

Regarding the distribution of rare species (endemics and those included in Red Data Books), it can be noted that all altitudinal belts are rich in such species. Many species from the Red Data Book of the Republic of Buryatia are abundant only in fir taiga and valley forests with *Populus suaveolens*, i.e., they are strictly confined to the northern slope of the Khamar-Daban Range and therefore do not occur in other areas of Buryatia. We did not reveal any strict relationship between the total species richness of an elevation band and

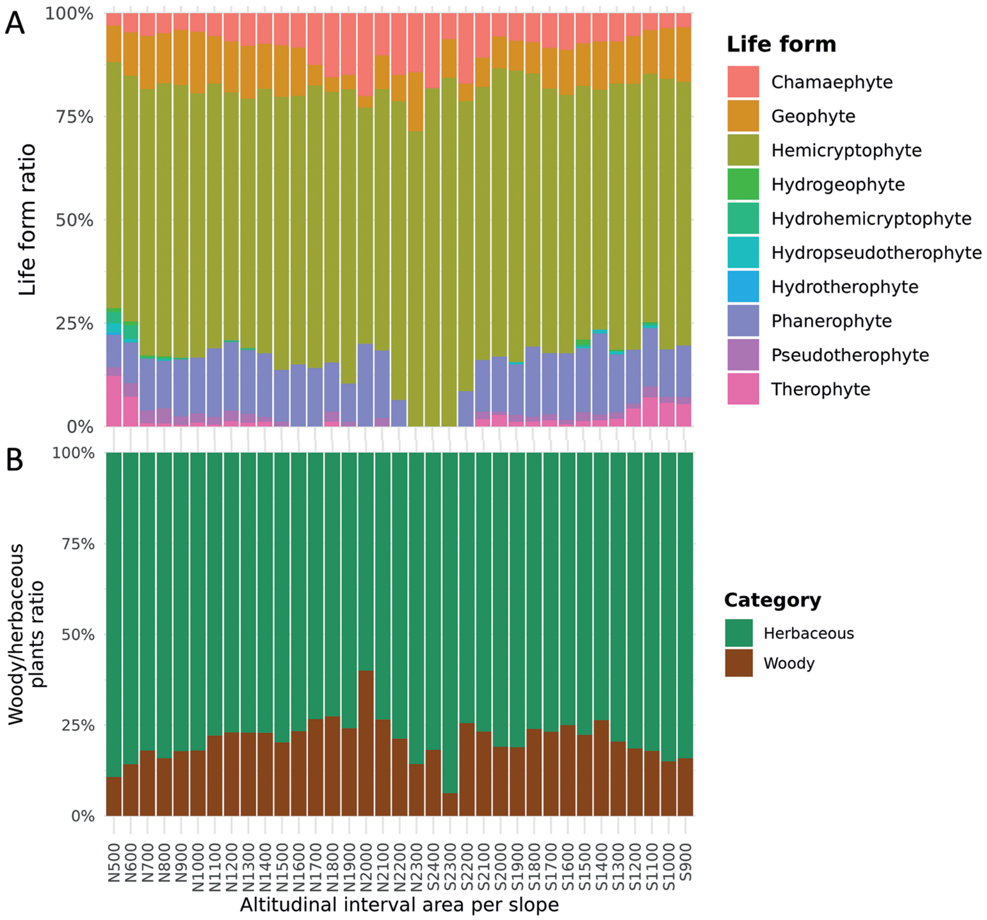

Figure 6 The proportion of different vascular plant life forms (A) and proportion of woody/herbaceous plants (B) across 100 m elevation bands

the number of rare species recorded within it. Most species of conservation concern, unless known from a single locality, are distributed across at least several adjacent elevation bands. The only exceptions are those rare species known exclusively from the Lake Baikal coast that do not ascend into the mountains at all (*Orchis militaris*, *Tillaea aquatica*, *Cotoneaster lucidus*). Interestingly, despite the high level of species richness observed in the steppe-like grasslands at the foot of the southern macro-slope, rare species are mostly absent there. Apparently, this is because these communities are merely "insular" patches of steppe plant communities, poorly connected to the main steppe areas in Buryatia, and are represented by the most common steppe species, which are generally very widespread in the republic and do not require protection. Overall, the study area harbors more than a quarter of all vascular plant species included in the Red Data Book of the Republic of Buryatia (Anenkhonov 2023), and for 16 of them, the Baikalsky Reserve is the only protected area in the republic where they are conserved. An analysis of the distribution of species of conservation concern in protected areas of Buryatia is presented in a separate work (Sandanov et al. 2024).

Alien component of the flora

A total of 127 alien species were recorded, accounting for 10.6 % of the flora; of these, 93 represent only accidental introductions, 22 escape from culture, and 12 have mixed sources of distribution. They are concentrated on the Lake Baikal coast and the Baikal terraces (bands N500–N600), with occasional penetration to N900 on the northern slope; no aliens have been recorded on the southern slope or at higher elevations. Regarding alien species, it can be stated that the current situation in the Baikalsky Reserve is very favorable. Although a total of 127 alien species have been recorded within the study area, only 22 of them have managed to penetrate the Reserve's main territory. Their spread is mainly associated with tourist trails and river valleys. Currently, *Juncus tenuis* and *Veronica officinalis* are actively spreading along trails, while *Tussilago farfara* is spreading along the river banks. The vast majority of alien species in the flora are concentrated in a narrow strip of the Lake Baikal coast, where invasive species included in the Black Data Books of the flora of Siberia and the Far East are also found (Vinogradova & Kupriyanov 2016, Vinogradova et al. 2021). In the part of the buffer zone adjacent to the coast, the number of alien species decreases, and in the undisturbed natural landscapes of the Reserve's main territory, the presence of alien species is minimal. Detailed analysis of invasion patterns is given in Gamova (2022b) and Gamova & Korotkov (2023).

CONCLUSION

The data we obtained represent a "snapshot" of knowledge on the floristic diversity of the study area as of 2025. The total vascular flora of study area comprises 1200 species. Within the Reserve boundaries proper, 828 species are known, of which 22 are alien. The systematic study of the mountain territory's flora makes it possible to identify natural patterns and distribution boundaries of floristic complexes. The obtained spatial data on the flora, along with information on the elevational distribution of species diversity, provide a fundamental basis for monitoring the Reserve's natural complexes and for conducting further research.

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APPENDIX I

Check-list of vascular plants of Baikalsky Reserve and adjacent territories

Symbols and abbreviations

+ – species recorded after publication of the 3rd checklist (Abramova et Volkova 2011)

* – Red Data Book of the Republic of Buryatia (2023)

** – Red Data Book of the Republic of Buryatia (2024)

EnBS – Endemic of Baikal Siberia

EnSS – Endemic of Southern Siberia

Vegetation belts (and sub-selts) are marked as follow.

Te – Baikal terraces: lower subbelt within the belt of mountain taiga of the northern macro-slope (forests, bogs, meadows, anthropogenically disturbed areas)

TN – Mountain taiga belt of northern macro-slope (dark coniferous forests, river valleys forests)

SN – Lower alpine (subalpine) belt (crooked forests, shrub thickets, alpine meadows) of northern macro-slope

Tu – Upper alpine (tundra) belt on the main watershed (tundras)

SS – Lower alpine (subalpine) belt (crooked forests, shrub thickets, alpine meadows) of southern macro-slope

TS – Mountain taiga belt of southern macro-slope (dark coniferous forests in the upper subbelt and light-coniferous forests in the middle and lower subbelts)

Fs – Lower subbelt within the belt of mountain taiga of the southern macro-slope (patches of forest-steppe communities and rocky steppe-like grasslands)

The status "native" is not specifically indicated in this checklist; we use only the statuses "alien" and "apophyte". If the status "apophyte" is given after the list of vegetation belts (e.g., Te, TN. Apophyte), it means that this status applies to the species in all belts. If the status "apophyte" is placed in parentheses after a single vegetation belt (e.g., Te (Apophyte), Fs), it indicates that the species has different statuses in different vegetation belts within the study area.

In some cases, we added special notes.

Lycopodiaceae

* *Dendrolycopodium juniperoideum* (Sw.) A.Haines [*Lycopodium juniperoideum* Sw.]: 461–548 m a.s.l. Te, TN.

Diphasiastrum alpinum (L.) Holub [*Lycopodium alpinum* L.]: 1002–1852 m a.s.l. SN, Tu, SS.

Diphasiastrum complanatum (L.) Holub [*Lycopodium complanatum* L.]: 458–1756 m a.s.l. Te, TN, SN, SS, TS.

+ *Huperzia petrovii* Sipliv. [*Huperzia selago* subsp. *appressa* (Desv.) D. Löve]: 1292–2220 m a.s.l. SN, Tu, SS.

Huperzia selago (L.) Bernh. ex Schrank & Mart.: 463–1314 m a.s.l. Te, TN, SN.

Lycopodium clavatum L.: 457–1530 m a.s.l. Te, TN, SN, SS, TS.

+ *Lycopodium lagopus* (Laest.) Zinserl. ex Kuzen.: 1215–1756 m a.s.l. SN, Tu, SS.

Spinulum annotinum (L.) A.Haines [*Lycopodium annotinum* L.]: 457–1602 m a.s.l. Te, TN, SN, SS, TS.

+ *Spinulum annotinum* subsp. *alpestre* (Hartm.) Uotila [*Lycopodium dubium* Zoëga]: 1201–1808 m a.s.l. SN, SS.

Selaginellaceae

Selaginella sanguinolenta (L.) Spring.: 840–1235 m a.s.l. Fs.

Selaginella selaginoides (L.) P. Beauv. ex Schrank & Mart.: 647–1627 m a.s.l. TN, SN.

Selaginella sibirica (Milde) Hieron.: 866 m a.s.l. Fs.

Equisetaceae

Equisetum arvense L.: 457–1244 m a.s.l. Te, TN, TS.

Equisetum fluviatile L.: 457–1450 m a.s.l. Te, TN, TS.

Equisetum hyemale L.: 457–1053 m a.s.l. Te, TN, TS.

Equisetum palustre L.: 457–1425 m a.s.l. Te, TN, TS.

Equisetum pratense Ehrh.: 457–1760 m a.s.l. Te, TN, TS.

Equisetum scirpoides Michx.: 457–1149 m a.s.l. Te, TN, TS.

Equisetum sylvaticum L.: 457–1497 m a.s.l. Te, TN, TS.

Equisetum variegatum Schleich. ex Weber & D.Mohr: 562–1341 m a.s.l. Te, TN, TS.

Onocleaceae

Matteuccia struthiopteris (L.) Tod. [*Onoclea struthiopteris* (L.) Roth]: 457–1455 m a.s.l. Te, TN, TS.

Aspleniaceae

+ ** *Asplenium sajanense* Gudoschn. & Krasnob.: 1300–1373 m a.s.l. EnSS. SN.

Athyrium distentifolium Tausch ex Opiz: 511–1931 m a.s.l. Te, TN, SN, SS.

Athyrium filix-femina (L.) Roth: 457–1389 m a.s.l. Te, TN, SN, SS, TS.

+ *Athyrium monomachii* (Kom.) Kom.: 458–791 m a.s.l. Te, TN.

Athyriaceae

Diplazium sibiricum (Turcz. ex Kunze) Sa.Kurata: 458–1606 m a.s.l. Te, TN, SN, SS, TS.

Woodsiaceae

+ *Woodsia calcarea* (Fomin) Shmakov: 912–2081 m a.s.l. TN, SN, SS, TS.

Woodsia ilvensis (L.) R. Br.: 555–1937 m a.s.l. TN, SN, SS, TS, Fs.

Cystopteridaceae

Cystopteris fragilis (L.) Bernh.: 746–1431 m a.s.l. TN, TS.

Cystopteris montana (Lam.) Bernh.: 1234–1658 m a.s.l. TS.

Cystopteris sudetica A. Braun & Milde: 463–1212 m a.s.l. Te, TN.

Gymnocarpium dryopteris (L.) Newm.: 458–1527 m a.s.l. Te, TN, SN, SS, TS.

Gymnocarpium jessoense (Koidz.) Koidz.: 896–1441 m a.s.l. SN, SS, TS.

Dryopteridaceae

Dryopteris carthusiana (Vill.) H.P.Fuchs: 464–1374 m a.s.l. Te, TN, SN.

Dryopteris expansa (C. Presl) Fraser-Jenk. & Jermy: 457–1710 m a.s.l. Te, TN, SN, SS, TS.

* *Dryopteris filix-mas* (L.) Schott.: 461–894 m a.s.l. Te, TN, SN.

Dryopteris fragrans (L.) Schott: 764–1498 m a.s.l. TN, SN, SS, TS.

* *Polystichum lonchitis* (L.) Roth: 587–1869 m a.s.l. TN, SN, SS.

Thelypteridaceae

* *Oreopteris limbosperma* (All.) Holub: 459–1656 m a.s.l. Te, TN, SN, SS.

Phegopteris connectilis (Michx.) Watt: 458–1920 m a.s.l. Te, TN, SN, SS, TS.

Dennstaedtiaceae

Pteridium pinetorum C.N.Page & R.R.Mill [*Pteridium latiusculum* subsp. *pinetorum* (C.N.Page & R.R.Mill) Fraser-Jenk.]: 460–1550 m a.s.l. Te, TN, SN.

Pteridaceae

+ *Aleuritopteris argentea* (S.G. Gmel.) Fée: 840 m a.s.l. Fs.

Cryptogramma stelleri (S.G. Gmel.) Prantl: 1521 m a.s.l. SN.

Polypodiaceae

Polypodium sibiricum Sipliv.: 528–1220 m a.s.l. TN, TS.

Ophioglossaceae

* *Botrychium boreale* Milde: 468–1124 m a.s.l. Te, TN, TS.

* *Botrychium lanceolatum* (S.G. Gmel.) Ångstr.: 460–1105 m a.s.l. Te, TN, TS.

Botrychium lunaria (L.) Sw.: 877–1334 m a.s.l. SN, TS, Fs.

* *Botrychium multifidum* (S.G. Gmel.) Rupr. [*Sceptridium multifidum* (S.G. Gmel.) Nishida ex Tagawa]: 457–619 m a.s.l. Te, TN.

* *Botrychium virginianum* (L.) Sw. [*Botrypus anthemoides* (C. Presl) Val.N. Tikhom.]: 460–595 m a.s.l. Te, TN.

Pinaceae

Abies sibirica Ledeb.: 457–1923 m a.s.l. Te, TN, SN, SS, TS.

Larix sibirica Ledeb.: 459–2007 m a.s.l. Te, TN, SS, TS, Fs.

Picea obovata Ledeb. (incl. *Picea obovata* var. *coerulea* Malyschev): 457–1962 m a.s.l. Te, TN, SN, SS, TS.

Pinus pumila (Pall.) Regel: 460–2103 m a.s.l. Te, TN, SN, Tu, SS, TS.

Pinus sibirica Du Tour: 457–2103 m a.s.l. Te, TN, SN, Tu, SS, TS.

Pinus sylvestris L.: 457–1643 m a.s.l. Te, TN, TS, Fs.

Cupressaceae

Juniperus communis L.: 460–1211 m a.s.l. Te, TN, TS.

Juniperus communis subsp. *saxatilis* (Pall.) A.E.Murray [*Juniperus communis* var. *saxatilis* Pall., *Juniperus sibirica* Burgsd.]: 460–1920 m a.s.l. Te, TN, SN, SS, TS.

Ephedraceae

Ephedra monosperma C.A. Mey.: 910–1132 m a.s.l. Fs.

Nymphaeaceae

Nuphar pumila (Timm) DC.: 489–541 m a.s.l. Te, TN.

* *Nymphaea tetragona* Georgi: 489–552 m a.s.l. Te, TN.

Araceae (incl. Lemnaceae)

Calla palustris L.: 458–741 m a.s.l. Te, TN.

+ *Lemna turionifera* Landolt: 464 m a.s.l. Te.

Tofieldiaceae

Tofieldia coccinea Richardson: 1541–2236 m a.s.l. Tu.

Alismataceae

Alisma plantago-aquatica L.: 457–535 m a.s.l. Te.
Sagittaria natans Pall.: 457–460 m a.s.l. Te.

+ Butomaceae

+ *Butomus umbellatus* L.: 457–515 m a.s.l. Te.

Hydrocharitaceae

Elodea canadensis Michx.: 457–460 m a.s.l. Te. Alien.

Scheuchzeriaceae

Scheuchzeria palustris L.: 457–1450 m a.s.l. Te, TN, TS.

Juncaginaceae

Triglochin palustris L.: 468–482 m a.s.l. Te.

Potamogetonaceae

Potamogeton alpinus Balb. (incl. *Potamogeton alpinus* subsp. *tenuifolius* (Raf.) Hultén): 457–1053 m a.s.l. Te, TS.
+ *Potamogeton berchtoldii* Fieber: 457–495 m a.s.l. Te.
+ *Potamogeton gramineus* L.: 457–461 m a.s.l. Te.
Potamogeton natans L.: 460 m a.s.l. Te.
Potamogeton perfoliatus L.: 460–1467 m a.s.l. Te, TN, TS.
Potamogeton praelongus Wulfen: 1212 m a.s.l. TS.

Melanthiaceae

Paris obovata Ledeb.: 458–1381 m a.s.l. Te, TN, SN, TS. Notes: We use species name *Paris obovata* meaning a complex of "transitional" forms between western *Paris quadrifolia* L. and eastern *Paris verticillata* M.Bieb. which occur in Baikal region.
Veratrum lobelianum Bernh.: 457–1931 m a.s.l. Te, TN, SN, Tu, SS, TS.
Zigadenus sibiricus (L.) A. Gray [*Anticlea sibirica* (L.) Kunth]: 1756 m a.s.l. SS.

Liliaceae

** *Fritillaria dagana* Turcz. ex Trautv.: 1050–2028 m a.s.l. EnSS. Tu, SS, TS.
* *Gagea granulosa* Turcz.: 459–461 m a.s.l. Te.
Lilium pensylvanicum Ker Gawl. 457–475 m a.s.l. Te.
Lilium pilosiusculum (Freyn) Miscz. [*Lilium martagon* var. *pilosiusculum* Freyn]. 460–1688 m a.s.l. Te, TN, SN, SS, TS, Fs.
Lilium pumilum Delile: 856–1150 m a.s.l. Fs.
Lloydia serotina (L.) Rchb. [*Gagea serotina* (L.) Ker Gawl.]: 1923–2000 m a.s.l. Tu.

Orchidaceae

** *Calypso bulbosa* (L.) Oakes: 482–1131 m a.s.l. Te, TN, TS.
Coeloglossum viride (L.) Hartm. [*Dactylorhiza viridis* (L.) R.M.Bateman, Pridgeon & M.W.Chase]: 1682–1918 m a.s.l. Tu.
Corallorhiza trifida Chatel.: 460–1171 m a.s.l. Te, TN, TS.
Cypripedium guttatum Sw.: 834–1682 m a.s.l. SS, TS.
Dactylorhiza fuchsii (Druce) Soó [*Dactylorhiza maculata* subsp. *fuchsii* (Druce) Hyl.] s.l. (incl. *Dactylorhiza hebridensis* (Wilmott) Aver.): 457–1852 m a.s.l. Te, TN, SN, SS, TS.
Dactylorhiza incarnata (L.) Soó: 475 m a.s.l. Te.
+ * *Epipactis helleborine* (L.) Crantz: 515–814 m a.s.l. TN.
+ ** *Epipogium aphyllum* Sw.: 566 m a.s.l. TN.
Goodyera repens (L.) R. Br.: 480–1496 m a.s.l. Te, TN, TS.
Gymnadenia conopsea (L.) R. Br.: 460–1495 m a.s.l. Te, SN.
+ * *Hammarbya paludosa* (L.) Kuntze.: 536–546 m a.s.l. TN.
Herminium monorchis (L.) R. Br.: 473 m a.s.l. Te.
* *Listera cordata* (L.) R. Br. [*Neottia cordata* (L.) Rich.]: 589–1374 m a.s.l. TN, SN.
Malaxis monophyllos (L.) Sw.: 458–1251 m a.s.l. Te, TN, TS.
** *Neottianthe cucullata* (L.) Schlechter [*Hemipilia cucullata* (L.) Y.Tang, H.Peng & T.Yukawa, *Ponerorchis cucullata* (L.) X.H.Jin, Schuit. & W.T.Jin]: 500–1120 m a.s.l. TN.
+ ** *Orchis militaris* L.: 460–462 m a.s.l. Te.
+ * *Platanthera bifolia* (L.) Rich.: 1495 m a.s.l. SN.
+ *Spiranthes australis* (R. Br.) Lindl.: 458–842 m a.s.l. Te, Fs.

Iridaceae

Iris humilis Georgi: 986–1124 m a.s.l. Fs.
Iris laevigata Fisch. ex Fisch. & C.A. Mey.: 457–465 m a.s.l. Te.
Iris ruthenica Ker Gawl.: 463–1550 m a.s.l. Te, TN, TS, Fs.
+ *Iris sanguinea* Hornem.: 457–458 m a.s.l. Te.
Sisyrinchium montanum Greene: 457–530 m a.s.l. Te. Alien.

Asphodelaceae

Hemerocallis minor Mill.: 465–473 m a.s.l. Te.

Amaryllidaceae

* *Allium altaicum* Pall.: 866–1152 m a.s.l. Fs.
Allium anisopodium Ledeb.: 920–1129 m a.s.l. Fs.
+ *Allium chamarense* M.M. Ivanova: 833–988 m a.s.l. EnBS. TS.
Allium leucocephalum Turcz. ex Ledeb.: 879–1045 m a.s.l. Fs.
Allium malyschevii N.Friesen: 1113–2183 m a.s.l. EnBS. SN, Tu, SS.
Allium microdictyon Prokh.: 458–1559 m a.s.l. Te, TN, SN, SS, TS.
Allium monadelphum Less. ex Kunth.: 1586–2203 m a.s.l. Tu.
+ *Allium ramosum* L.: 493 m a.s.l. Te. Apophyte.
Allium schoenoprasum L.: 460–1790 m a.s.l. Te, TN, SN, SS, TS, Fs.
Allium splendens Willd. ex Schult. & Schult.f.: 470–1636 m a.s.l. Te, TN, SS, TS, Fs.
Allium strictum Schrad.: 879–950 m a.s.l. Fs.

Asparagaceae

Maianthemum bifolium (L.) F.W. Schmidt: 457–1658 m a.s.l. Te, TN, SN, Tu, SS, TS.
Polygonatum odoratum (Mill.) Druce: 458–1205 m a.s.l. Te, TN, Fs.
Smilacina trifolia (L.) Desf. [*Maianthemum trifolium* (L.) Sloboda]: 458–1218 m a.s.l. Te, TN, TS.

Typhaceae

Sparganium angustifolium Michx.: 1110–1340 m a.s.l. TS.
Sparganium glomeratum (Laest. ex Beurl.) Beurl.: 457–497 m a.s.l. Te.
Sparganium gramineum Georgi: 1340–1860 m a.s.l. TS.
+ *Sparganium × kolymense* A.A. Bobrov, Volkova, Mochalova & Chemeris: 457–460 m a.s.l. Te.
+ *Sparganium natans* L.: 460–1212 m a.s.l. Te, TS.
+ *Sparganium rothertii* Tzvelev: 490–558 m a.s.l. Te.
+ *Typha angustifolia* L.: 466–534 m a.s.l. Te. Apophyte.
Typha latifolia L.: 457–535 m a.s.l. Te, TN.
+ *Typha laxmannii* Lepech.: 465–535 m a.s.l. Te. Apophyte.

Juncaceae

Juncus alpinoarticulatus Chaix: 457–1040 m a.s.l. Te, TS.
Juncus arcticus Willd.: 832–1040 m a.s.l. TS.
Juncus articulatus L.: 459 m a.s.l. Te.
Juncus biglumis L.: 2002 m a.s.l. Tu.
Juncus bufonius L.: 457–525 m a.s.l. Te.
Juncus castaneus Sm. (incl. *Juncus triceps* Rostk.): 1519–2000 m a.s.l. Tu.
+ *Juncus compressus* Jacq.: 458–510 m a.s.l. Te.
Juncus filiformis L.: 457–1506 m a.s.l. Te, TN, SN, SS, TS.
+ *Juncus stygius* L.: 460 m a.s.l. Te.
+ *Juncus tenuis* Willd.: 457–578 m a.s.l. Te, TN. Alien.
Juncus triglumis L.: 1320–2258 m a.s.l. Tu.
Luzula confusa Lindeb.: 1760–2195 m a.s.l. Tu, SS.
Luzula multiflora subsp. *sibirica* V.I. Krecz.: 457–2312 m a.s.l. Te, TN, SN, Tu, SS, TS.
Luzula pallescens Sw.: 460–895 m a.s.l. Te, TN, TS.
Luzula parviflora (Ehrh.) Desv.: 974–1860 m a.s.l. SN, SS.
Luzula pilosa (L.) Willd.: 457–1314 m a.s.l. Te, TN, SN, TS.
Luzula rufescens Fisch. ex E. Mey.: 1042–1196 m a.s.l. TS.
Luzula arcuata subsp. *unalaschkensis* (Buchenau) Hultén [*Luzula kamtschadalorum* (Sam.) Gorodkov ex Krylov, *Luzula unalaschkensis* subsp. *kamtschdalorum* (Sam.) Tolm.]: 1469–2236 m a.s.l. Tu.

Cyperaceae

Carex acuta L.: 458–490 m a.s.l. Te.
+ *Carex amgunensis* F. Schmidt: 835–1226 m a.s.l. TN, Fs.
Carex appendiculata (Trautv. & C.A. Mey.) Kük.: 460–517 m a.s.l. Te.
Carex aquatilis subsp. *stans* (Drejer) Hultén [*Carex aquatilis* var. *minor* Boott]: 508 m a.s.l. Te.
Carex argunensis Turcz. ex Trevir.: 853–1235 m a.s.l. Fs.
+ *Carex arnellii* Christ.: 856–1186 m a.s.l. Fs.
Carex aterrima Hoppe: 461–2183 m a.s.l. Te, TN, SN, Tu, SS.
+ *Carex atherodes* Spreng.: 458–515 m a.s.l. Te.
+ *Carex bicolor* Bellardi ex All.: 899–1425 m a.s.l. TS.
Carex bohemica Schreb.: 460–1042 m a.s.l. Te, TS.
Carex brunnescens (Pers.) Poir.: 460–1572 m a.s.l. Te, TN, SN, SS, TS.
Carex canescens L.: 457–1607 m a.s.l. Te, TN, SN, SS, TS.
Carex cespitosa L.: 457 m a.s.l. Te.
+ *Carex chloroleuca* Meinsh.: 1017 m a.s.l. Fs.
Carex chordorrhiza L.f.: 460–741 m a.s.l. Te, TN.
+ *Carex conspissata* V.I. Krecz.: 1238–1448 m a.s.l. SN, Tu, SS.
Carex curaica Kunth: 457–1050 m a.s.l. Te, TS.
+ *Carex delicata* C.B.Clarke: 820–1040 m a.s.l. Fs.
Carex diandra Schrank: 465–1187 m a.s.l. Te, TN, TS.
Carex disperma Dewey: 460–647 m a.s.l. TN.
Carex duriuscula C.A. Mey.: 460–920 m a.s.l. Te, Fs.
Carex eleusinoides Turcz. ex Kunth: 460–1749 m a.s.l. Te, TN, SS, TS.
Carex elongata L.: 464–678 m a.s.l. TN.

Carex enervis C.A. Mey.: 457–470 m a.s.l. Te.
Carex ensifolia Turcz. ex V.I. Krecz. [*Carex bigelowii* subsp. *ensifolia* (Turcz. ex Gorodkov) Holub]: 1190–2258 m a.s.l. SN, Tu, SS.
Carex ericetorum Pollich: 1053–2159 m a.s.l. SN, Tu, SS.
Carex falcata Turcz. [*Carex vaginata* var. *petersii* (C.A. Mey. ex F. Schmidt) Akiyama]: 458–1296 m a.s.l. Te, TS.
Carex globularis L.: 457–1640 m a.s.l. Te, TN, SN, SS, TS.
+ *Carex hancockiana* Maxim.: 503 m a.s.l. TN.
Carex heleonastes Ehrh. ex L.f.: 460 m a.s.l. Te.
Carex heterolepis Bunge: 470 m a.s.l. TN.
Carex iljinii V.I. Krecz.: 460–1939 m a.s.l. Te, TN, SN, Tu, SS, TS.
Carex juncella (Fries) Th.Fr. [*Carex nigra* subsp. *juncea* (Fr.) Soó]: 457–1583 m a.s.l. Te, TN, SN, SS, TS.
Carex korshinskyi Kom.: 856–1217 m a.s.l. Fs.
Carex lachenalii Schkuhr [*Carex tripartita* All.]: 1749–1931 m a.s.l. Tu.
+ *Carex laevissima* Nakai: 457–532 m a.s.l. Te. Alien.
Carex lasiocarpa Ehrh.: 460–1450 m a.s.l. Te, TN, TS.
Carex ledebouriana C.A. Mey. ex Trevir.: 1342–2203 m a.s.l. Tu.
Carex leporina L.: 457–1212 m a.s.l. Te.
Carex limosa L.: 457–1607 m a.s.l. Te, TN, TS.
Carex loliacea L.: 565–1493 m a.s.l. TN, TS.
Carex macroura Meinsh. [*Carex pediformis* var. *macroura* (Meinsh.) Kük.]: 460–1605 m a.s.l. Te, TN, SN, SS, TS, Fs.
Carex media R. Br.: 457–1465 m a.s.l. Te, TN, TS, Fs.
Carex melananthiformis Litv.: 460 m a.s.l. Te.
Carex melanocarpa Cham. ex Trautv. [*Carex ericetorum* subsp. *melanocarpa* (Cham. ex Trautv.) Kük.]: 1231 m a.s.l. SN.
+ *Carex microglochin* Wahlenb.: 1412–1862 m a.s.l. SN, SS.
Carex nigra (L.) Reichard.: 460–480 m a.s.l. Te.
+ *Carex obtusata* Liljebl.: 870–1193 m a.s.l. Fs.
Carex pallescens L.: 457–1200 m a.s.l. Te, TN, SN.
+ *Carex pamirica* subsp. *dichroa* (Malyschev) T.V.Egorova [*Carex pamirensis* subsp. *dichroa* Malyschev]: 460–1040 m a.s.l. Te, Fs.
Carex parallela subsp. *redowskiana* (C.A. Mey.) T.V.Egorova: 1187 m a.s.l. TN.
Carex pauciflora Lightf.: 457–1363 m a.s.l. Te, TN, TS.
Carex paupercula Michx. [*Carex magellanica* subsp. *irrigua* (Wahlenb.) Hiitonen]: 460–1843 m a.s.l. Te, Tu.
Carex pediformis C.A. Mey. s.str.: 836–1242 m a.s.l. Fs.
Carex pseudocuraica F. Schmidt.: 458 m a.s.l. Te.
Carex rhynchophysa C.A. Mey. [*Carex utriculata* Boott]: 457–1493 m a.s.l. Te, TN, TS.
Carex rostrata Stokes: 457–1493 m a.s.l. Te, TN, TS.
Carex rupestris All.: 1832–2203 m a.s.l. Tu.
Carex sajanensis V.I. Krecz.: 457 m a.s.l. Te.
Carex schmidtii Meinsh.: 457–1047 m a.s.l. Te, TN, TS.
+ *Carex sedakowii* C.A. Mey. ex Meinsh.: 910 m a.s.l. TS.
+ *Carex serotina* Mérat [*Carex oederi* Retz.]: 457 m a.s.l. Te.
Carex stenocarpa Turcz. ex V.I. Krecz. [*Carex tristis* subsp. *stenocarpa* (Turcz. ex V.I. Krecz.) T.V.Egorova]: 1524–2000 m a.s.l. Tu.
Carex tenuiflora Wahlenb.: 460–1749 m a.s.l. Te, Tu.
Carex tristis M.Bieb. s.str.: 1342–2258 m a.s.l. Tu.
Carex vesicaria L.: 550 m a.s.l. TN.
+ *Carex vesicata* Meinsh.: 457–1047 m a.s.l. Te, Fs.
Carex williamsii Britton: 1584–1893 m a.s.l. Tu.
Eleocharis acicularis (L.) Roem. & Schult.: 457–460 m a.s.l. Te.
+ *Eleocharis mamillata* (H. Lindb.) H. Lindb.: 518 m a.s.l. Te. Apophyte.
Eleocharis palustris (L.) Roem. & Schult.: 457–1047 m a.s.l. Te, TS.
Eriophorum angustifolium Honck. s.str.: 468–1660 m a.s.l. Te, TN, SN, SS, TS.
+ *Eriophorum angustifolium* subsp. *komarovii* (V.N. Vassil.) Vorosch. [*Eriophorum komarovii* V.N. Vassil.]: 508–1862 m a.s.l. Te, SN, SS, TS.
Eriophorum brachyantherum Trautv. & C.A. Mey.: 480–1524 m a.s.l. Te, Tu.
Eriophorum gracile Roth: 460 m a.s.l. Te.
Eriophorum humile Turcz. 1465–2014 m a.s.l. Tu, SS.
Eriophorum russeolum Fr. [*Eriophorum chamissonis* C.A. Mey.]: 458–1450 m a.s.l. Te, TN, TS.
Eriophorum vaginatum L.: 466–1450 m a.s.l. Te, TN, TS.
Kobresia myosuroides (Vill.) Fiori [*Carex myosuroides* Vill.]: 1645–2312 m a.s.l. Tu, SS.
* *Rhynchospora alba* (L.) Vahl: 466–590 m a.s.l. Te, TN.
Schoenoplectus tabernaemontani (C.C.Gmel.) Palla [*Scirpus tabernaemontani* C.C.Gmel.]: 509 m a.s.l. Te.
+ *Scirpus orientalis* Ohwi: 460–908 m a.s.l. Te, TN, TS.
+ *Scirpus radicans* Schkuhr: 457–467 m a.s.l. Te.
Scirpus sylvaticus L.: 457–1081 m a.s.l. Te, TN, TS.
Trichophorum alpinum (L.) Pers.: 457–1583 m a.s.l. Te, SN, SS.
Trichophorum cespitosum (L.) Hartm.: 515–1412 m a.s.l. Te, SN, SS.

Poaceae

Achnatherum sibiricum (L.) Keng ex Tzvelev: 825–1205 m a.s.l. Fs.
Agropyron cristatum L.: 853–1142 m a.s.l. Fs.
Agrostis clavata Trin.: 488–1445 m a.s.l. Te, TN, TS.
Agrostis gigantea Roth: 466–500 m a.s.l. Te, TN.
+ *Agrostis stolonifera* L.: 457–520 m a.s.l. Te.
Agrostis tenuis Sibth. [*Agrostis capillaris* L.]: 457–1015 m a.s.l. Te, TN.
Agrostis trinii Turcz.: 458–900 m a.s.l. Te, Fs.
Alopecurus aequalis Sobol.: 457–1488 m a.s.l. Te, TS.
+ *Alopecurus arundinaceus* Poir.: 457–511 m a.s.l. Te.
Alopecurus brachystachyus M.Bieb.: 460 m a.s.l. Te.
Alopecurus pratensis L.: 460–470 m a.s.l. Te.
Anthoxanthum alpinum Á. Löve & D. Löve [*Anthoxanthum nipponicum* Honda]: 457–2183 m a.s.l. Te, TN, SN, Tu, SS, TS.
Arctopoa subfastigiata (Trin.) Prob. [*Poa subfastigiata* Trin.]: 457–837 m a.s.l. Te, TS.
+ *Avena fatua* L.: 460–490 m a.s.l. Te. Alien.
+ *Avena sativa* L.: 460–500 m a.s.l. Te. Alien.
Beckmannia syzigachne (Steud.) Fernald: 457–521 m a.s.l. Te.
+ *Brachypodium pinnatum* (L.) P. Beauv.: 768–1448 m a.s.l. TN.
* *Brachypodium sylvaticum* (Huds.) P. Beauv.: 462–524 m a.s.l. TN.
+ *Bromus hordeaceus* L.: 461 m a.s.l. Te. Alien.
Bromopsis inermis (Leyss.) Holub [*Bromus inermis* Leyss.]: 460–521 m a.s.l. Te.
Bromopsis pumpelliana (Scribn.) Holub [*Bromus pumpellianus* Scribn.]: 460–1408 m a.s.l. Te, TS, Fs.
+ *Calamagrostis arundinacea* (L.) Roth: 513–1226 m a.s.l. Te, TN, TS.
Calamagrostis epigejos (L.) Roth: 458–1157 m a.s.l. Te, TS.
+ *Calamagrostis korotkyi* Litv.: 903–1613 m a.s.l. SN, SS, TS.
Calamagrostis langsdorffii (Link) Trin.: 457–1688 m a.s.l. Te, TN, SN, SS, TS.
Calamagrostis lapponica (Wahlb.) Hartm.: 488–1917 m a.s.l. Te, TN, SN, SS, TS.
Calamagrostis neglecta (Ehrh.) G. Gaertn., B. Mey. & Schreb. [*Calamagrostis stricta* (Timm) Koeler]: 457–1465 m a.s.l. Te, TN, SS, TS.
Calamagrostis obtusata Trin.: 457–1688 m a.s.l. Te, TN, SN, TS.
Calamagrostis pavlovii Roshev.: 1165 m a.s.l. TS.
Calamagrostis purpurea (Trin.) Trin.: 457–1860 m a.s.l. Te, TN, SN, SS, TS.
Cinna latifolia (Trevir. ex Göpp.) Griseb.: 458–1002 m a.s.l. Te, TN.
+ *Cleistogenes kitagawae* Honda: 840–1068 m a.s.l. Fs.
Cleistogenes squarrosa (Trin.) Keng.: 904–960 m a.s.l. Fs.
Dactylis glomerata L. 457–530 m a.s.l. Te.
+ *Deschampsia baicalensis* Tzvelev: 832–1497 m a.s.l. EnBS. SS, TS.
Deschampsia cespitosa (L.) P. Beauv.: 457–1093 m a.s.l. Te, TN.
+ *Digitaria asiatica* Tzvelev: 460–473 m a.s.l. Te. Apophyte.
+ *Echinochloa crus-galli* (L.) P. Beauv.: 462–530 m a.s.l. Te.
Elymus caninus (L.) L.: 457–896 m a.s.l. Te, TN, TS.
Elymus confusus (Roshev.) Tzvelev: 460–462 m a.s.l. Te, TN.
Elymus gmelinii (Ledeb.) Tzvelev: 910–1124 m a.s.l. TN, Fs.
Elymus ircutensis Peschkova: 1160 m a.s.l. TS. Notes: Herbarium specimens (IRK, IRKU) need verification; we suggest they could belong to *Elymus caninus* L. s.l.
Elymus mutabilis (Drobow) Tzvelev: 464–1226 m a.s.l. TN, TS.
Elymus sibiricus L.: 457–1217 m a.s.l. Te, Fs.
+ *Elymus transbaicalensis* (Nevski) Tzvelev: 839–1507 m a.s.l. TS, Fs.
Elytrigia repens (L.) Nevski [*Elymus repens* (L.) Gould]: 457–835 m a.s.l. Te, Fs.
+ *Eragrostis minor* Host: 469 m a.s.l. Te.
Festuca altaica Trin.: 1877–1903 m a.s.l. SS.
* *Festuca altissima* All.: 471–1161 m a.s.l. Te, TN.
+ *Festuca arundinacea* Schreb. [*Lolium arundinaceum* (Schreb.) Darbysh.]: 457–536 m a.s.l. Te. Alien.
+ *Festuca lenensis* Drobow: 1107 m a.s.l. Fs.
Festuca ovina L.: 598–2312 m a.s.l. SN, Tu, SS, TS, Fs.
Festuca pratensis Huds. [*Lolium pratense* (Huds.) Darbysh.]: 457–520 m a.s.l. Te.
Festuca rubra L.: 457–902 m a.s.l. Te, Fs.
+ *Glyceria fluitans* (L.) R. Br.: 476 m a.s.l. Te. Alien.
Glyceria lithuanica (Gorski) Gorski: 473–1110 m a.s.l. Te, TN.
Glyceria notata Chevall. [*Glyceria plicata* (Fr.) Fr.]: 458–525 m a.s.l. Te.
+ *Glyceria spiculosa* (F. Schmidt) Roshev.: 457–462 m a.s.l. Te.
+ *Glyceria triflora* (Korsh.) Kom.: 457–619 m a.s.l. Te.
Helictotrichon mongolicum (Roshev.) Henrard: 1691 m a.s.l. SS.
Helictotrichon schellianum (Hack.) Kitag. [*Helictochloa hookeri* (Scribn.) Romero Zarco]: 905–1191 m a.s.l. Fs.
Hierochloe alpina (Sw.) Roem. & Schult. [*Anthoxanthum monticola* (Bigelow) Veldkamp]: 1661–2258 m a.s.l. Tu, SS.
+ *Hierochloe glabra* Trin. [*Anthoxanthum glabrum* (Trin.) Veldkamp]. 492 m a.s.l. Te.

Hierochloe odorata (L.) P. Beauv. [*Anthoxanthum nitens* (Weber) Y.Schouten & Veldkamp]: 457–1650 m a.s.l. Te, TN, SS, TS.
+ *Hierochloe sibirica* (Tzvelev) Czerep. [*Anthoxanthum glabrum* (Trin.) Veldkamp]: 1453 m a.s.l. TS.
Hordeum brevisubulatum (Trin.) Link: 457 m a.s.l. Te.
Hordeum jubatum L.: 462–534 m a.s.l. Te. Alien.
+ *Hordeum vulgare* L.: 459–500 m a.s.l. Te. Alien.
Koeleria cristata (L.) Pers. [*Koeleria pyramidata* (Lam.) P. Beauv.]: 835–1132 m a.s.l. Fs.
+ *Lolium* × *hybridum* Hausskn. [*Lolium* × *boucheanum* Kunth]: 460 m a.s.l. Te. Alien.
+ *Lolium multiflorum* Lam.: 460–499 m a.s.l. Te. Alien.
+ *Lolium perenne* L.: 460–537 m a.s.l. Te. Alien.
Melica nutans L.: 458–1425 m a.s.l. Te, TN, SN, SS, TS.
Melica turczaninowiana Ohwi: 836–1226 m a.s.l. Fs.
Milium effusum L.: 457–1488 m a.s.l. Te, TN, SN, TS.
Nardus stricta L.: 472–491 m a.s.l. Te.
+ *Panicum miliaceum* L. s.str.: 468–471 m a.s.l. Te. Alien.
+ *Panicum miliaceum* subsp. *ruderale* (Kitag.) Tzvelev: 460–530 m a.s.l. Te. Alien.
Phalaroides arundinacea (L.) Rauschert [*Phalaris arundinacea* L.]: 457–700 m a.s.l. Te.
+ *Phleum phleoides* (L.) H.Karst.: 457 m a.s.l. Te.
Phleum pratense L.: 457–635 m a.s.l. Te, TN.
+ *Phragmites australis* (Cav.) Trin. ex Steud.: 457–543 m a.s.l. Te, TN. Apophyte.
+ *Poa alpina* L.: 555 m a.s.l. TN.
Poa angustifolia L.: 457–1197 m a.s.l. Te, Fs.
Poa annua L.: 480 m a.s.l. Te.
Poa arctica R. Br.: 1849 m a.s.l. Tu.
+ *Poa argunensis* Roshev.: 1054 m a.s.l. TN.
Poa attenuata Trin.: 835–1431 m a.s.l. TS, Fs.
Poa glauca Vahl: 1555–2089 m a.s.l. Tu.
+ *Poa* × *intricata* Wein.: 457 m a.s.l. Te.
* *Poa irkutica* Roshev.: 503–2220 m a.s.l. EnBS. Te, TN, SN, SS.
Poa krylovii Reverd. [*Poa urssulensis* subsp. *krylovii* (Reverd.) Olonova]: 677–1017 m a.s.l. TN.
Poa nemoralis L.: 457–1498 m a.s.l. Te, TN, TS.
Poa palustris L.: 458–1441 m a.s.l. Te, TN, TS.
Poa pratensis L.: 457–1200 m a.s.l. Te, TN.
Poa pruinosa Korotky [*Poa tianschanica* (Regel) Hack. ex O.Fedtsch.]: 458–459 m a.s.l. Te.
+ *Poa raduliformis* Prob.: 457–1480 m a.s.l. Te, TS.
Poa remota Forselles: 462–510 m a.s.l. Te, TN.
Poa sibirica Roshev.: 460–2173 m a.s.l. Te, TN, SN, SS, TS.
Poa smirnowii Roshev.: 1819–2210 m a.s.l. Tu.
Poa supina Schrad.: 457–1231 m a.s.l. Te, TN, TS.
Poa transbaicalica Roshev. [*Poa versicolor* Besser]: 460–1506 m a.s.l. Te, TN, TS, Fs.
Poa trivialis L.: 457–465 m a.s.l. Te.
+ *Poa urssulensis* Trin. s.str: 1076–1274 m a.s.l. TN, TS.
+ *Puccinellia hauptiana* V.I. Krecz.: 460–528 m a.s.l. Te. Apophyte.
Schizachne callosa (Turcz. ex Griseb.) Ohwi [*Schizachne purpurascens* subsp. *callosa* (Turcz. ex Griseb.) T. Koyama & Kawano]: 460–1320 m a.s.l. Te, TN, TS.
Secale cereale L.: 470 m a.s.l. Te. Alien.
+ *Setaria pumila* (Poir.) Roem. & Schult.: 464–490 m a.s.l. Te. Alien.
+ *Setaria pycnocoma* (Steud.) Henrard ex Nakai: 530 m a.s.l. Te. Alien.
Setaria viridis (L.) P. Beauv.: 458–490 m a.s.l. Te.
+ *Sorghum halepense* (L.) Pers.: 458 m a.s.l. Te. Alien.
+ *Spodiopogon sibiricus* Trin.: 856–900 m a.s.l. Fs.
Trisetum agrostideum (Laest.) Fr. [*Trisetum subalpestre* (Hartm.) Neuman, *Koeleria subalpestris* (Hartm.) Barberá, Quintanar, Soreng & P.M. Peterson]: 1181–1906 m a.s.l. Tu, SS.
Trisetum altaicum Roshev.: 1340–1664 m a.s.l. SN, SS.
Trisetum sibiricum Rupr. [*Sibirotrisetum sibiricum* (Rupr.) Barberá]: 457–1656 m a.s.l. Te, TN, SS, TS.
+ *Triticum aestivum* L.: 457–523 m a.s.l. Te. Alien.

Papaveraceae

Chelidonium majus L.: 457–1285 m a.s.l. Te, TN, SN, TS, Fs. Notes: Identification of specimens from the study area needs further research; some of them could belong to *Chelidonium asiaticum* (H. Hara) Krahulc.
* *Corydalis bracteata* (Steph. ex Willd.) Pers. s.l. (incl. + *Corydalis bombylina* Stepanov): 459–896 m a.s.l. Te, TN. Notes: According to N.V. Stepanov, all specimen from the study area belong to *Corydalis bombylina*. We follow the approach used in the Red Data Book of the Republic of Buryatia, where *Corydalis bracteata* is used for all plants of this species in the region.
Corydalis impatiens (Pall.) Fisch. ex DC.: 457–1173 m a.s.l. Te, TS.
+ *Eschscholzia californica* Cham.: 460 m a.s.l. Te. Alien.
Papaver nudicaule L. [*Oreomecon nudicaulis* (L.) Banfi, Bartolucci, J.-M. Tison & Galasso]: 465 m a.s.l. Te. Apophyte.
Papaver pseudocanescens Popov: 1156–1157 m a.s.l. TS.
+ *Papaver somniferum* L.: 472–481 m a.s.l. Te. Alien.

Berberidaceae

Berberis sibirica Pall.: 1018–1742 m a.s.l. SS, TS.

Ranunculaceae

Aconitum ambiguum Rchb.: 524–1809 m a.s.l. TN, SN, SS, TS.
Aconitum baicalense Turcz. ex Rapaics: 457–1451 m a.s.l. Te, TN, SN, SS, TS.
Aconitum barbatum Pers.: 804–1303 m a.s.l. Fs.
+ * *Aconitum pascoi* subsp. *arctoalpinum* Vorosch. [*Aconitum paskoi* Vorosch.]: 1227–2014 m a.s.l. EnSS. SN, Tu, SS.
Aconitum rubicundum Fisch.: 1086–1204 m a.s.l. TN, SN.
Aconitum septentrionale Koelle [*Aconitum excelsum* Rchb.]: 457–1920 m a.s.l. Te, TN, SN, SS, TS.
Actaea cimicifuga L. [*Cimicifuga foetida* L.]: 722–1254 m a.s.l. TN, TS.
Actaea erythrocarpa (Fisch.) Freyn [*Actaea rubra* (Aiton) Willd.]: 460–1189 m a.s.l. Te, TN, TS.
* *Adonis apennina* L. [*Adonis sibirica* Patrin ex Ledeb.]: 860 m a.s.l. Fs.
Anemonastrum sibiricum (L.) Holub [*Anemonastrum narcissiflorum* subsp. *crinitum* (Juz.) Raus]: 1113–2236 m a.s.l. SN, Tu, SS. Notes: Previously, two species were recorded for the Baikalsky Reserve: *Anemonastrum crinitum* and *Anemonastrum sibiricum*. We did not find typical *Anemonastrum crinitum*; however, in the current taxonomy, both of these taxa are synonymized under *Anemonastrum narcissiflorum* subsp. *crinitum* (Juz.) Raus.
** *Anemonastrum baicalense* (Turcz.) Mosyakin [*Anemone baicalensis* Turcz. ex Ledeb., *Arsenjevia baicalensis* (Turcz.) Starod.]: 457–1518 m a.s.l. EnBS. EnSS. Te, TN, SN, SS, TS.
* *Anemone altaica* Fisch. ex C.A. Mey.: 459–1254 m a.s.l. Te, TN.
Anemone dichotoma L. [*Anemonastrum dichotomum* (L.) Mosyakin]: 457–473 m a.s.l. Te.
Anemone reflexa Stephan: 460–1657 m a.s.l. Te, TN, SN, SS, TS.
+ *Anemone sylvestris* L.: 457–475 m a.s.l. Te.
Aquilegia glandulosa Fisch. ex Link.: 471–1955 m a.s.l. TN, SN, Tu, SS.
Aquilegia sibirica Lam.: 460–1549 m a.s.l. Te, TN, TS.
Atragene sibirica L. [*Clematis sibirica* (L.) Mill.]: 460–1920 m a.s.l. Te, TN, SN, SS, TS, Fs.
Callianthemum sajanense (Regel) Witasek: 1127–2007 m a.s.l. SN, Tu, SS.
Caltha crenata Belyaeva & Sipliv.: 477–1095 m a.s.l. Te, TN.
Caltha natans Pall. 464–471 m a.s.l. [*Thacla natans* (Pall.) Deyl & Soják]. Te.
Caltha palustris L.: 457–1931 m a.s.l. Te, TN, SN, SS, TS.
Clematis fusca Turcz. 465 m a.s.l. Te. Alien.
+ *Delphinium crassifolium* Schrad. ex Ledeb.: 833–988 m a.s.l. TS.
Delphinium elatum L.: 474–1510 m a.s.l. Te, TN, SN, SS, TS.
Delphinium grandiflorum L.: 845–1132 m a.s.l. Fs.
Delphinium malyschevii Frizen: 1161 m a.s.l. EnBS. TS.
* *Eranthis sibirica* DC. s.l. (incl. + *Eranthis tanhoensis* Erst): 458–1860 m a.s.l. EnBS. Te, TN, SN, Tu, SS, TS. Notes: This complex of species is now under revision; we follow the approach used in the Red Data Book of the Republic of Buryatia, where *Eranthis sibirica* is used for all plants of this species in the region.
Oxygraphis glacialis (Fisch.) Bunge [*Oxygraphis kamchatica* (DC.) R.R. Stewart]: 1907–2210 m a.s.l. Tu.
Pulsatilla ambigua (Turcz. ex Hayek) Zämelis & Paegle: 929–1734 m a.s.l. SS, Fs.
Pulsatilla orientali-sibirica Stepanov: [*Pulsatilla patens* (L.) Mill. s.l., *Pulsatilla flavescens* (Zucc.) Juz.]: 598–1590 m a.s.l. SN, Fs. Notes: Plants from the study area are yellow-flowered only.
Pulsatilla turczaninovii Krylov & Serg.: 856–1191 m a.s.l. Fs.
Ranunculus altaicus Laxm.: 1488–1942 m a.s.l. EnSS. Tu, SS.
Ranunculus gmelinii DC.: 460 m a.s.l. Te.
+ *Ranunculus grandifolius* C.A. Mey.: 493–1490 m a.s.l. EnSS. TN, SN.
Ranunculus kauffmannii Clerc [*Batrachium kauffmannii* (Clerc) Krecz.]: 460 m a.s.l. Te.
Ranunculus monophyllus Ovcz.: 845–847 m a.s.l. TS.
Ranunculus polyanthemos L.: 457–530 m a.s.l. Te.
Ranunculus propinquus C.A. Mey.: 457–1920 m a.s.l. Te, TN, SN, Tu, SS, TS.
Ranunculus pulchellus Ledeb. ex Spreng.: 895–899 m a.s.l. TS.
Ranunculus radicans C.A. Mey.: 458 m a.s.l. Te.
Ranunculus repens L.: 457–1047 m a.s.l. Te, TN, TS.
Ranunculus reptans L.: 457–1506 m a.s.l. Te, TS.
Ranunculus sceleratus L.: 480–510 m a.s.l. Te.
Ranunculus smirnovii Ovcz.: 996 m a.s.l. TS.

Ranunculus trichophyllus Chaix. [*Batrachium trichophyllum* (Chaix) Bosch]: 457–460 m a.s.l. Te.
Thalictrum alpinum L.: 1564 m a.s.l. SS.
Thalictrum foetidum L.: 872–1254 m a.s.l. TS, Fs.
Thalictrum minus L.: 458–1688 m a.s.l. Te, TN, SN, SS, TS, Fs.
Thalictrum simplex L.: 457–1161 m a.s.l. Te, SN, Fs.
+ *Trollius asiaticus* L.: 460–1657 m a.s.l. Te, TN, SN.
+ *Trollius asiaticus* L. × *Trollius chinensis* Bunge: 740–1661 m a.s.l. TN, SN.
+ *Trollius sibiricus* Schipcz.: 845–1931 m a.s.l. SN, SS, TS.
Notes on *Trollius*: The final list of species of *Trollius* is currently under revision; hybrid forms are apparently more widespread; but the total number of species barely reaches three.

+ Paeoniaceae

+ * *Paeonia anomala* L.: 474 m a.s.l. Te.

Grossulariaceae

Ribes altissimum Turcz. ex Pojark. [*Ribes petraeum* Wulfen]: 1000–1170 m a.s.l. SS, TS.
Ribes atropurpureum C.A. Mey.: 458–1379 m a.s.l. Te, TN.
Ribes diacanthum Pall.: 879–965 m a.s.l. Fs.
Ribes fragrans Pall.: 1140–1943 m a.s.l. SN, SS, TS.
Ribes nigrum L. s.l. (incl. *Ribes pauciflorum* Turcz. ex Pojark.): 457–1530 m a.s.l. Te, TN, TS.
+ *Ribes procumbens* Pall.: 975–1059 m a.s.l. TS.
Ribes pulchellum Turcz.: 1056 m a.s.l. Fs.
Ribes spicatum E.Robson: [*Ribes palczewskii* (Janch.) Pojark.]. 812–1302 m a.s.l. TS.
+ *Ribes uva-crispa* L. 478 m a.s.l. Te. Alien.

Saxifragaceae

Bergenia crassifolia (L.) Fritsch.: 459–2203 m a.s.l. Te, TN, SN, Tu, SS, TS.
Chrysosplenium sibiricum (Ser. ex DC.) A.P. Khokhr.: 544–1051 m a.s.l. TN, TS.
Micranthes melaleuca (Fisch. ex Spreng.) Losinsk. [*Saxifraga melaleuca* Fisch. ex Spreng.]: 1559–2236 m a.s.l. Tu, SS.
Micranthes nelsoniana var. *aestivalis* (Fisch. & C.A. Mey.) Gornall & H. Ohba [*Micranthes nelsoniana* subsp. *aestivalis* (Fisch. & C.A. Mey.) Elven & D.F. Murray, *Saxifraga aestivalis* Fisch. & C.A. Mey.]: 463–2210 m a.s.l. Te, TN, SN, SS, TS.
Mitella nuda L.: 461–1257 m a.s.l. Te, TN, TS.
Saxifraga asiatica Hayek [*Saxifraga oppositifolia* subsp. *asiatica* (Hayek) Engl. & Irmsch.]: 1907–2210 m a.s.l. Tu.
Saxifraga bronchialis L.: 1749–1875 m a.s.l. Tu, SS.
Saxifraga setigera Pursh.: 2276 m a.s.l. Tu.
Saxifraga sibirica L.: 746–2312 m a.s.l. TN, SN, Tu, SS, TS.
Saxifraga spinulosa Adams: 461–2210 m a.s.l. TN, SN, Tu, SS, TS, Fs.

Crassulaceae

Aizopsis aizoon (L.) Grulich [*Phedimus aizoon* (L.) 't Hart, *Sedum aizoon* L.]: 822–1431 m a.s.l. TN, TS, Fs.
Hylotelephium telephium (L.) H. Ohba [*Hylotelephium telephium* (L.) H. Ohba, *Sedum telephium* L.]: 460–1101 m a.s.l. Te, TN, Fs.
Orostachys malacophylla (Pall.) Fisch.: 845–1235 m a.s.l. Fs.
Orostachys spinosa (L.) C.A. Mey.: 835–1719 m a.s.l. Fs.
Rhodiola quadrifida (Pall.) Fisch. & C.A. Mey.: 1879–2312 m a.s.l. Tu.
** *Rhodiola rosea* L.: 1110–1962 m a.s.l. SN, Tu, SS, TS.
+ ** *Tillaea aquatica* L. [*Crassula aquatica* (L.) Schönland]: 458 m a.s.l. Te.

Haloragaceae

+ *Myriophyllum verticillatum* L.: 457–460 m a.s.l. Te.

Fabaceae

+ *Astragalus adsurgens* Pall. [*Astragalus laxmannii* Jacq.]: 457–583 m a.s.l. Te. Apophyte.
Astragalus alpinus L.: 457–1274 m a.s.l. Te, TN, SN, TS, Fs.
Astragalus austrosibiricus Schischk. [*Astragalus laxmannii* Jacq.]: 834–907 m a.s.l. Fs.
+ *Astragalus danicus* Retz.: 458–465 m a.s.l. Te.
+ *Astragalus davuricus* (Pall.) DC.: 460–461 m a.s.l. Te. Apophyte.
Astragalus frigidus (L.) A. Gray. (incl. *Astragalus secundus* DC.): 463–1769 m a.s.l. TN, SS, TS, Fs.
+ *Astragalus inopinatus* Boriss. [*Astragalus laxmannii* Jacq.]: 822–1038 m a.s.l. Fs.
Astragalus kaufmannii Krylov: 1124–2210 m a.s.l. Tu, SS.
Astragalus laguroides Pall.: 925–1002 m a.s.l. Fs.
Astragalus melilotoides Pall.: 831–992 m a.s.l. Fs.
+ *Astragalus norvegicus* Grauer: 815–1100 m a.s.l. TS.
+ *Astragalus propinquus* Schischk. [*Astragalus mongholicus* Bunge]: 461–1341 m a.s.l. TN, TS, Fs.
Astragalus suffruticosus DC. [*Astragalus syriacus* L.]: 836–1150 m a.s.l. Fs.
Astragalus uliginosus L.: 460 m a.s.l. Te.
Caragana pygmaea (L.) DC.: 835–936 m a.s.l. Fs.
+ *Glycine max* (L.) Merr.: 466 m a.s.l. Te. Alien.
+ *Gueldenstaedtia verna* (Georgi) Boriss.: 997 m a.s.l. Fs.
Hedysarum alpinum L.: 850–990 m a.s.l. TS.
+ * *Hedysarum cisbaicalense* Malyschev: 1564–1914 m a.s.l. EnBS. Tu, SS.
Hedysarum inundatum Turcz.: 1110–2217 m a.s.l. SN, Tu, SS.
Lathyrus gmelinii Fritsch.: 460–1495 m a.s.l. Te, TN.
Lathyrus humilis (Ser.) Spreng.: 460–1408 m a.s.l. Te, TN, TS, Fs.
Lathyrus pilosus Cham. [*Lathyrus palustris* subsp. *pilosus* (Cham.) Hultén]: 458–855 m a.s.l. Te, TS.
Lathyrus pisiformis L.: 465–466 m a.s.l. Te.
Lathyrus pratensis L.: 457–1220 m a.s.l. Te, TN, TS.
+ *Lathyrus tuberosus* L.: 458–496 m a.s.l. Te. Alien.
+ *Lotus corniculatus* L.: 463–491 m a.s.l. Te. Alien.
+ *Lupinus polyphyllus* Lindl.: 460–530 m a.s.l. Te. Alien.
Medicago falcata L.: 457–487 m a.s.l. Te.
Medicago lupulina L.: 457–530 m a.s.l. Te.
+ *Medicago* × *varia* Martyn.: 458–536 m a.s.l. Te. Alien.
Melilotus albus Medikus: 457–536 m a.s.l. Te. Alien.
+ *Melilotus officinalis* (L.) Lam.: 457–536 m a.s.l. Te. Alien.
+ *Onobrychis arenaria* (Kit.) DC.: 460–493 m a.s.l. Te.
+ *Onobrychis viciifolia* Scop.: 470 m a.s.l. Te.
Oxytropis coerulea (Pall.) DC.: 911–926 m a.s.l. Fs.
Oxytropis deflexa (Pall.) DC.: 470 m a.s.l. Te. Apophyte.
Oxytropis kusnetzovii Krylov & Steinb.: 1564–2210 m a.s.l. Tu, SS.
+ *Oxytropis longirostra* DC.: 465 m a.s.l. EnBS. Te. Apophyte.
Oxytropis strobilacea Bunge: 460–895 m a.s.l. Te, TN, Fs.
+ *Oxytropis turczaninovii* Jurtzev: 842–1129 m a.s.l. EnBS. Fs.
+ *Pisum sativum* L. [*Lathyrus oleraceus* Lam.]: 463 m a.s.l. Te. Alien.
Thermopsis alpina (Pall.) Ledeb.: 1704–1879 m a.s.l. Tu.
+ *Trifolium arvense* L.: 477 m a.s.l. Te. Alien.
+ *Trifolium aureum* Pollich: 465 m a.s.l. Te. Alien.
Trifolium hybridum L. [*Amoria hybrida* (L.) C. Presl]: 457–535 m a.s.l. Te. Alien.
Trifolium lupinaster L. [*Lupinaster pentaphyllus* Moench]: 458–1520 m a.s.l. Te, TN, SN, SS, TS, Fs.
Trifolium medium L.: 460–472 m a.s.l. Te.
Trifolium montanum L. [*Amoria montana* (L.) Sojak]: 465–470 m a.s.l. Te. Alien.
Trifolium pratense L.: 457–530 m a.s.l. Te.
Trifolium repens L. [*Amoria repens* (L.) C. Presl]: 457–830 m a.s.l. Te, TN.
Trifolium spadiceum L.: 457–509 m a.s.l. Te. Alien.
Vicia amoena Fisch.: 457–1242 m a.s.l. Te, Fs.
Vicia cracca L.: 457–1298 m a.s.l. Te, TN, TS, Fs.
+ *Vicia hirsuta* (L.) Gray: 470 m a.s.l. Te. Alien.
+ *Vicia nervata* Sipliv. [*Vicia multicaulis* Ledeb.]: 472–1742 m a.s.l. Te, TN, SS, TS, Fs.
Vicia ramuliflora (Maxim.) Ohwi [*Vicia baicalensis* (Turcz.) B. Fedtsch.]: 804–1175 m a.s.l. TS, Fs.
Vicia sepium L.: 457–655 m a.s.l. Te, TN.
Vicia unijuga A. Braun: 458–1242 m a.s.l. Te, Fs.
Vicia venosa (Willd. ex Link) Maxim.: 842–1189 m a.s.l. TS, Fs.

Polygalaceae

Polygala comosa Schkuhr [*Polygala hybrida* DC.]: 457–470 m a.s.l. Te.
Polygala sibirica L.: 872–1129 m a.s.l. Fs.
Polygala tenuifolia Willd.: 856–986 m a.s.l. Fs.

Rosaceae

Agrimonia pilosa Ledeb.: 460–1056 m a.s.l. Te, TN, TS, Fs.
+ *Alchemilla altaica* Juz.: 460–470 m a.s.l. Te.
Alchemilla anisopoda Juz.: 457–462 m a.s.l. Te.
+ *Alchemilla aperta* Juz.: 478–850 m a.s.l. Te, TN. Apophyte.
+ *Alchemilla argutiserrata* H. Lindb. ex Juz.: 461–462 m a.s.l. Te.
+ *Alchemilla atrifolia* Zämelis: 458–525 m a.s.l. Te.
+ *Alchemilla baltica* Sam. ex Juz.: 457–521 m a.s.l. Te.
+ *Alchemilla barbulata* Juz.: 470–520 m a.s.l. Te.
+ *Alchemilla biquadrata* Juz.: 461 m a.s.l. Te.
+ *Alchemilla bungei* Juz.: 530 m a.s.l. Te.
+ *Alchemilla conglobata* H. Lindb.: 507 m a.s.l. Te.
+ *Alchemilla cymatophylla* Juz.: 461–480 m a.s.l. Te.
+ *Alchemilla cyrtopleura* Juz.: 480–481 m a.s.l. Te.
+ *Alchemilla dasyclada* Juz.: 859 m a.s.l. TN. Apophyte.
+ *Alchemilla decalvans* Juz.: 466 m a.s.l. Te.
+ *Alchemilla denticulata* Juz.: 483 m a.s.l. Te.
+ *Alchemilla flavescens* Buser: 470–484 m a.s.l. Te.

+ *Alchemilla glabriformis* Juz.: 469–475 m a.s.l. Te.
+ *Alchemilla hebescens* Juz.: 465 m a.s.l. Te.
+ *Alchemilla hians* Juz.: 465 m a.s.l. Te.
+ *Alchemilla hirsuticaulis* H. Lindb.: 525 m a.s.l. Te.
+ *Alchemilla integribasis* Juz.: 463–483 m a.s.l. Te.
+ *Alchemilla krylovii* Juz.: 460 m a.s.l. Te.
+ *Alchemilla laxescens* Czkalov: 463–859 m a.s.l. Te, TN.
+ *Alchemilla leiophylla* Juz.: 458–489 m a.s.l. Te.
+ *Alchemilla lipschitzii* Lipsch. ex Juz.: 462 m a.s.l. Te.
+ *Alchemilla micans* Buser: 457–513 m a.s.l. Te.
+ *Alchemilla monticola* Opiz: 465–520 m a.s.l. Te.
+ *Alchemilla murbeckiana* Buser: 460–482 m a.s.l. Te.
+ *Alchemilla obconiciflora* Juz.: 460–508 m a.s.l. Te.
+ *Alchemilla omalophylla* Juz.: 462 m a.s.l. Te.
+ *Alchemilla oxyodonta* (Buser) G.C. Westerl.: 463–482 m a.s.l. Te.
+ *Alchemilla pachyphylla* Juz.: 460–461 m a.s.l. Te.
+ *Alchemilla parcipila* Juz.: 480–483 m a.s.l. Te.
+ *Alchemilla pavlovii* Juz.: 458 m a.s.l. Te.
+ *Alchemilla plicata* Buser: 480–525 m a.s.l. Te.
+ *Alchemilla retropilosa* Juz.: 489 m a.s.l. Te.
+ *Alchemilla rigescens* Juz.: 458–485 m a.s.l. Te.
+ *Alchemilla sarmatica* Juz.: 474–480 m a.s.l. Te.
+ *Alchemilla sauri* Juz.: 460 m a.s.l. Te.
+ *Alchemilla schmakovii* Czkalov: 461–525 m a.s.l. Te.
+ *Alchemilla sibirica* Zämelis: 460–529 m a.s.l. Te.
+ *Alchemilla subcrenata* Buser: 458–460 m a.s.l. Te.
+ *Alchemilla tubulosa* Juz.: 465–478 m a.s.l. Te.

Notes on *Alchemilla*: The study of *Alchemilla* species diversity in the Baikal region is currently incomplete. The names used here follow the identifications of herbarium specimens made by A.V. Chkalov. The species status (native/alien) is not used here, except "apophyte" only for *Alchemilla aperta* and *Alchemilla dasyclada* due to their distribution on the territory of Reserve.

Chamaerhodos erecta (L.) Bunge: 840–1132 m a.s.l. Fs.
Chamaerhodos grandiflora (Pall. ex Schult.) Bunge: 910 m a.s.l. Fs.
Comarum palustre L.: 457–1489 m a.s.l. Te, TN, TS.
+ * *Cotoneaster lucidus* Schltdl. [*Cotoneaster acutifolius* Turcz.]: 458 m a.s.l. EnBS. Te.
Cotoneaster melanocarpus Fisch. ex Blytt [*Cotoneaster laxiflorus* J.Jacq. ex Lindl.]: 736–1920 m a.s.l. TN, SS, TS, Fs.
* *Cotoneaster tjuliniae* Pojark. ex Peschkova: 1510–1581 m a.s.l. EnBS, SS.
Crataegus sanguinea Pall.: 457–851 m a.s.l. Te, TS.
Dasiphora fruticosa (L.) Rydb.: 457–1937 m a.s.l. Te, TN, SN, SS, TS.
Dryas oxyodonta Juz. [*Dryas octopetala* subsp. *oxyodonta* (Juz.) Hultén]: 1342–2312 m a.s.l. SN, Tu, SS.
Filipendula palmata (Pall.) Maxim.: 458–878 m a.s.l. Te, TS.
Filipendula ulmaria (L.) Maxim.: 457–859 m a.s.l. Te, TN, TS.
+ *Fragaria × ananassa* (Weston) Duchesne ex Rozier: 457–530 m a.s.l. Te. Alien.
Fragaria orientalis Losinsk.: 804–1335 m a.s.l. TS.
Fragaria vesca L.: 457–771 m a.s.l. Te, TN.
Geum aleppicum Jacq.: 458–1098 m a.s.l. Te, TN, TS.
Geum rivale L.: 477–513 m a.s.l. Te, TN.
Malus baccata (L.) Borkh. [*Malus chamardabanica* Vartapetyan & Solovjeva]: 457–1065 m a.s.l. Te, Fs.
Padus avium Mill. [*Padus asiatica* Kom., *Prunus padus* L.]: 457–1152 m a.s.l. Te, TN, TS, Fs.
Potentilla acaulis L.: 856–1205 m a.s.l. Fs.
+ *Potentilla acervata* Soják: 837–1148 m a.s.l. Fs.
+ *Potentilla × angarensis* Popov: 460–491 m a.s.l. EnSS. Te.
Potentilla anserina L. [*Argentina anserina* (L.) Rydb.]: 457–1047 m a.s.l. Te, TS.
Potentilla argentea L.: 463–496 m a.s.l. Te.
Potentilla biflora Willd. ex Schltdl.: 1907–2210 m a.s.l. Tu.
Potentilla bifurca L. [*Sibbaldianthe bifurca* (L.) Kurtto & T.Erikss.]: 460–1011 m a.s.l. Te, Fs.
Potentilla chrysantha Trevir.: 458–474 m a.s.l. Te.
Potentilla conferta Bunge: 465 m a.s.l. Te.
Potentilla crebridens Juz.: 837–1205 m a.s.l. Fs.
Potentilla elegans Cham. & Schltdl.: 1962–2089 m a.s.l. Tu.
Potentilla fragarioides L.: 470–880 m a.s.l. Te, TS.
Potentilla gelida subsp. *boreoasiatica* Jurtzev & Kamelin [*Potentilla crantzii* subsp. *gelida* (C.A. Mey.) Soják]: 1854–1955 m a.s.l. Tu.
+ *Potentilla longifolia* Willd. ex Schltdl.: 926–967 m a.s.l. Fs.
Potentilla nivea L.: 912–1943 m a.s.l. Tu, SS, Fs.
Potentilla norvegica L.: 457–1047 m a.s.l. Te, TS.
Potentilla orientalis Juz. [*Potentilla semiglabra* Juz., *Sibbaldianthe semiglabra* (Juz. ex Soják) Mosyakin & Shiyan, *Sibbaldianthe orientalis* (Juz. ex Soják) Mosyakin & Shiyan]: 457–484 m a.s.l. Te.
+ *Potentilla ornithopoda* Tausch: 460 m a.s.l. EnSS. Te.
Potentilla paradoxa Nutt. ex Torr. & Gray [*Potentilla supina* subsp. *paradoxa* (Nutt.) Soják]: 457–530 m a.s.l. Te.
+ *Potentilla sericea* L.: 1431 m a.s.l. Fs.
Potentilla tanacetifolia Willd. ex Schltdl.: 840–1150 m a.s.l. Fs.
Potentilla tergemina Soják: 458–496 m a.s.l. Te.
Rosa acicularis Lindl.: 457–1943 m a.s.l. Te, TN, SN, Tu, SS, TS, Fs.
Rosa davurica Pall.: 470 m a.s.l. Te. Apophyte.
+ *Rosa rugosa* Thunb.: 457 m a.s.l. Te. Alien.
Rubus arcticus L.: 457–1615 m a.s.l. Te, TN, TS.
Rubus chamaemorus L.: 458–1218 m a.s.l. Te, TN, SN.
Rubus humulifolius C.A. Mey.: 468–984 m a.s.l. Te, TS.
Rubus idaeus L.: 457–1365 m a.s.l. Te, TN, TS.
Rubus sachalinensis H.Lév. [*Rubus matsumuranus* H.Lév. & Vaniot]: 466–1736 m a.s.l. Te, TN, SN, SS, TS.
Rubus saxatilis L.: 458–1448 m a.s.l. Te, TN, SN, SS, TS, Fs.
Sanguisorba alpina Bunge: 462–1852 m a.s.l. Te, TN, SN, SS, TS.
Sanguisorba officinalis L.: 457–1298 m a.s.l. Te, TS, Fs.
Sanguisorba parviflora (Maxim.) Takeda [*Sanguisorba tenuifolia* Fisch. ex Link]: 460–465 m a.s.l. Te. Apophyte.
Sanguisorba tenuifolia Fisch. ex Link: 465 m a.s.l. Te. Apophyte.
Sibbaldia procumbens L.: 457–2183 m a.s.l. Te, TN, SN, Tu, SS.
Sorbaria sorbifolia (L.) A. Braun: 458–472 m a.s.l. Te.
Sorbus aucuparia subsp. *glabrata* (Wimm. & Grab.) Hedl. [*Sorbus sibirica* (Hedl.) Prain]: 457–1880 m a.s.l. Te, TN, SN, SS, TS.
Spiraea alpina L.: 975–1852 m a.s.l. SS, TS.
Spiraea flexuosa Fisch. ex Cambess: 460–1563 m a.s.l. Te, TN.
Spiraea media Schmidt: 804–1742 m a.s.l. TN, SS, TS.
Spiraea salicifolia L.: 457–1226 m a.s.l. Te, TS.
* *Waldsteinia ternata* (Steph.) Fritsch [*Geum ternatum* (Stephan) Smedmark]: 458–1001 m a.s.l. Te, TN.

+ Elaeagnaceae

+ *Hippophae rhamnoides* L.: 458–501 m a.s.l. Te. Alien.

Ulmaceae

Ulmus pumila L.: 476–1100 m a.s.l. Te (Apophyte), Fs.

Cannabaceae

Cannabis sativa var. *spontanea* Vavilov: 460–534 m a.s.l. Te. Alien.
+ *Humulus lupulus* L.: 460–465 m a.s.l. Te. Alien.

Urticaceae

Urtica angustifolia Fisch. ex Hornem. [*Urtica dioica* var. *holosericea* Fr.]: 983–1150 m a.s.l. TS.
Urtica cannabina L.: 509–835 m a.s.l. Te, TS. Apophyte.
Urtica dioica L.: 457–1389 m a.s.l. Te, TN, TS.
Urtica galeopsifolia Wierzb. ex Opiz [*Urtica dioica* subsp. *pubescens* (Ledeb.) Domin]: 510–763 m a.s.l. TN.

Betulaceae

+ *Betula exilis* Sukaczev: 466–2167 m a.s.l. Te, SN, Tu, SS, TS.
Betula fruticosa Pall.: 845–1701 m a.s.l. TS.
Betula platyphylla Sukaczev [*Betula pendula* subsp. *mandshurica* (Regel) Ashburner & McAll.]: 457–1880 m a.s.l. Te, TN, SS, TS, Fs.
Betula pubescens Ehrh.: 457–1923 m a.s.l. Te, TN, SN, SS, TS.
Betula rotundifolia Spach.1123–1843 m a.s.l. SN, Tu, SS.
Betula tortuosa Ledeb. [*Betula pubescens* var. *pumila* (G. Zanoni ex Murray) Govaerts]: 1125–1711 m a.s.l. SN, SS.
Duschekia fruticosa (Rupr.) Pouzar [*Alnus alnobetula* subsp. *fruticosa* (Rupr.) Raus]: 457–1692 m a.s.l. Te, TN, SN, SS, TS.

Celastraceae

Parnassia laxmannii Pall. ex Schult.: 1881–1908 m a.s.l. SS.
Parnassia palustris L.: 457–1920 m a.s.l. Te, TN, SN, Tu, SS, TS.

Oxalidaceae

Oxalis acetosella L.: 457–1420 m a.s.l. Te, TN, TS.

Hypericaceae

Hypericum gebleri Ledeb. [*Hypericum ascyron* subsp. *gebleri* (Ledeb.) N.Robson]: 460–840 m a.s.l. Te, TN.
Hypericum maculatum Crantz: 457–523 m a.s.l. Te. Alien.
Hypericum perforatum L.: 463–488 m a.s.l. Te. Alien.

Violaceae

+ *Viola acuminata* Ledeb.: 460 m a.s.l. Te.
Viola altaica Ker Gawl.: 1113–2022 m a.s.l. SN, Tu, SS.
Viola biflora L.: 459–1955 m a.s.l. Te, TN, SN, Tu, SS, TS.
+ *Viola brachyceras* Turcz.: 799–1235 m a.s.l. TN, TS.
Viola canina L.: 465 m a.s.l. Te. Notes: The presence of *Viola canina* in the Baikal region is currently uncertain. Previously, all plants were identified as *Viola canina*; however, during recent revisions of herbarium material, all of them were reidentified as *Viola*

nemoralis. As this fact is not reflected in the Checklist of Asian Russia, we include both species.
+ *Viola collina* Besser: 472–961 m a.s.l. TN.
Viola dactyloides Schult.: 834–1042 m a.s.l. TS.
Viola dissecta Ledeb.: 967 m a.s.l. Fs.
Viola epipsiloides Á. Löve & D. Löve [*Viola epipsila* subsp. *repens* W. Becker]: 458–1488 m a.s.l. Te, TN, TS.
Viola gmeliniana Schult.: 827–931 m a.s.l. TS.
Viola mauritii Tepl.: 457–500 m a.s.l. Te.
+ *Viola nemoralis* Kütz. [*Viola canina* subsp. *ruppii* (All.) Schübl. & G. Martens]: 458–595 m a.s.l. Te, TN.
Viola patrinii Ging.: 458 m a.s.l. Te.
Viola rupestris F.W. Schmidt.: 465–534 m a.s.l. Te, TN.
Viola sacchalinensis H.Boissieu: 457–1561 m a.s.l. Te, TN, SN, SS, TS.
Viola selkirkii Pursh ex Goldie: 458–1230 m a.s.l. Te, TN, TS.
+ *Viola tricolor* L.: 460–530 m a.s.l. Te. Alien.
Viola uniflora L.: 464–1928 m a.s.l. Te, TN, SN, Tu, SS, TS.
+ *Viola* × *wittrockiana* Gams: 463 m a.s.l. Te. Alien. Notes: The exact identity of escaped garden pansies (*Viola* hybrids) can hardly be determined with certainty. We therefore use the "traditional" name, noting that these plants may represent *Viola* × *williamsii* or other hybrid forms within subsection *Bracteolatae*.

Salicaceae

Populus suaveolens Fisch.: 457–1302 m a.s.l. Te, TN, TS.
Populus tremula L.: 457–1736 m a.s.l. Te, TN, SS, TS, Fs.
Salix abscondita Laksch.: 522–1054 m a.s.l. Te, TN.
+ *Salix arctica* Pall.: 1807–2203 m a.s.l. Tu.
Salix bebbiana Sarg.: 510–1335 m a.s.l. TN, TS.
Salix berberifolia Pall.: 1675–2210 m a.s.l. Tu.
Salix caprea L.: 457–1711 m a.s.l. Te, TN, SS, TS.
Salix divaricata Pall.: 457–1896 m a.s.l. Te, TN, SN, SS, TS.
Salix glauca L.: 1378–2026 m a.s.l. SN, Tu, SS.
Salix gmelinii Pall.: 457–472 m a.s.l. Te.
Salix hastata L.: 1656–1931 m a.s.l. Tu, SS.
Salix jenisseensis (F. Schmidt) Flod.: 459–505 m a.s.l. Te, TN.
Salix krylovii E.L. Wolf: 985–2094 m a.s.l. SN, Tu, SS.
Salix myrtilloides L.: 517–1493 m a.s.l. Te, TN, SS.
Salix nummularia Andersson: 1701–2312 m a.s.l. Tu.
Salix pseudopentandra (Flod.) Flod.: 459 m a.s.l. Te.
+ *Salix pyrolifolia* Ledeb.: 1059 m a.s.l. TS.
Salix rhamnifolia Pall.: 457–1860 m a.s.l. Te, SS, TS.
Salix rorida Laksch.: 457–1274 m a.s.l. Te, TN, TS.
Salix sajanensis Nasarow: 1783 m a.s.l. EnSS. Tu.
+ *Salix saposhnikovii* A.K. Skvortsov: 1007–1210 m a.s.l. TN, TS.
Salix saxatilis Turcz. ex Ledeb.: 740–2034 m a.s.l. SN, Tu, SS.
Salix schwerinii E.L. Wolf: 457–500 m a.s.l. Te.
Salix sphenophylla A.K. Skvortsov: 1926 m a.s.l. Tu.
Salix taraikensis Kimura: 457–1602 m a.s.l. Te, TN, TS.
Salix turczaninowii Laksch.: 2220 m a.s.l. Tu.
Salix viminalis L.: 457–574 m a.s.l. Te, TN.

Euphorbiaceae

Euphorbia borealis Baikov: 835–1226 m a.s.l. TN, TS, Fs.
Euphorbia virgata Waldst. & Kit.: 465–520 m a.s.l. Te. Alien.

Linaceae

Linum perenne L.: 835–1056 m a.s.l. Fs.
+ *Linum usitatissimum* L.: 457–474 m a.s.l. Te. Alien.

Geraniaceae

Erodium cicutarium (L.) L'Hér.: 463–530 m a.s.l. Te.
Geranium krylovii Tzvelev: 457–1955 m a.s.l. Te, TN, SN, Tu, SS.
+ *Geranium malyschevii* Troschkina. 460–469 m a.s.l. Te.
Geranium platyanthum Duthie [*Geranium eriostemon* Fisch. ex DC.]: 459–1335 m a.s.l. Te, TS, Fs.
Geranium pseudosibiricum J. Mayer: 837–1233 m a.s.l. TS, Fs.
Geranium sergievskajae (Peschkova) Troshkina [*Geranium pratense* subsp. *sergievskajae* Peschkova]: 457–462 m a.s.l. Te.
Geranium sibiricum L.: 457–492 m a.s.l. Te. Alien.
Geranium transbaicalicum Serg. s.str.: 910–1011 m a.s.l. Fs.
+ *Geranium transbaicalicum* subsp. *turczaninovii* (Serg.) Peschkova: 804–1150 m a.s.l. TS, Fs.
Geranium wlassovianum Fisch. ex Link: 457–480 m a.s.l. Te.

Onagraceae

Chamaenerion angustifolium (L.) Scop. [*Epilobium angustifolium* L.]: 457–1920 m a.s.l. Te, TN, SN, SS, TS, Fs.
Chamaenerion latifolium (L.) Sweet [*Epilobium latifolium* L.]: 457–1872 m a.s.l. Te, TN, SN, SS, TS.
Circaea alpina L.: 460–1106 m a.s.l. Te, TN, TS.
Epilobium adenocaulon Hausskn.: 457–791 m a.s.l. Te, TN. Alien.
Epilobium anagallidifolium Lam. [*Epilobium alpinum* L.]: 540–1630 m a.s.l. TN, SN, Tu, SS.
+ *Epilobium davuricum* Fisch. ex Hornem.: 459 m a.s.l. Te.
+ *Epilobium fastigiatoramosum* Nakai: 458 m a.s.l. Te. Alien.
* *Epilobium montanum* L.: 457–960 m a.s.l. Te, TN.
Epilobium palustre L.: 457–1465 m a.s.l. Te, TN, TS.
+ *Epilobium pseudorubescens* A.K. Skvortsov: 457–815 m a.s.l. Te, TN. Alien.
+ *Epilobium tetragonum* L.: 465 m a.s.l. Te. Alien.
+ *Oenothera rubricaulis* Kleb.: 470 m a.s.l. Te. Alien.
+ *Oenothera villosa* Thunb.: 465 m a.s.l. Te. Alien.

Thymelaeaceae

* *Daphne mezereum* L.: 458–916 m a.s.l. Te, TN.

Brassicaceae

+ *Alyssum lenense* Adams: 840–1038 m a.s.l. Fs.
Alyssum obovatum (C.A. Mey.) Turcz. [*Odontarrhena obovata* C.A. Mey.]: 879–911 m a.s.l. Fs.
Arabis borealis Andrz. [*Arabis sagittata* var. *borealis* (Andrz. ex Ledeb.) A.L.Ebel]: 872–1160 m a.s.l. TN, TS, Fs.
Arabis pendula L. [*Catolobus pendulus* (L.) Al-Shehbaz]: 457–1039 m a.s.l. Te, Fs.
Armoracia rusticana G. Gaertn., B. Mey. & Scherb.: 460–530 m a.s.l. Te. Alien.
Barbarea orthoceras Ledeb.: 470 m a.s.l. Te.
Barbarea vulgaris R. Br. [*Barbarea arcuata* (Opiz J. ex Presl & C. Presl) Rchb.]: 457–530 m a.s.l. Te.
Berteroa incana (L.) DC.: 530 m a.s.l. Te.
Brassica campestris L. [*Brassica rapa* subsp. *campestris* (L.) A.R. Clapham]: 457–524 m a.s.l. Te. Alien.
Brassica juncea (L.) Czern.: 460 m a.s.l. Te. Alien.
+ *Brassica napus* L.: 465–490 m a.s.l. Te. Alien.
Bunias orientalis L.: 457–500 m a.s.l. Te. Alien.
Camelina microcarpa Andrz. ex DC.: 490 m a.s.l. Te.
Capsella bursa-pastoris (L.) Medikus: 457–483 m a.s.l. Te.
Cardamine bellidifolia L.: 1860–2210 m a.s.l. Tu.
Cardamine macrophylla Willd.: 457–1790 m a.s.l. Te, TN, SN, SS, TS.
Cardamine pratensis L.: 460–1195 m a.s.l. Te, TN, TS.
Cardamine trifida (Poir.) B.M.G. Jones: 460–622 m a.s.l. Te, TN.
Clausia aprica (Stephan) Korn.-Trotzky: 889–1235 m a.s.l. Fs.
Descurainia sophia (L.) Webb ex Prantl.: 457–467 m a.s.l. Te.
Dontostemon integrifolius (L.) C.A. Mey.: 840–1065 m a.s.l. Fs.
Dontostemon pinnatifidus (Willd.) Al-Shehbaz & H. Ohba: 460 m a.s.l. Te. Apophyte.
Draba fladnizensis Wulfen: 1882–1943 m a.s.l. Tu.
+ *Draba lanceolata* Royle: 939–949 m a.s.l. TN.
Draba nemorosa L. 460–1065 m a.s.l. Te, Fs.
Draba sibirica (Pall.) Thell.: 458 m a.s.l. Te.
+ *Draba subamplexicaulis* C.A. Mey.: 1704–1800 m a.s.l. Tu.
Eruca sativa Mill. [*Eruca vesicaria* (L.) Cav.]: 470 m a.s.l. Te. Alien.
Erucastrum armoracioides (Czern. ex Turcz.) Cruchet [*Brassica elongata* subsp. *integrifolia* (Boiss.) Breistr.]: 465 m a.s.l. Te. Alien.
Erysimum cheiranthoides L.: 457–1160 m a.s.l. Te, Fs.
Erysimum marschallianum Andrz. ex M.Bieb.: 465–515 m a.s.l. Te.
+ *Hesperis pycnotricha* Borbás & Degen [*Hesperis matronalis* L.]: 470–473 m a.s.l. Te. Alien.
Hesperis sibirica L.: 460–1040 m a.s.l. Te, TN, TS.
Isatis oblongata DC.: 457–465 m a.s.l. Te.
+ *Lepidium apetalum* Willd.: 465–469 m a.s.l. Te.
Lepidium densiflorum Schrad.: 460–485 m a.s.l. Te. Alien.
+ *Lepidium ruderale* L.: 469 m a.s.l. Te.
Macropodium nivale (Pall.) R. Br.: 497–1860 m a.s.l. TN, SN, SS, TS.
Noccaea cochleariformis (DC.) Á. Löve & D. Löve: 833 m a.s.l. Fs.
Rorippa palustris (L.) Besser: 457–1345 m a.s.l. Te, TS.
+ *Sinapis alba* L.: 466 m a.s.l. Te. Alien.
Sinapis arvensis L.: 460–470 m a.s.l. Te. Alien.
Sisymbrium heteromallum C.A. Mey.: 973 m a.s.l. Fs.
Sisymbrium loeselii L.: 460–473 m a.s.l. Te. Apophyte.
+ *Sisymbrium volgense* M.Bieb. ex E.Fourn.: 458 m a.s.l. Te. Alien.
Smelowskia alba (Pall.) Regel: 1038–1068 m a.s.l. Fs.
Stevenia alyssoides Adams & Fisch.: 856–1015 m a.s.l. Fs.
Thlaspi arvense L.: 457–530 m a.s.l. Te. Apophyte.
Turritis glabra L.: 463–475 m a.s.l. Te.

Santalaceae

+ *Thesium repens* Ledeb.: 880–1405 m a.s.l. SN, TS.
Thesium saxatile Turcz.: 824–1242 m a.s.l. EnSS. Fs.

Tamaricaceae

Myricaria longifolia (Willd.) Ehrenb.: 851–1072 m a.s.l. EnSS. TS, Fs.

Plumbaginaceae

Goniolimon speciosum (L.) Boiss.: 856–1117 m a.s.l. Fs.
Limonium flexuosum (L.) Kuntze: 900 m a.s.l. Fs.

Polygonaceae

Aconogonon alpinum (All.) Schur [*Persicaria alpina* (All.) H. Gross]: 457–1549 m a.s.l. Te, SN, TS.
Aconogonon angustifolium (Pall.) H. Hara: 1493–1756 m a.s.l. Tu, SS.
Aconogonon divaricatum (L.) Nakai: 457–525 m a.s.l. Te. Apophyte.
Aconogonon ocreatum var. *riparium* (Georgi) Tzvelev [*Polygonum ochreatum* L.]: 1552–1976 m a.s.l. Tu, SS.
Aconogonon weyrichii (F. Schmidt) H. Hara [*Persicaria weyrichii* (F. Schmidt) H. Gross]: 458 m a.s.l. Te. Alien.
Bistorta elliptica (Willd. ex Spreng.) Kom. [*Bistorta abbreviata* Kom.]: 1618–2258 m a.s.l. SN, Tu, SS.
Bistorta officinalis Delarbre [*Persicaria bistorta* (L.) Samp.]: 457–1920 m a.s.l. Te, SN, SS.
Bistorta vivipara (L.) Delarbre [*Persicaria vivipara* (L.) Ronse Decr.]: 457–2258 m a.s.l. Te, TN, SN, Tu, SS, TS.
Fagopyrum esculentum Moench: 460–1098 m a.s.l. Te, TS. Alien.
Fagopyrum tataricum (L.) Gaertn.: 463–476 m a.s.l. Te. Alien.
Fallopia convolvulus (L.) Á. Löve: 457–540 m a.s.l. Te, TN (Apophyte).
Oxyria digyna (L.) Hill: 460–1849 m a.s.l. TN, SN, SS, TS.
+ *Persicaria amphibia* (L.) Delarbre: 1067 m a.s.l. TS.
+ *Persicaria hydropiper* (L.) Delarbre: 457–532 m a.s.l. Te.
Persicaria lapathifolia (L.) Delarbre: 457–1494 m a.s.l. Te, TS.
Persicaria maculosa S.F.Gray: 457–530 m a.s.l. Te. Alien.
+ *Persicaria minor* (Huds.) Opiz: 458 m a.s.l. Te.
+ *Polygonum arenastrum* Boreau: 465–524 m a.s.l. Te.
Polygonum aviculare L.: 457–835 m a.s.l. Te.
+ *Polygonum neglectum* Besser [*Polygonum aviculare* L.]: 465 m a.s.l. Te.
+ *Polygonum rigidum* Skvortsov: 528 m a.s.l. Te.
+ *Polygonum tenuissimum* A.I. Baranov & Skvortsov ex Vorosch.: 485 m a.s.l. Te.
Rheum compactum L.: 1087–1976 m a.s.l. Tu, SS, TS.
Rumex acetosa L. [*Acetosa pratensis* Mill.]: 461–509 m a.s.l. Te. Notes: Previously, only *Rumex acetosa* was recorded for the study area. After a revision, all specimens from the main territory of the Reserve have been assigned to *Rumex arifolius*. We considered it appropriate to apply the name *Rumex acetosa* to the plants from the coast of Lake Baikal.
Rumex acetosella L. [*Acetosella vulgaris* Fourr.]: 457–568 m a.s.l. Te, TN.
Rumex aquaticus L. 457–858 m a.s.l. Te, Fs.
Rumex arifolius All. [*Rumex alpestris* Jacq.]: 511–1907 m a.s.l. TN, SN, SS.
+ *Rumex crispus* L.: 475 m a.s.l. Te. Alien.
Rumex gmelinii Turcz. ex Ledeb.: 457–460 m a.s.l. Te.
Rumex longifolius DC.: 460 m a.s.l. Te.
+ *Rumex pseudonatronatus* (Borbas) Borbas ex Murb.: 457–530 m a.s.l. Te.
+ *Rumex thyrsiflorus* Fingerh.: 459–467 m a.s.l. Te. Apophyte.
Truellum sieboldii (Meisn.) Soják [*Persicaria sagittata* (L.) H. Gross]: 457–487 m a.s.l. Te.

Droseraceae

Drosera anglica Huds.: 457–542 m a.s.l. Te, TN.
Drosera × obovata Mert. & W.D.J. Koch: 521 m a.s.l. Te.
Drosera rotundifolia L.: 457–1450 m a.s.l. Te, TN, SN, TS.

Caryophyllaceae

Agrostemma githago L.: 470 m a.s.l. Te. Alien.
Cerastium arvense L.: 460–1148 m a.s.l. Te, Fs.
Cerastium davuricum Fisch. ex Spreng.: 460–1215 m a.s.l. Te, TN, SN.
Cerastium holosteoides Fr. [*Cerastium fontanum* subsp. *vulgare* (Hartm.) Greuter & Burdet]: 457–1231 m a.s.l. Te, TN.
Cerastium maximum L.: 470 m a.s.l. Te. Apophyte.
Cerastium pauciflorum Steven ex Ser.: 457–1445 m a.s.l. Te, TN, TS.
Cerastium pusillum Ser.: 1124–1994 m a.s.l. Tu, SS.
+ *Dianthus barbatus* L.: 457–500 m a.s.l. Te. Alien.
+ *Dianthus deltoides* L.: 460 m a.s.l. Te.
Dianthus superbus L.: 475–1920 m a.s.l. TN, SN, Tu, SS, TS.
Dianthus versicolor Fisch. ex Link [*Dianthus chinensis* L.]: 835–1708 m a.s.l. SS, Fs.
Dichodon cerastoides (L.) Rchb.: 1088–2210 m a.s.l. Tu, SS, TS.
Eremogone formosa (Fisch. ex Ser.) Fenzl: 1891 m a.s.l. Tu.
Gastrolychnis brachypetala (Fenzl) Tolm. & Kozhanch. [*Silene songarica* (Fisch., C.A. Mey. & Avé-Lall.) Bocquet]: 460 m a.s.l. Te.
+ *Gastrolychnis tristis* (Bunge) Czerep. [*Silene bungei* Bocquet]: 1397–2210 m a.s.l. EnSS. Tu, SS.
Gypsophila patrinii Ser.: 900 m a.s.l. Fs.
+ *Lychnis chalcedonica* L. [*Silene chalcedonica* (L.) E.H.L. Krause]: 462–471 m a.s.l. Te. Alien.
Lychnis sibirica L. [*Silene samojedorum* (Sambuk) Oxelman]: 935–1205 m a.s.l. Fs.
Silene latifolia subsp. *alba* (Mill.) Greuter & Burdet [*Melandrium album* (Mill.) Garcke]: 457–520 m a.s.l. Te.
Minuartia arctica (Steven ex Ser.) Graebn. [*Cherleria arctica* (Steven ex Ser.) A.J. Moore & Dillenb.]: 1609–2312 m a.s.l. SN, Tu, SS.
Minuartia biflora (L.) Schinz & Thell. [*Cherleria biflora* (L.) A.J. Moore & Dillenb.]: 1320–2183 m a.s.l. SN, Tu, SS.
Minuartia verna (L.) Hiern [*Sabulina verna* (L.) Rchb.]: 1645–2184 m a.s.l. Tu, SS.
Moehringia lateriflora (L.) Fenzl: 457–1445 m a.s.l. Te, TN, TS.
Silene vulgaris (Moench) Garcke [*Oberna behen* (L.) Ikonn.]: 457–1383 m a.s.l. Te, TN, SN.
Sagina procumbens L.: 457–742 m a.s.l. Te, TN.
Sagina saginoides (L.) Karst.: 457–894 m a.s.l. Te, TN.
+ *Saponaria officinalis* L.: 470–489 m a.s.l. Te. Alien.
+ *Scleranthus annuus* L.: 462 m a.s.l. Te. Alien.
Silene amoena L. [*Silene repens* Patrin]: 457–1920 m a.s.l. Te, TN, SN, SS, TS, Fs.
+ *Silene aprica* Turcz. ex Fisch. & C.A. Mey. [*Elisanthe aprica* (Turcz. ex Fisch. & C.A. Mey.) Peshkova s. str.]: 835–1211 m a.s.l. Fs.
Silene chamarensis Turcz.: 1127–1975 m a.s.l. EnSS. Tu, SS.
Silene flos-cuculi (L.) Greuter & Burdet [*Coccyganthe flos-cuculi* (L.) Rchb., *Coronaria flos-cuculi* (L.) A. Braun]: 470–477 m a.s.l. Te.
+ *Silene jeniseensis* Willd.: 825–1045 m a.s.l. Fs.
Spergula arvensis L.: 510–513 m a.s.l. Te.
Spergularia rubra (L.) J. Presl & C. Presl: 460 m a.s.l. Te.
Stellaria angarae Popov: 457–482 m a.s.l. EnBS. Te.
Stellaria bungeana Fenzl. 457–1266 m a.s.l. Te, TN.
Stellaria cherleriae (Fisch. ex Ser.) F.N. Williams [*Adenonema cherleriae* (Fisch. ex Ser.) M.T. Sharples & E.A. Tripp]: 926–2184 m a.s.l. Tu, SS, Fs.
Stellaria dahurica Willd. ex Schltdl.: 457–855 m a.s.l. Te, Fs.
Stellaria dichotoma L.: 853–1142 m a.s.l. Fs.
Stellaria graminea L.: 457–1050 m a.s.l. Te, Fs.
Stellaria irrigua Bunge [*Stellaria umbellata* Turcz.]: 475–1456 m a.s.l. TN, SN, SS, TS.
Stellaria longifolia H.L.Muhl. ex Willd.: 457–1171 m a.s.l. Te, TN, TS.
Stellaria media (L.) Vill.: 458–530 m a.s.l. Te.
Stellaria peduncularis Bunge [*Stellaria longipes* Goldie]: 742–2210 m a.s.l. SN, Tu, SS, TS.
Stellaria radians L. [*Fimbripetalum radians* (L.) Ikonn.]: 457 m a.s.l. Te.
+ *Stellaria schischkinii* Peschkova: 914–1181 m a.s.l. EnBS. TS.

Amaranthaceae

Amaranthus retroflexus L.: 463–530 m a.s.l. Te. Alien.
+ *Atriplex patula* L.: 459 m a.s.l. Te. Alien.
+ *Atriplex sagittata* (L.) Borkh.: 462–530 m a.s.l. Te. Alien.
+ *Axyris amaranthoides* L.: 463–1142 m a.s.l. Te (Apophyte), Fs.
+ *Axyris hybrida* L.: 485–1142 m a.s.l. Te (Apophyte), Fs.
+ *Bassia scoparia* subsp. *densiflora* (Turcz. ex Aellen) Cirujano & Velayos [*Bassia scoparia* (L.) Voss, *Kochia densiflora* (Regel) Turcz. ex Aellen]: 460–514 m a.s.l. Te.
Chenopodiastrum hybridum (L.) S.Fuentes, Uotila & Borsch [*Chenopodium hybridum* L.]: 874–1142 m a.s.l. Fs.
+ *Chenopodium acuminatum* Willd.: 460–489 m a.s.l. Te. Apophyte.
Chenopodium album L.: 457–535 m a.s.l. Te.
+ *Chenopodium betaceum* Andrz.: 471 m a.s.l. Te.
+ *Chenopodium bryoniifolium* Bunge: 475–1148 m a.s.l. Te (Apophyte), Fs.
+ *Chenopodium virgatum* Thunb.: 471 m a.s.l. Te.
+ *Corispermum sibiricum* Iljin: 460–461 m a.s.l. Te. Apophyte.
+ *Oxybasis glauca* (L.) S.Fuentes, Uotila & Borsch: 460–534 m a.s.l. Te.
Salsola collina Pall.: 465–470 m a.s.l. Te.
+ *Salsola tragus* L. [*Salsola kali* subsp. *tragus* (L.) Čelak.]: 460–465 m a.s.l. Te.
Teloxys aristata (L.) Moq. [*Chenopodium aristatum* L., *Dysphania aristata* (L.) Mosyakin & Clemants]: 465–1142 m a.s.l. Te (Apophyte), Fs.

Montiaceae

Claytonia joanneana Schult.: 1682–2236 m a.s.l. Tu, SS.
+ *Montia fontana* L.: 474–482 m a.s.l. Te.

Cornaceae

Cornus alba L.: 460–528 m a.s.l. Te, TN.

Balsaminaceae

+ *Impatiens glandulifera* Royle: 457–530 m a.s.l. Te. Alien.
Impatiens noli-tangere L.: 457–1142 m a.s.l. Te, TN.

Polemoniaceae

\+ *Collomia linearis* Nutt.: 461–471 m a.s.l. Te. Alien.
Polemonium acutiflorum Willd. ex Roem. & Schult.: 457–1314 m a.s.l. Te, TN, TS. Notes: The correct name for local plants needs revision; in some sources they are named as *Polemonium chinense* (Brand) Brand, *Polemonium villosum* Rudolph ex Georgi, *Polemonium racemosum* (Regel) Kitam. or *Polemonium liniflorum* V.N. Vassil.
Polemonium boreale Adams: 1595 m a.s.l. SS.

Primulaceae

Androsace bungeana Schischk. et Bobrov: 1645–2007 m a.s.l. Tu, SS.
Androsace filiformis Retz.: 457–520 m a.s.l. Te.
Androsace incana Lam.: 893–979 m a.s.l. Fs.
Androsace lactiflora Fisch. ex Willd.: 465–1164 m a.s.l. Te, Fs.
Androsace septentrionalis L.: 847–1208 m a.s.l. Fs.
Cortusa sibirica Andrz. ex Besser [*Primula matthioli* subsp. *sibirica* (Andrz. ex Besser) Kovt., *Primula kovtonyukiae* Chepinoga]: 490–1849 m a.s.l. TN, SN, SS, TS.
Lysimachia davurica Ledeb.: 536 m a.s.l. TN.
Lysimachia vulgaris L.: 458 m a.s.l. Te.
Naumburgia thyrsiflora (L.) Rchb. [*Lysimachia thyrsiflora* L.]: 457–1465 m a.s.l. Te, TN, TS.
Primula farinosa L.: 1040 m a.s.l. TS.
* *Primula macrocalyx* Bunge [*Primula veris* subsp. *macrocalyx* (Bunge) Lüdi]: 461 m a.s.l. Te.
* *Primula pallasii* Lehm. [*Primula elatior* subsp. *pallasii* (Lehm.) W.W. Sm. & Forrest]: 458–1657 m a.s.l. Te, TN, SN, SS.
Trientalis europaea L. [*Lysimachia europaea* (L.) U. Manns & Anderb.]: 457–2103 m a.s.l. Te, TN, SN, Tu, SS, TS.

Ericaceae

Andromeda polifolia L.: 458–743 m a.s.l. Te, TN.
Arctostaphylos uva-ursi (L.) Spreng.: 1227–1443 m a.s.l. TS.
\+ *Arctous alpina* subsp. *erythrocarpa* (Small) M.M. Ivanova [*Arctous rubra* (Rehder & E.H. Wilson) Nakai, *Arctous erythrocarpa* Small]: 1804–1806 m a.s.l. Tu.
Chamaedaphne calyculata (L.) Moench: 458–743 m a.s.l. Te, TN.
\+ * *Chimaphila umbellata* (L.) W.P.C. Barton: 529 m a.s.l. TN.
Empetrum sibiricum V.N. Vassil. [*Empetrum nigrum* subsp. *stenopetalum* (V.N. Vassil.) Nedol.]: 459–1904 m a.s.l. Te, TN, SN, Tu, SS, TS.
Ledum palustre L. [*Rhododendron tomentosum* Harmaja] (incl. *Ledum decumbens* (Aiton) Lodd. ex Steud.): 457–2013 m a.s.l. Te, TN, SN, Tu, SS, TS.
Moneses uniflora (L.) A. Gray: 463–1445 m a.s.l. Te, TN, TS.
\+ *Monotropa hypopitys* L.: 736 m a.s.l. TN.
\+ *Orthilia obtusata* (Turcz.) H. Hara: 817–1272 m a.s.l. TN, TS.
Orthilia secunda (L.) House: 459–1527 m a.s.l. Te, TN, TS.
Oxycoccus microcarpus Turcz. ex Rupr. [*Vaccinium microcarpum* (Turcz. ex Rupr.) Schmalh.]: 520–1862 m a.s.l. Te, TN, SN, TS.
Oxycoccus palustris Pers. [*Vaccinium oxycoccos* L.]: 457–1358 m a.s.l. Te, TN, TS.
Phyllodoce caerulea (L.) Bab.: 480–2236 m a.s.l. Te, TN, SN, Tu, SS.
Pyrola chlorantha Sw.: 463–1531 m a.s.l. Te, TN, TS.
Pyrola incarnata (DC.) Freyn [*Pyrola asarifolia* Michx.]: 460–1939 m a.s.l. Te, TN, SN, SS, TS.
\+ *Pyrola media* Sw.: 459–630 m a.s.l. Te, TN.
Pyrola minor L.: 457–1731 m a.s.l. Te, TN, SN, Tu, SS, TS.
Pyrola rotundifolia L.: 471–1278 m a.s.l. TN, TS.
* *Rhododendron adamsii* Rehder: 1497–2203 m a.s.l. Tu, SS.
Rhododendron aureum Georgi: 466–2203 m a.s.l. Te, TN, SN, Tu, SS, TS.
Rhododendron dauricum L.: 483–1344 m a.s.l. Te, TN, TS.
\+ *Rhododendron parvifolium* Adams: 1505 m a.s.l. SS.
Vaccinium myrtillus L.: 457–1920 m a.s.l. Te, TN, SN, Tu, SS, TS.
Vaccinium uliginosum L. (incl. *Vaccinium uliginosum* subsp. *microphyllum* (Lange) Tolm.): 457–2167 m a.s.l. Te, TN, SN, Tu, SS, TS.
Vaccinium vitis-idaea L. (incl. *Vaccinium vitis-idaea* subsp. *minus* (G. Lodd.) Hultén): 457–2203 m a.s.l. Te, TN, SN, Tu, SS, TS.

Rubiaceae

Cruciata glabra (L.) Opiz: 465–468 m a.s.l. Te. Alien.
Galium boreale L.: 457–1852 m a.s.l. Te, TN, SN, SS, TS, Fs.
\+ *Galium mollugo* L.: 457–539 m a.s.l. Te. Alien.
\+ *Galium odoratum* (L.) Scop.: 514 m a.s.l. TN.
* *Galium paradoxum* Maxim. [*Pseudogalium paradoxum* (Maxim.) L.E. Yang, Z.L. Nie & H. Sun]: 460–569 m a.s.l. TN.
Galium trifidum L.: 458–1465 m a.s.l. Te, TN, TS.
* *Galium triflorum* Michx.: 458–1010 m a.s.l. Te, TN.
Galium uliginosum L.: 457–1185 m a.s.l. Te, TN, TS.
Galium verum L.: 460–1235 m a.s.l. Te, Fs.

Gentianaceae

Anagallidium dichotomum (L.) Griseb. [*Swertia dichotoma* L.]: 457–464 m a.s.l. Te.
Comastoma tenellum (Rottb.) Toyok.: 1672–1975 m a.s.l. Tu.
Gentiana algida Pall. [*Dasystephana algida* (Pall.) Borkh.]: 1314–2312 m a.s.l. Tu, SS.
Gentiana aquatica L. [*Ciminalis aquatica* (L.) Zuev]: 458 m a.s.l. Te.
Gentiana barbata Froel. [*Gentianopsis barbata* (Froel.) Ma]. 461–1943 m a.s.l. Te, SN, SS, TS.
Gentiana grandiflora Laxm. [*Ciminalis grandiflora* (Laxm.) Zuev]: 1095–2203 m a.s.l. SN, Tu, SS.
Gentiana macrophylla Pall. [*Dasystephana macrophylla* (Pall.) Zuev]: 912–1205 m a.s.l. TS, Fs.
Gentiana squarrosa Ledeb. [*Ciminalis squarrosa* (Ledeb.) Zuev]: 900–1150 m a.s.l. Fs.
Gentianella acuta (Michx.) Hiitonen [*Gentianella amarella* subsp. *acuta* (Michx.) J.M. Gillett, *Gentianella plebeia* (Cham.) Czerep.]: 460–1218 m a.s.l. Te, TN, TS.
Halenia corniculata (L.) Cornaz: 457–1952 m a.s.l. Te, SN, SS, TS.
Lomatogonium rotatum (L.) Fries ex Fern.: 1023 m a.s.l. TS.
** *Swertia baicalensis* Popov ex Pissjauk.: 535–1931 m a.s.l. EnBS. TN, SN, Tu, SS.

Apocynaceae

Vincetoxicum sibiricum (L.) Decne.: 876–1068 m a.s.l. Fs.

Boraginaceae

Amblynotus rupestris (Pall. ex Georgi) Popov ex Serg.: 844–992 m a.s.l. Fs.
\+ *Brunnera sibirica* Steven: 470–474 m a.s.l. Te. Alien.
Echium vulgare L.: 460 m a.s.l. Te. Alien.
Eritrichium sajanense (Malyschev) Sipliv.: 1736–1950 m a.s.l. EnSS. Tu, SS.
\+ *Hackelia deflexa* (Wahlenb.) Opiz: 853–1217 m a.s.l. Fs.
Lappula anisacantha (Turcz. ex Bunge) Gürke: 460–469 m a.s.l. Te.
Lappula consanguinea (Fisch. et C.A. Mey.) Gürke [*Lappula squarrosa* (Retz.) Dumort.]: 508 m a.s.l. Te.
Lappula squarrosa (Retz.) Dumort.: 472–474 m a.s.l. Te.
Myosotis cespitosa Schultz.: 457–482 m a.s.l. Te.
Myosotis imitata Serg.: 457–483 m a.s.l. Te.
Myosotis krylovii Serg.: 508–1615 m a.s.l. Te, TN.
Myosotis scorpioides L.: 457–1606 m a.s.l. Te, TN, SN, SS, TS.
Nonea pulla (L.) DC.: 465–470 m a.s.l. Te. Apophyte.
Pulmonaria mollis Wulfen ex Hornem.: 459–1334 m a.s.l. Te, TN.
\+ *Symphytum caucasicum* M.Bieb.: 461–467 m a.s.l. Te. Alien.

Convolvulaceae

\+ *Calystegia inflata* Sweet [*Calystegia sepium* subsp. *americana* (Sims) Brummitt]: 460–474 m a.s.l. Te. Alien.
Convolvulus arvensis L.: 458–1339 m a.s.l. Te, TN.
\+ *Cuscuta europaea* L.: 825–1200 m a.s.l. SN, TS.

Plantaginaceae

Callitriche palustris L.: 456–1492 m a.s.l. Te, TN, TS.
\+ *Chaenorhinum minus* (L.) Lange: 457–530 m a.s.l. Te. Alien.
Hippuris vulgaris L.: 457–1465 m a.s.l. Te, TS.
Limosella aquatica L.: 465–470 m a.s.l. Te.
Linaria acutiloba Fisch. ex Rchb.: 835–1148 m a.s.l. Fs.
Linaria vulgaris Mill.: 457–711 m a.s.l. Te, TN.
\+ *Plantago depressa* Willd.: 461–1098 m a.s.l. Te, Fs.
Plantago major L.: 457–1231 m a.s.l. Te, TN.
\+ *Plantago major* subsp. *intermedia* (Gilib.) Lange [*Plantago uliginosa* F.W. Schmidt]: 467–517 m a.s.l. Te.
Plantago media L.: 457–525 m a.s.l. Te.
\+ *Plantago urvillei* Opiz: 494 m a.s.l. Te.
Veronica alpina L.: 663–1838 m a.s.l. SN, Tu, SS.
\+ *Veronica anagallis-aquatica* L.: 457 m a.s.l. Te.
Veronica chamaedrys L.: 457–576 m a.s.l. Te, TN.
Veronica densiflora Ledeb.: 685–1852 m a.s.l. SN, Tu, SS.
Veronica incana L.: 837–1150 m a.s.l. Fs.
Veronica linariifolia Pall. ex Link: 942–1202 m a.s.l. Fs.
Veronica longifolia L.: 457–1274 m a.s.l. Te, TN, TS.
Veronica officinalis L.: 461–633 m a.s.l. Te, TN. Alien.
\+ *Veronica scutellata* L.: 458–525 m a.s.l. Te.
Veronica serpyllifolia L.: 457–752 m a.s.l. Te, TN.
Veronicastrum sibiricum (L.) Pennell: 470 m a.s.l. Te.

Lentibulariaceae

Pinguicula villosa L.: 1607–1759 m a.s.l. Tu, SS.
Utricularia intermedia Hayne: 457–743 m a.s.l. Te, TN.
\+ *Utricularia × japonica* Makino: 457–460 m a.s.l. Te.
Utricularia minor L.: 457–1053 m a.s.l. Te, TS.
\+ *Utricularia macrorhiza* Leconte: 457–558 m a.s.l. Te.

Lamiaceae

Amethystea caerulea L.: 465–989 m a.s.l. Te (Apophyte), Fs.

Dracocephalum grandiflorum L.: 1256–1968 m a.s.l. SN, Tu, SS.
Dracocephalum nutans L.: 457–1562 m a.s.l. Te, TN, SN, SS, TS.
Dracocephalum olchonense Peschkova: 465 m a.s.l. EnBS. Te. Apophyte.
Dracocephalum ruyschiana L.: 855–1235 m a.s.l. Fs.
Galeopsis bifida Boenn.: 457–1039 m a.s.l. Te, TN, TS.
+ *Galeopsis ladanum* L.: 460–463 m a.s.l. Te.
+ *Galeopsis speciosa* Mill.: 465 m a.s.l. Te. Alien.
Glechoma hederacea L.: 457–529 m a.s.l. Te.
Lamium album subsp. *orientale* Kamelin & A.L. Budantsev [*Lamium album* subsp. *barbatum* (Siebold & Zucc.) Mennema]: 457–1762 m a.s.l. Te, TN, SN, SS, TS, Fs.
+ *Leonurus deminutus* V.I. Krecz.: 511–1142 m a.s.l. Te (Apophyte), Fs.
Lycopus europaeus L.: 534–546 m a.s.l. TN.
Mentha arvensis L.: 457–482 m a.s.l. Te.
Origanum vulgare L.: 460–1373 m a.s.l. Te, TN, SN.
Phlomoides tuberosa (L.) Moench: 804–1217 m a.s.l. Fs.
Prunella vulgaris L.: 457–729 m a.s.l. Te, TN.
Schizonepeta multifida (L.) Briq. [*Nepeta multifida* L.]: 481–1205 m a.s.l. Te (Apophyte), Fs.
Scutellaria galericulata L.: 460–1047 m a.s.l. Te, TN, TS.
Scutellaria scordiifolia Fisch. ex Schrank: 459–1157 m a.s.l. Te, Fs.
Stachys aspera Michx.: 468–743 m a.s.l. Te, TN.
Thymus baicalensis Serg.: 845–1150 m a.s.l. EnBS. Fs.
+ *Thymus chamarensis* Vasjukov: 1553 m a.s.l. EnBS. SS.
+ *Thymus mongolicus* (Ronniger) Ronniger: 1142 m a.s.l. Fs.

Orobanchaceae

Boschniakia rossica (Cham. & Schltdl.) B. Fedtsch.: 460–1120 m a.s.l. Te, TN, TS.
Euphrasia hirtella Jord. ex Reut.: 460 m a.s.l. Te.
Euphrasia stricta J.P. Wolff ex J.F. Lehm.: 457–1379 m a.s.l. Te, TN.
Euphrasia syreitschikovii Govor.: 1165–2089 m a.s.l. EnSS. SN, Tu.
Odontites vulgaris Moench: 469–484 m a.s.l. Te.
Orobanche coerulescens Stephan ex Willd.: 882–1056 m a.s.l. Fs.
+ *Orobanche korshinskyi* Novopokr.: 997 m a.s.l. EnBS. Fs.
Pedicularis amoena Adams ex Steven: 1618–2203 m a.s.l. Tu.
Pedicularis compacta Stephan: 1245–1906 m a.s.l. SN, Tu, SS.
Pedicularis fissa Turcz.: 1862–2210 m a.s.l. Tu.
Pedicularis incarnata L.: 490–1907 m a.s.l. TN, SN, SS, TS.
Pedicularis karoi Freyn: 457–509 m a.s.l. Te.
Pedicularis labradorica Wirsing: 840–1862 m a.s.l. TN, SN, Tu, SS, TS.
Pedicularis oederi Vahl: 1342–2258 m a.s.l. Tu.
Pedicularis resupinata L.: 457–1335 m a.s.l. Te, TS.
Pedicularis rubens Stephan ex Willd.: 842–1827 m a.s.l. SS, TS, Fs.
Pedicularis tristis L.: 1799 m a.s.l. Tu.
Pedicularis verticillata L.: 457–1920 m a.s.l. Te, TN, SN, Tu, SS, TS.
Rhinanthus serotinus (Schönh.) Oborny [*Rhinanthus major* L.]: 457–544 m a.s.l. Te.

Campanulaceae

Campanula cervicaria L.: 484–1013 m a.s.l. Te, TS.
Campanula dasyantha M.Bieb.: 600–2312 m a.s.l. Te, SN, Tu, SS.
Campanula glomerata L.: 460–1615 m a.s.l. Te, TN, SN, SS, TS, Fs.
Campanula patula L.: 458–534 m a.s.l. Te. Alien.
+ *Campanula rapunculoides* L.: 467–530 m a.s.l. Te. Alien.
Campanula rotundifolia L.: 503–1920 m a.s.l. TN, SN, Tu, SS, TS.
Campanula turczaninovii Fed. [*Campanula stevenii* subsp. *turczaninovii* (Fed.) Victorov]: 835–2203 m a.s.l. TN, SN, Tu, SS, TS.

Menyanthaceae

Menyanthes trifoliata L.: 457–1212 m a.s.l. Te, TN, TS.

Asteraceae

Achillea alpina L. [*Ptarmica alpina* (L.) DC.]: 463–1103 m a.s.l. Te, TS.
Achillea asiatica Serg.: 457–1124 m a.s.l. Te, TS, Fs.
Achillea salicifolia Besser [*Ptarmica salicifolia* (Besser) Serge]: 465–520 m a.s.l. Te.
Achillea impatiens L. [*Ptarmica impatiens* DC.]: 458–742 m a.s.l. Te, TN.
Achillea millefolium L.: 457–532 m a.s.l. Te, TN.
+ *Achillea ptarmica* L. [*Ptarmica vulgaris* Hill]: 458–465 m a.s.l. Te. Alien.
+ *Ambrosia artemisiifolia* L.: 461 m a.s.l. Te. Alien.
Antennaria dioica (L.) Gaertn.: 457–1920 m a.s.l. Te, TN, SN, Tu, SS, TS.
Arctium tomentosum Mill.: 458–541 m a.s.l. Te.
Artemisia absinthium L.: 460–522 m a.s.l. Te.
Artemisia commutata Besser: 467–1235 m a.s.l. Te (Apophyte), Fs.
+ *Artemisia desertorum* Spreng.: 457–1126 m a.s.l. Te (Apophyte), Fs.
Artemisia dracunculus L.: 458–1148 m a.s.l. Te, Fs.
Artemisia frigida Willd.: 845–1150 m a.s.l. Fs.
Artemisia furcata M.Bieb.: 1618–2312 m a.s.l. Tu.
Artemisia gmelinii Weber ex Stechm.: 840–1342 m a.s.l. Fs.
Artemisia integrifolia L.: 457–1202 m a.s.l. Te, TS.
Artemisia laciniata Willd.: 986 m a.s.l. Fs.
Artemisia lagocephala (Fisch. ex Besser) DC.: 1087–1742 m a.s.l. SS, TS.
+ *Artemisia leucophylla* (Turcz. ex Besser) Pamp.: 1093–1097 m a.s.l. TN.
Artemisia macrantha Ledeb.: 986 m a.s.l. Fs.
Artemisia mongolica (Besser) Fisch. ex Nakai: 457–1178 m a.s.l. Te, TN, SN, Fs.
Artemisia phaeolepis Krasch.: 1058 m a.s.l. Fs.
Artemisia scoparia Waldst. & Kit.: 460–1000 m a.s.l. Te (Apophyte), Fs.
Artemisia sericea Weber ex Stechm.: 804–1235 m a.s.l. TN, Fs.
Artemisia sieversiana Willd.: 460–519 m a.s.l. Te.
Artemisia tanacetifolia L.: 465–1408 m a.s.l. Te, TS, Fs.
Artemisia vulgaris L.: 457–499 m a.s.l. Te. Alien.
Aster alpinus L.: 804–1943 m a.s.l. SN, Tu, SS, Fs.
+ *Aster tataricus* L.f.: 838–844 m a.s.l. TS.
Bidens radiata Thuill.: 457–525 m a.s.l. Te.
+ *Bidens tripartita* L.: 460 m a.s.l. Te. Alien.
Carduus crispus L.: 467 m a.s.l. Te.
+ *Carduus nutans* subsp. *leiophyllus* (Petrovič) Arènes [*Carduus thoermeri* Weinm.]: 473–483 m a.s.l. Te. Alien.
+ *Carthamus tinctorius* L.: 460 m a.s.l. Te. Alien.
Centaurea jacea L.: 461–530 m a.s.l. Te. Alien.
+ *Centaurea montana* L.: 460 m a.s.l. Te. Alien.
+ *Centaurea phrygia* subsp. *pseudophrygia* (C.A. Mey.) Gugler: 466–473 m a.s.l. Te. Alien.
Centaurea scabiosa L.: 457–490 m a.s.l. Te. Alien.
Chrysanthemum zawadzkii Herbich. (incl. *Chrysanthemum zawadzkii* subsp. *peleiolepis* (Trautv.) Zuev) 463–1920 m a.s.l. Te, TN, SN, SS, TS, Fs.
Cicerbita azurea (Ledeb.) Beauverd: 580–896 m a.s.l. TN.
Cichorium intybus L.: 462–477 m a.s.l. Te. Alien.
Cirsium helenioides (L.) Hill: 457–1488 m a.s.l. Te, TN, SN, SS, TS.
+ *Cirsium pendulum* Fisch. ex DC.: 519 m a.s.l. Te. Apophyte.
Cirsium serratuloides (L.) Hill: 768–1408 m a.s.l. TN, SS, TS, Fs.
Cirsium setosum (Willd.) Besser [*Cirsium arvense* var. *integrifolium* Wimm. & Grab.]: 457–820 m a.s.l. Te, TN (Apophyte).
+ *Cosmos bipinnatus* Cav.: 530 m a.s.l. Te. Alien.
Cota tinctoria (L.) J.Gay [*Anthemis tinctoria* L.]: 465–483 m a.s.l. Te.
Crepis chrysantha (Ledeb.) Turcz. s.l. (incl. *Crepis polytricha* (Ledeb.) Turcz.): 1586–2203 m a.s.l. Tu, SS.
Crepis lyrata (L.) Froel.: 460–1852 m a.s.l. Te, TN, SN, SS, TS.
Crepis sibirica L.: 461–1615 m a.s.l. Te, TN, SN, SS, TS.
Crepis tectorum L.: 457–1338 m a.s.l. Te, TS.
Doronicum altaicum Pall.: 525–1931 m a.s.l. Te, TN, SN, Tu, SS.
+ *Echinops davuricus* Fisch. ex Hornem. [*Echinops latifolius* Tausch]: 469 m a.s.l. Te. Apophyte.
Erigeron acris L.: 457–1160 m a.s.l. Te, TN, TS, Fs.
+ *Erigeron canadensis* L. [*Conyza canadensis* (L.) Cronquist]. 457–820 m a.s.l. Te, TN. Alien.
Erigeron eriocalyx (Ledeb.) Vierh. [*Erigeron uniflorus* subsp. *eriocalyx* (Ledeb.) A. Löve & D. Löve]: 1275–1906 m a.s.l. SN, Tu, SS.
Erigeron flaccidus (Bunge) Botsch. [*Aster flaccidus* Bunge]: 1662–2007 m a.s.l. SN, Tu, SS.
Erigeron politus Fr. [*Erigeron acris* subsp. *politus* (Fr.) H. Lindb.]: 458–1397 m a.s.l. Te, TN, SN, SS, TS.
Galatella dahurica DC.: 855–1064 m a.s.l. Fs.
+ *Galinsoga parviflora* Cav.: 470 m a.s.l. Te. Alien.
Gnaphalium norvegicum Gunnerus: 475–1656 m a.s.l. Te, TN, SN, SS, TS.
Gnaphalium supinum L.: 1522–1524 m a.s.l. Tu.
Gnaphalium sylvaticum L.: 460–1467 m a.s.l. Te, TN, SN.
Gnaphalium uliginosum L.: 465–521 m a.s.l. Te.
+ *Helianthus annuus* L.: 460–530 m a.s.l. Te. Alien.
+ *Helianthus tuberosus* L. 478–490 m a.s.l. Te. Alien.
Heteropappus biennis (Ledeb.) Tamamsch. ex Grubov. [*Aster biennis* Ledeb.]: 478–1150 m a.s.l. Fs.
Hieracium bichloricolor (Ganesch. & Zahn) Üksip ex Sennikov: 515–1054 m a.s.l. Te, TS.
+ *Hieracium chamar-dabanense* Tupitz.: 1679 m a.s.l. EnSS. SS.
Hieracium ganeschinii Zahn [*Hieracium korshinskyi* Zahn]: 457–1735 m a.s.l. Te, TN, SN, SS, TS.
Hieracium krylovii Nevski ex Schljakov: 501–544 m a.s.l. Te.
+ *Hieracium kusnetzkiense* Schischk. & Sergievsk.: 463–475 m a.s.l. Te.
Hieracium schischkinii Üksip: 742 m a.s.l. TN.
Hieracium lucens Norrl. [*Hieracium pseudofariniramum* Tupitz.]. 1629 m a.s.l. SS.

Hieracium tunguskanum Ganesch. & Zahn: 460–1530 m a.s.l. Te, TN, SN, TS.
Hieracium umbellatum L. (incl. *Hieracium porphyrii* Schischk. & Serg.): 457–1636 m a.s.l. Te, TN, TS, Fs.
+ *Hieracium veresczaginii* Schischk. & Serg.: 679 m a.s.l. TN.
+ *Ixeris chinensis* subsp. *versicolor* (Fisch. ex Link) Kitam. [*Ixeridium gramineum* (Fisch.) Tzvelev]: 965–1553 m a.s.l. SS, Fs.
Lactuca sibirica (L.) Benth. ex Maxim. [*Mulgedium sibiricum* (L.) Less.]: 457–983 m a.s.l. Te, TN, SN, TS.
+ *Lapsana communis* L.: 476 m a.s.l. Te. Alien.
Leontopodium conglobatum (Turcz.) Hand.-Mazz. [*Leontopodium ochroleucum* subsp. *conglobatum* (Turcz.) Khanm.]: 470 m a.s.l. Te. Apophyte.
Leucanthemum ircutianum Turcz. ex DC.: 457–576 m a.s.l. Te, TN.
Ligularia sibirica (L.) Cass.: 517–2029 m a.s.l. Te, TN, Tu, SS, TS.
Matricaria discoidea DC. [*Lepidotheca suaveolens* (Pursh) Nutt.]: 457–535 m a.s.l. Te. Alien.
Parasenecio hastatus (L.) H. Koyama [*Cacalia hastata* L.]: 457–1339 m a.s.l. Te, TN, SN, TS.
Pentanema britannicum (L.) D. Gut. Larr., Santos-Vicente, Anderb., E. Rico & M.M. Mart. Ort. [*Inula britannica* L.]: 473–1185 m a.s.l. Te, TN. Apophyte.
Pentanema salicinum (L.) D. Gut. Larr., Santos-Vicente, Anderb., E. Rico & M.M. Mart. Ort. [*Inula salicina* L.]: 465–475 m a.s.l. Te.
Petasites frigidus (L.) Fr.: 512 m a.s.l. Te.
Petasites rubellus (J.F. Gmel.) J. Toman: 457–1688 m a.s.l. Te, TN, SN, SS, TS.
Picris davurica Fisch. ex Hornem.: 461–508 m a.s.l. Te. Apophyte.
+ *Pilosella caespitosa* (Dumort.) P.D. Sell & C. West: 516 m a.s.l. Te. Alien.
Pilosella vaillantii (Tausch) Soják [*Pilosella cymosa* subsp. *vaillantii* (Tausch) S. Bräut. & Greuter]: 520 m a.s.l. Te. Alien.
+ *Pilosella dublitzkii* (B. Fedtsch. et Nevski) Tupitz.: 480 m a.s.l. Te. Apophyte.
Pilosella × suecica (Fr.) F. Schultz & Sch. Bip. [*Pilosella czerepninii* Tupitz., *Pilosella floribunda* (Wimm. & Grab.) Fr.]: 463–520 m a.s.l. Te. Alien.
+ *Pilosella glomerata* (Froel.) Fr.: 458–465 m a.s.l. Te. Alien.
Pilosella × permica (Zahn) Sennikov [*Pilosella × tephrochlorella* (Ganesch. & Zahn) Tupitz.]: 473 m a.s.l. Te. Alien.
Pyrethrum pulchellum Turcz. ex DC. [*Tanacetum pulchellum* (Turcz. ex DC.) Sch. Bip.]: 1536–2203 m a.s.l. EnSS. Tu, SS.
+ *Rudbeckia laciniata* var. *hortensia* L.H. Bailey: 465 m a.s.l. Te. Alien.
+ *Saussurea amara* (L.) DC.: 474 m a.s.l. Te. Apophyte.
Saussurea baicalensis (Adams) B.L.Rob.: 1790–1943 m a.s.l. EnSS. Tu, SS.
+ *Saussurea amurensis* Turcz. ex DC. [*Saussurea denticulata* Ledeb.]: 1790–1838 m a.s.l. SS.
Saussurea latifolia Ledeb.: 809–1955 m a.s.l. SN, Tu, SS.
Saussurea parviflora (Poir.) DC.: 463–1520 m a.s.l. Te, TN, TS.
Saussurea pseudosquarrosa Popov & Lipsch.: 1914–1920 m a.s.l. Tu.
Saussurea schanginiana (Wydler) Fisch. ex Serg.: 1852–2203 m a.s.l. Tu.
Saussurea subacaulis (Ledeb.) Serg.: 1586–2248 m a.s.l. Tu.
Scorzonera radiata Fisch. ex Ledeb.: 804–1796 m a.s.l. SS, TS.
Scorzoneroides autumnalis (L.) Moench. [*Leontodon autumnalis* L.]: 457–554 m a.s.l. Te. Alien.
Senecio dubitabilis C. Jeffrey & Y.L. Chen.: 458–482 m a.s.l. Te. Apophyte.
Senecio nemorensis L. [*Jacobaea nemorensis* (L.) Moench]: 461–1615 m a.s.l. Te, TN, SN, SS, TS.
Senecio viscosus L.: 458 m a.s.l. Te. Alien.
Senecio vulgaris L.: 457–519 m a.s.l. Te. Apophyte.
+ *Solidago gigantea* Ait. 465 m a.s.l. Te. Alien.
Solidago virgaurea subsp. *dahurica* (Kitag.) Kitag. [*Solidago dahurica* (Kitag.) Kitag. ex Juz.]: 460–1955 m a.s.l. Te, TN, SN, SS, TS.
Sonchus arvensis L. (incl. *Sonchus arvensis* subsp. *uliginosus* (M.Bieb.) Nyman): 458–873 m a.s.l. Te, TN. Apophyte.
Sonchus asper (L.) Hill.: 457–470 m a.s.l. Te. Apophyte.
** *Stemmacantha carthamoides* (Willd.) Dittrich [*Leuzea carthamoides* (Willd.) DC., *Rhaponticum carthamoides* (Willd.) Iljin] (incl. *Stemmacantha chamarensis* (Peschkova) Czerep.): 460–1920 m a.s.l. EnSS. Te, TN, SN, SS.
Stemmacantha uniflora (L.) Dittrich [*Leuzea uniflora* (L.) Holub]: 856–1205 m a.s.l. Fs.
+ *Symphyotrichum novi-belgii* (L.) G.L. Nesom: 474–490 m a.s.l. Te. Alien.
Takhtajaniantha austriaca (Willd.) Zaika, Sukhor. & N.Kilian. [*Scorzonera austriaca* Willd.]: 1665 m a.s.l. SS.
Tanacetum vulgare L. (incl. *Tanacetum boreale* Fisch. ex DC.): 457–1906 m a.s.l. Te, TN, SN, SS, TS, Fs.
Taraxacum altaicum Schischk.: 1819–1849 m a.s.l. Tu.
+ *Taraxacum besarabicum* (Hornem.) Hand.-Mazz.: 463–845 m a.s.l. Te (Apophyte), Fs.
Taraxacum chamarense Peschkova [*Taraxacum ceratophorum* (Ledeb.) DC.]: 470–2003 m a.s.l. EnBS. Te, SN, SS.
Taraxacum mongolicum Hand.-Mazz.: 1090 m a.s.l. SN.
Taraxacum officinale Wigg.: 457–1110 m a.s.l. Te, SN, Fs.
+ *Taraxacum printzii* Dahlst. ex Printz.: 721–855 m a.s.l. TN.
Tephroseris integrifolia (L.) Holub: 746–1334 m a.s.l. TN, SN, TS, Fs.
Tephroseris palustris (L.) Schrenk ex Rchb.: 460 m a.s.l. Te.
Tephroseris turczaninovii (DC.) Holub: 874–2210 m a.s.l. SN, Tu, SS.
Tragopogon orientalis L.: 458–470 m a.s.l. Te. Apophyte.
Tragopogon sibiricus Ganesh.: 470 m a.s.l. Te.
** *Tridactylina kirilowii* (Turcz.) Sch. Bip.: 465–1341 m a.s.l. EnBS. Te, SS, TS.
Tripleurospermum inodorum (L.) Sch. Bip.: 457–532 m a.s.l. Te.
Trommsdorffia maculata (L.) Bernh. [*Hypochaeris maculata* L.]: 461 m a.s.l. Te. Alien.
Tussilago farfara L.: 457–860 m a.s.l. Te, TN. Alien.
Youngia tenuifolia (Willd.) Babc. & Stebbins. [*Crepidiastrum tenuifolium* (Willd.) Sennikov]: 845–1235 m a.s.l. Fs.

Viburnaceae (= Adoxaceae)

Adoxa moschatellina L.: 457–1445 m a.s.l. Te, TN, TS.
Sambucus sibirica Nakai: 457–1325 m a.s.l. Te, TN, SN, SS, TS.
+ *Viburnum opulus* L.: 492 m a.s.l. Te. Alien.

Caprifoliaceae

Knautia arvensis (L.) Coult.: 470 m a.s.l. Te. Apophyte.
Linnaea borealis L.: 457–1838 m a.s.l. Te, TN, SN, Tu, SS, TS.
Lonicera caerulea subsp. *altaica* (Pall.) Gladkova [*Lonicera altaica* Pall.]: 467–1742 m a.s.l. Te, SS, TS.
Lonicera caerulea subsp. *pallasii* (Ledeb.) Browicz [*Lonicera pallasii* Ledeb.]: 457–1563 m a.s.l. Te, TN, SN.
Patrinia rupestris (Pall.) Dufr.: 840–1235 m a.s.l. Fs.
Patrinia sibirica (L.) Juss.: 1405–2007 m a.s.l. SN, Tu, SS.
+ *Valeriana altaica* Sumnev.: 1576–1790 m a.s.l. EnSS. SS.
+ *Valeriana alternifolia* Ledeb.: 1098–1380 m a.s.l. SN.
Valeriana transjenisensis Kreyer: 517–1872 m a.s.l. TN, SS, TS, Fs.

Apiaceae

Aegopodium alpestre Ledeb.: 457–1860 m a.s.l. Te, TN, SN, SS, TS.
Angelica decurrens (Ledeb.) B. Fedtsch. [*Angelica archangelica* subsp. *decurrens* (Ledeb.) Kuvaev]: 457–1720 m a.s.l. Te, TN, SN, SS, TS.
Angelica sylvestris L.: 457–1420 m a.s.l. Te, TN.
Anthriscus sylvestris (L.) Hoffm.: 457–1606 m a.s.l. Te, TN, SN, SS, TS.
Bupleurum aureum Fisch. ex Hoffm.: 460–1920 m a.s.l. Te, TN, SN, SS, TS.
Bupleurum multinerve DC.: 470 m a.s.l. Te. Apophyte.
Bupleurum scorzonerifolium Willd.: 837–1202 m a.s.l. Fs.
Bupleurum triradiatum Adams ex Hoffm.: 1243–1931 m a.s.l. SN, Tu, SS.
Carum carvi L.: 457–530 m a.s.l. Te.
Cicuta virosa L.: 457–548 m a.s.l. Te, TN.
Conioselinum longifolium Turcz.: 507–1688 m a.s.l. TN, TS.
Conioselinum tataricum Hoffm.: 457–1808 m a.s.l. Te, TN, SN, SS, TS.
Heracleum dissectum Ledeb.: 457–1592 m a.s.l. Te, TN, SN, SS, TS, Fs.
Heracleum sibiricum L. [*Heracleum sphondylium* subsp. *sibiricum* (L.) Simonk.]: 465 m a.s.l. Te. Alien.
Kitagawia baicalensis (I. Redowsky ex Willd.) Pimenov: 839–1235 m a.s.l. Fs.
Ostericum tenuifolium (Pall. ex Spreng.) Y.C. Chu [*Angelica tenuifolia* (Pall. ex Schult.) Pimenov, *Peucedanum salinum* Pall. ex Spreng.]: 460–1342 m a.s.l. Te, TN, TS.
Pachypleurum alpinum Ledeb. [*Neogaya simplex* (L.) Meisn.]: 1920–2044 m a.s.l. Tu.
Pastinaca sativa L.: 459–498 m a.s.l. Te. Alien.
+ *Peucedanum vaginatum* Ledeb.: 838–1148 m a.s.l. Fs.
+ *Phlojodicarpus sibiricus* (Fisch.) Koso-Pol.: 458 m a.s.l. Te.
Phlojodicarpus villosus (Turcz. ex Fisch. & C.A. Mey.) Ledeb.: 479–2007 m a.s.l. TN, SN, Tu, SS.
Pimpinella saxifraga L.: 457–497 m a.s.l. Te. Apophyte.
Pimpinella thellungiana H.Wolff.: 460–470 m a.s.l. Te. Apophyte.
Pleurospermum uralense Hoffm.: 457–1920 m a.s.l. Te, TN, SN, SS, TS, Fs.
Schulzia crinita (Pall.) Spreng.: 1352–2258 m a.s.l. SN, Tu, SS.
+ *Seseli condensatum* (L.) Rchb.f.: 825–1100 m a.s.l. TS.
Sium suave Walter: 457–743 m a.s.l. Te, TN.
Sphallerocarpus gracilis (Besser ex Trevir.) Koso-Pol.: 458–472 m a.s.l. Te.

APPENDIX II

Excluded species and reasons for exclusion.

Acer negundo L.	This species is cultivated in the Tankhoy village, but without escape from culture.
Achnatherum splendens (Trin.) Nevski	Earlier identifications were incorrect. Herbarium specimens belong to *Achnatherum sibiricum* (L.) Keng ex Tzvelev
Aconitum glandulosum Rapaics [*Aconitum stubendorffii* Worosch., *Aconitum smirnovii* auct., non Steinb.]	No herbarium samples/photos from the study area
Acorus calamus L.	No herbarium samples/photos from the study area
Adenophora verticillata Fischer	No herbarium samples/photos from the study area
Allium amphibolum Ledeb.	Earlier identifications were incorrect. Herbarium specimens belong to *Allium malyschevii*.
Allium flavidum Ledeb.	Earlier identifications were incorrect. Herbarium specimens belong to *Allium leucocephalum*.
Allium senescens L.	No herbarium samples/photos from the study area
Alopecurus glaucus Less. [*Alopecurus alpinus* subsp. *glaucus* (Less.) Hulten]	No herbarium samples/photos from the study area
Androsace gmelinii (Gaertn.) Roem. et Schult.	No herbarium samples/photos from the study area
Anemonastrum crinitum (Juz.) Holub	Traditionally, most of the *Anemonastrum* specimen from the study area were identified as *Anemonastrum sibiricum*. New taxonomic revision suggests synonymizing both *Anemonastrum sibiricum* and *Anemonastrum crinitum* as *Anemonastrum narcissiflorum* subsp. *crinitum* (Juz.) Raus, already included in the check-list.
Aquilegia borodinii Schischk.	Earlier identification was incorrect. Herbarium specimen belongs to *Aquilegia sibirica*, along with the specimen mentioned as "a sample with characteristics intermediate between *Aquilegia sibirica* and *Aquilegia borodinii*».
Arabis sagittata (Bertol.) DC.	Actualizing species name: *Arabis borealis* Andrz. [*Arabis sagittata* var. *borealis* (Andrz. ex Ledeb.) A.L.Ebel]
Asplenium altajense (Kom.) Grub.	Earlier identifications were incorrect. Herbarium specimens belong to the only species *Asplenium sajanense*.
Astragalus frigidus subsp. *secundus* (DC.) Vorosch.	This subspecies is not currently distinguished from *Astragalus frigidus*, already included in the check-list.
Astragalus schelichovii Turcz.	Earlier identification was incorrect. Herbarium specimen belongs to *Astragalus uliginosus*, already included in the check-list.
Betula divaricata Ledeb.	No herbarium samples/photos from the study area
Betula pendula Roth. s.str.	Local plants belong to *Betula platyphylla* [*Betula pendula* subsp. *mandshurica* (Regel) Ashburner & McAll.], not to *Betula pendula* s.str.
Bidens cernua L.	No herbarium samples/photos from the study area
Bistorta abbreviata Kom.	This name was used for alpine species of *Bistorta*. The correct name should be *Bistorta elliptica*.
Buglossoides arvensis (L.) I.M.Johnst.	No herbarium samples/photos from the study area
Bupleurum bicaule Helm.	No herbarium samples/photos from the study area
Calamagrostis × *andrejewii* Litv.	Earlier identification was incorrect. Herbarium specimen belongs to *Calamagrostis arundinacea*, which was also found in the study area and included in the check-list.
Calamagrostis krylovii Reverd.	This name was erroneously used for *Calamagrostis pavlovii*, which was also found in the study area and included in the check-list.
Calamagrostis tenuis V.Vassil.	Earlier identification was incorrect. Herbarium specimen belongs to *Calamagrostis lapponica*, which was also found in the study area and included in the check-list.
Camelina alyssum (Mill.) Thell.	No herbarium samples/photos from the study area
Camptosorus sibiricus Rupr.	No herbarium samples/photos from the study area. Earlier mentions were based on the materials from the Tayozhnyi village which is outside of the study area.
Caragana arborescens Lam.	No herbarium samples/photos from the study area. This species is cultivated in the Tankhoy village, but wihtous escape from culture, and the annotation as «along river valleys, in forests, along forest edges and in the rocky areas of the southern macroslope» has no connection with the study area.
Caragana jubata (Pallas) Poiret	No herbarium samples/photos from the study area. The nearest known place is situated more than 150 km to the west of the study area
Caragana spinosa (L.) Vahl. ex Hornem.	No herbarium samples/photos from the study area
Carex capitata L.	No herbarium samples/photos from the study area
Carex coriophora Fisch. & C.A. Mey. ex Kunth	No herbarium samples/photos from the study area
Carex dioica L.	No herbarium samples/photos from the study area
Carex praecox Schreb.	No herbarium samples/photos from the study area
Carex sabynensis Less. ex Kunth.	Earlier identifications were incorrect. Herbarium specimens belong to *Carex conspissata*
Carex selengensis N.A.Ivanova	Earlier identification was incorrect. Herbarium specimen belongs to *Carex ledebouriana*, already included in the check-list.
Carum buriaticum Turcz.	Earlier identifications were incorrect. Herbarium specimens belong to *Peucedanum vaginatum*, which was also found in the study area and included in the check-list
Centaurea cyanus L.	No herbarium samples/photos from the study area
Cerastium flavescens Gartner [*Cerastium furcatum* Cham. et Schlecht.]	Reliable identification impossible due to the lack of modern revisions for the group. We suggest herbarium specimen belong to *Cerastium pusillum*, already included in the check-list.
Cerastium subciliatum Gartner	Reliable identification impossible due to the lack of modern revisions for the group. We suggest herbarium specimen belong to *Cerastium pusillum*, already included in the check-list.

Chrysanthemum mongolicum Ling	This taxon is now considered to be subspecies within *Chrysanthemum zawadzkii*, i.e. *Chrysanthemum zawadzkii* subsp. *peleiolepis* (Trautv.) Zuev, and *Chrysanthemum zawadzkii* is already included in the check-list.
Chrysosplenium baicalense Maxim.	No herbarium samples/photos from the study area
Cirsium esculentum (Siev.) C.A. Mey.	No herbarium samples/photos from the study area. Earlier mentions were based on the materials from the Tayozhnyi village
Convolvulus bicuspidatus Fischer ex Link.	No herbarium samples/photos from the study area
Cotoneaster uniflorus Bunge	No herbarium samples/photos from the study area
Crataegus dahurica Koehne ex Schneider	No herbarium samples/photos from the study area
Crepis crocea (Lam.) Babc.	Earlier identifications were incorrect. Herbarium specimens belong to *Crepis chrysantha*, which is already included in the check-list
Crepis polytricha Turcz.	This taxon is now included in *Crepis chrysantha*, which is already included in the check-list
Crepis praemorsa (L.) Tausch	No herbarium samples/photos from the study area
Cypripedium macranthon Sw.	No herbarium samples/photos from the study area
Dactylorhiza cruenta (O.F.Muell.) Soó	No herbarium samples/photos from the study area (while *Dactylorhiza incarnata* is present and included in the check-list).
Dactylorhiza hebridensis (Wilmott) Aver.	This name is considered to be a synonym of *Dactylorhiza fuchsii*, already included in the check-list.
Draba cana Rydb.	This name was erroneously used for *Draba lanceolata*
Dryopteris assimilis S.Walker	Actualizing species name: *Dryopteris expansa* (C. Presl) Fraser-Jenk. & Jermy
Echinops latifolius Tausch.	Actualizing species name: *Echinops davuricus* Fisch. ex Hornem.
Elscholtzia ciliata (Thunb.) Hylander	No herbarium samples/photos from the study area
Empetrum nigrum L. s.str.	The plants from the study area belong mostly to *Empetrum sibiricum* V.N. Vassil. [*Empetrum nigrum* subsp. *stenopetalum* (V.N. Vassil.) Nedol.]
Eriophorum scheuchzeri Hoppe	Earlier identification was incorrect. Herbarium specimen belongs to *Eriophorum russeolum*
Erodium stephanianum Willd.	No herbarium samples/photos from the study area
Euphorbia leoncroizatii (Harusava) Oudejans	This name was erroneously applied to *Euphorbia borealis*
Euphrasia pectinata Ten.	Reliable identification impossible due to the lack of modern revisions for the group. We suggest herbarium specimen belong to *Euphrasia stricta*, already included in the check-list.
Festuca komarovii Krivot.	Earlier identification was incorrect. Herbarium specimen belongs to *Festuca ovina*, already included in the check-list.
Fragaria virginiana Duchense	This name was erroneously applied to *Fragaria* × *ananassa* (Weston) Duchesne ex Rozier
Gagea pauciflora Turcz. ex Ledeb.	No herbarium samples/photos from the study area. This species is known from the Tayozhnyi village which is outside of the study area.
Galium vaillantii DC.	No herbarium samples/photos from the study area
Gastrolychnis apetala (L.) Tolm. & Kozhanch.	Reliable identification impossible due to the lack of modern revisions for the group. We suggest herbarium specimen belong to *Gastrolychnis brachypetala*, already included in the check-list.
Gastrolychnis uniflora (Ledeb.) Tzvelev	No herbarium samples/photos from the study area
Geranium davuricum DC.	Earlier identification was incorrect. Herbarium specimen belongs to *Geranium sibiricum*, already included in the check-list.
Geranium eriostemon Fischer	Actualizing species name: *Geranium platyanthum* Duthie
Geranium pratense L. s.str.	Instead of *Geranium pratense* s.str., *Geranium sergievskajae* grows in the study area
Hedysarum neglectum Ledeb.	Earlier identifications were incorrect. Herbarium specimens belong to *Hedysarum cisbaicalense*
Hieracium fariniramum (Ganesch. et Zahn) Juxip et Sennikov	Reliable identification impossible due to the lack of modern revisions for the group.
Hieracium porphyrii Schischk. & Sergievsk.	This taxon is now included in *Hieracium umbellatum*, which is already included in the check-list
Hylotelephium pallescens (Freyn) H. Ohba	Earlier identification was incorrect. Herbarium specimen belongs to *Hylotelephium triphyllum* [*Hylotelephium telephium*]
Hypericum ascyron L.	Earlier identification was incorrect. Herbarium specimen belongs to *Hypericum gebleri*, already included in the check-list.
Impatiens parviflora DC.	Earlier identification was incorrect. Herbarium specimen belongs to *Impatiens noli-tangere*, already included in the check-list.
Juncus triceps Rostk. [*Juncus castaneus* subsp. *triceps* (Rostk.) Novikov]	*Juncus castaneus* is already included in the check-list
Juncus minutulus Albert et Jahandiez	No herbarium samples/photos from the study area.
Juniperus pseudosabina Fischer et C.A. Mey.	No herbarium samples/photos from the study area. The nearest known place is situated more than 150 km to the west of the study area
Ledum palustre var. *decumbens* Aiton	*Ledum palustre* L. [*Rhododendron tomentosum* Harmaja] is already included in the check-list
Lemna minor L.	No herbarium samples/photos from the study area
Lemna trisulca L.	No herbarium samples/photos from the study area
Leonurus glaucescens Bunge	Earlier identifications were incorrect, all plants belong to *Leonurus deminutus*
Leonurus sibiricus L.	Earlier identifications were incorrect all plants belong to *Leonurus deminutus*
Leptopyrum fumaroides (L.) Rchb.	No herbarium samples/photos from the study area. This species is known from the Tayozhnyi village which is outside of the study area.
Lespedeza davurica (Laxm.) Schindl.	No herbarium samples/photos from the study area
Leucanthemum vulgare Lam.	Actualizing species name: *Leucanthemum ircutianum* Turcz. ex DC.
Linaria buriatica Turcz. ex Ledeb.	No herbarium samples/photos from the study area
Listera ovata (L.) R. Br.	No herbarium samples/photos from the study area

Lycopodiella inundata (L.) Holub	No herbarium samples/photos from the study area. The only specimen from Buryatia is from the Tunka valley and it dates back to the beginning of XX century; no one found this species in the Baikal region later.
Malva mohileviensis Downar	No herbarium samples/photos from the study area
Medicago sativa L.	No herbarium samples/photos from the study area
Melilotus suaveolens Ledeb.	No herbarium samples/photos from the study area
Myosotis stricta Link ex Roemer et Schultes [*Myosotis micrantha* Pall. ex Lehm.]	Earlier identification was incorrect. Herbarium specimen belongs to *Hackelia deflexa*, which was also found in the study area and included in the check-list
Myriophyllum sibiricum Kom.	Earlier identifications were incorrect, all plants belong to *Myriophyllum verticillatum*
Oenothera biennis L.	This name was erroneously applied to all the early specimen of *Oenothera*, which turned to be *Oenothera rubricaulis*.
Oxytropis baicalia (Pall.) Pers. [*Oxytropis ircutensis* M.Popov]	No herbarium samples/photos from the study area
Oxytropis pauciflora Bunge	No herbarium samples/photos from the study area. The native range of *Oxytropis pauciflora* is Mongolia and Tyva, and the habitats are deserted steppes, which are not present at the study area. We suggest this name was erroneously applied to *Gueldenstaedtia verna* [=*Astragalus pauciflorus*], which was also found at the study area and included in the check-list.
Oxytropis tompudae M.Popov	Earlier identifications were incorrect. Herbarium specimens belong to *Oxytropis turczaninovii*
Papaver croceum Ledeb.	No herbarium samples/photos from the study area
Paraquilegia microphylla (Royle) J.Drumm. et Hutch.	No herbarium samples/photos from the study area. The nearest known place is situated more than 150 km to the west of the study area
Paris quadrifolia L.	Herbarium specimens need revision. We use "*Paris obovata* Ledeb.", considering it as a hybrid between *Paris quadrifolia* and *Paris verticillata* because of the wide range of variability of plants in the study area, which does not allow to identify them correctly within the current approach to these species.
Pedicularis lapponica L.	No herbarium samples/photos from the study area
Petasites radiatus (J.F.Gmel.) J. Toman	Earlier identifications were incorrect. Herbarium specimens belong to *Petasites rubellus*, which is already included in the check-list
Pilosella czerepninii Tupitzina	Reliable identification impossible due to the lack of modern revisions for the group.
Pilosella sulphurea (Döll) F. W. Schultz & Sch. Bip.	Reliable identification impossible due to the lack of modern revisions for the group.
Poa tristis Trin.	This name was erroneously "mixed" with *Poa glauca*, already included in the check-list.
Populus laurifolia Ledeb.	Earlier identifications were incorrect. Herbarium specimens belong to *Populus suaveolens*
Potamogeton pusillus L.	Earlier identifications were incorrect. Herbarium specimens belong to *Potamogeton berchtoldii*.
Potentilla pensylvanica L.	No herbarium samples/photos from the study area
Primula nutans Georgi	No herbarium samples/photos from the study area
Psammophiliella muralis (L.) Ikonn.	Earlier identification was incorrect. Herbarium specimen belongs to *Spergularia rubra*.
Pteridium aquilinum (L.) Kuhn	Actualizing species name: *Pteridium pinetorum* C.N. Page & R.R. Mill [*Pteridium latiusculum* subsp. *pinetorum* (C.N.Page & R.R.Mill) Fraser-Jenk.]
Pulsatilla bungeana C.A. Mey.	This name was erroneously used for *Pulsatilla ambigua* already included in the check-list
Pulsatilla tenuiloba (Hayek) Juz.	No herbarium samples/photos from the study area. Local plants belong to *Pulsatilla turczaninovii*
Rhinanthus aestivalis (N.W. Zinger) Schischk. & Serg.	We do not include "minor races" such as *Rhinanthus aestivalis*, while *Rhinanthus serotinus* is already included in the check-list.
Rhodiola pinnatifida Boriss.	No herbarium samples/photos from the study area
Ribes palczewskii (Janch.) Pojark.	This name was applied to *Ribes spicatum*
Ribes pauciflorum Turcz. ex Pojark.	*Ribes pauciflorum* is considered as a subspecies within *Ribes nigrum*, i.e. as *Ribes nigrum* var. *kolymense* Trautv., and *Ribes nigrum* is already included in the check-list
Ribes triste Pallas	Earlier identification was incorrect. Herbarium specimen belongs to *Ribes spicatum*.
Rosa amblyotis C.A. Mey.	Earlier identifications were incorrect. Herbarium specimens belong to *Rosa acicularis*
Salix reticulata L.	Earlier identification was incorrect. Herbarium specimen belongs to *S. arctica*
Saxifraga hirculus L.	No herbarium samples/photos from the study area
Saxifraga punctata L.	Actualizing species name: *Micranthes nelsoniana* var. *aestivalis* (Fisch. & C.A. Mey.) Gornall & H. Ohba
Scabiosa comosa Fischer ex Roemer et Schult.	No herbarium samples/photos from the study area. Earlier mentions were based on the materials from the Tayozhnyi village
Selaginella rupestris (L.) Spring	Actualizing species name: *Selaginella sibirica* (Milde) Hieron.
Serratula centauroides L.	No herbarium samples/photos from the study area. Earlier mentions were based on the materials from the Tayozhnyi village which is outside from the study area.
Sisyrinchium septentrionale Bicknell	This name (along with *Sisyrinchium bermudianum* and *Sisyrinchium angustifolium*) was erroneously applied to local plants. They belong to *Sisyrinchium montanum*.
Sparganium emersum Rehmann	Earlier identifications were incorrect. Herbarium specimens belong to other *Sparganium* species (*Sparganium rothertii* Tzvelev and *Sparganium* × *kolymense* A.A. Bobrov, Volkova, Mochalova & Chemeris)
Spiraea aquilegifolia Pallas	No herbarium samples/photos from the study area. Earlier mentions were based on the materials from the Tayozhnyi village which is outside from the study area.
Stellera chamaejasme L.	No herbarium samples/photos from the study area
Stemmacantha chamarensis (Peschkova) Czerep. [*Rhaponticum chamarense* Peschkova]	This taxon is now included in *Stemmacantha carthamoides* [*Rhaponticum carthamoides*], which is already included in the check-list

Stipa capillata L.	No herbarium samples/photos from the study area
Stipa krylovii Roshev.	No herbarium samples/photos from the study area
Tanacetum vulgare subsp. *boreale* (Fisch. ex DC.) Á. Löve & D. Löve	*Tanacetum vulgare* is already included in the check-list
Taraxacum ceratophorum (Ledeb.) DC.	This name was used as a synonym for several Taraxacum which are now treated as separate species and are included in the check-list.
Tephroseris porphyrantha (Schischk.) Holub	No herbarium samples/photos from the study area
Tephroseris praticola (Schischkin et Serg.) Holub	Earlier identifications were incorrect. Herbarium specimens belong to *Tephroseris integrifolia*, which is already included in the check-list.
Thymus serpyllum L. s.str.	This name "*Thymus serpyllum*" was "widely" applied for the whole section *Serpyllum*. The most common species is *Thymus baicalensis*, which was found in the study area and included in the check-list.
Trollius ircuticus Sipl. [*Trollius kytmanovii* Reverd.]	These group of species is under revision. The major part of the plants from the study area, though, belong either to *Trollius sibiricus* or to the hybrid between *Trollius asiaticus* and *Trollius chinensis*.
Trollius sajanensis (Malyschev) Sipl.	These group of species is under revision. The major part of the plants from the study area, though, belong either to *Trollius sibiricus* or to the hybrid between *Trollius asiaticus* and *Trollius chinensis*.
Urtica urens L.	No herbarium samples/photos from the study area
Utricularia vulgaris L.	This name was erroneously applied for other species of *Utricularia*. Revision of herbarium specimens revealed that the most common species of this group is *Utricularia macrophylla*, while *Utricularia* × *japonica* is also present in the study area.
Vaccinium uliginosum subsp. *microphyllum* (Herder) Tolm.	*Vaccinium uliginosum* L. is already included in the check-list
Vaccinium vitis-idaea subsp. *minus* (G. Lodd.) Hultén	*Vaccinium vitis-idaea* L. is already included in the check-list
Veratrum dahuricum (Turcz.) Loes. fil.	No herbarium samples/photos from the study area
Vicia baicalensis (Turcz.) B. Fedtsch.	Actualizing species name: *Vicia ramuliflora* (Maxim.) Ohwi
Vicia sativa L.	Earlier identification was incorrect. Herbarium specimen belongs to *Vicia sepium*, already included in the check-list.
Viola arenaria DC.	Actualizing species name: *Viola rupestris* F.W. Schmidt