

BIOGEOGRAPHICAL ANALYSIS OF VASCULAR PLANT FLORA IN VENTSPILS AND DAUGAVPILS CITIES

Māris Laiviņš, Ģertrūde Gavrilova

Institute of Biology, University of Latvia; Salaspils, Miera Str. 3, LV-2169, e-mail: m.laivins@inbox.lv; gga@email.lubi.edu.lv

The paper deals with the analysis of vascular floras of two Latvian cities: in Ventspils (area – 55.4 km²) 866 species, and in Daugavpils (area - 72.5 km²) – 953 species were found (inventory of vascular plants was carried out from 1975 to 1999). The floras of both cities are highly saturated with plant species, the number of species per area unit is higher than that one of Central European cities and rural floras of Latvia that can be explained by high habitat diversity and moderate anthropogenic disturbances (3/4 from all species are apophytes).

The composition of vascular plant species reflects the regional differences between the coastal and south-east geobotanical regions of Latvia: the number of oceanic and sub-oceanic species decrease, while the proportion of sub-continental and continental species increases in the west-east direction. Both cities are situated on significant migration routes of biota. The flora of Daugavpils is considerably richer in exotic neophyte species (the number of ephemerophytes in Daugavpils is 13.5 and the number of neophytes - 2.2 times higher than in Ventspils). Presumably, the flora of Ventspils is more conservative, the species migration along the coastal line of the Baltic Sea is comparatively slower, while the flora of Daugavpils is more inconsistent, and the environmental conditions (fluctuation of temperatures, topography, transportation crossroads etc.) in south-east Latvia promote intensive migration and circulation of species.

Key words: urban flora, number of species, synanthropic elements, structure of distribution ranges, Latvia.

INTRODUCTION

The first fragmentary data on the flora of Latvian cities were published more than 140 years ago, when F. Buhse and F. Diercke (Diercke 1867; Buhse 1870, 1872) published brief reports in the annual of the Nature Researchers Society of Riga on the vascular plant species in the Riga city. Few years later T. Kottkowitz published the first flora list of the Riga city where 892 taxa were mentioned (Kottkowitz 1878, 1879) and which was, in our opinion, rather comprehensive list at that time. Unfortunately this is still the only known and most profound inventory of urban vascular flora in Latvia. Later on, several researchers, e.g. W. Rothert, V. Mühlenbach, A. Šulcs and others had been investigating and publishing materials on the flora of Latvian cities (mainly episodic inventories on the exotic flora of the Riga city), nevertheless, comprehensive papers on the urban flora (flora lists, conspectus of flora) remained unpublished.

Urban vegetation is a significant environmental component which diversifies and stabilizes the structure of urban landscape simultaneously having social functions. The composition of plant species and communities in a city reflects the intensity of urbanization and characterizes the city and its historical development. Since the urban areas are highly saturated with plant species, today the urban vegetation is very dynamic. The composition of plant species and communities within a city indicates the level of urbanization, synanthropization, and the role of

humans in the migration of plant species amid different regions. In this aspect, the vascular flora of two cities in Latvia – Ventspils and Daugavpils, were analyzed.

MATERIALS AND METHODS

Brief characterization of study areas

Both Ventspils and Daugavpils are among the largest cities in Latvia; the area of Ventspils covers 55.4 km² with 46.5 thousand inhabitants, while the area of Daugavpils is 72.5 km² with 117.5 thousand inhabitants. Ventspils is situated in the west part of Latvia at the coast of the Baltic Sea 5-17 m above the sea level; Daugavpils is located in the east part of the country 120 m above the sea level. The distance between both cities is 430 km (Fig. 1).

Characteristic features for both cities are large forest cover (29 % in Ventspils, and 22 % in Daugavpils), and high percentage of the territories of both cities are covered by lakes (6 % in both cities). In both cities, sandy sediments form the soil bedrock (loose washed-out and eolian sandy deposits in Ventspils; inland dunes and alluvial sediments of Daugava River in Daugavpils). Both cities differ in climatic conditions: the climate in Ventspils is comparatively mild and moist, while in Daugavpils it is colder and drier. The average difference of air temperatures between the coldest month (February) and the warmest month (July) in Ventspils is 19.7 °C, while in Daugavpils it is 24.3 °C. The sum of active temperatures (> 10 °C) in Ventspils is 1800, while in Daugavpils it reaches 2100. The annual mean precipitation sum in Ventspils comprises 650 mm, while in Daugavpils it is 580 mm per year (Kļaviņš u.c. 2008; Темникова 1958).

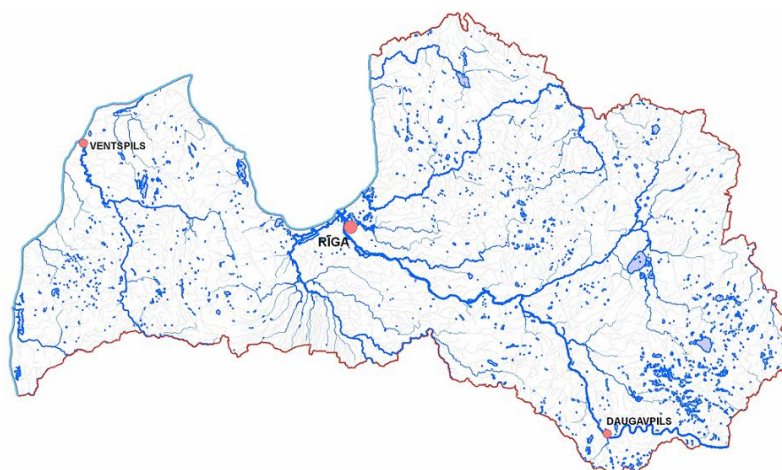


Fig. 1. Location of Ventspils and Daugavpils in Latvia

The city rights on Ventspils were conferred in 1378, and on Daugavpils – in 1582. Already a long time both cities serve as important transportation (highways, railways, waterways) crossroads and commercial centres, facilitating intensive exchange of material and social values between Europe and Asia.

Flora inventory and data processing

Inventory of vascular plant flora in Daugavpils was done discontinuously in a period from 1975 to 1983 (Гаврилова, Табака 1985); in Ventspils it was performed in a period from 1993 to 1999. The composition and process of ruderalization in both cities was studied by A. Šulcs who described the urban taxa including rare exotic species (Шулц 1972).

Flora inventories were carried out using route method, covering all habitat types within the study area. In each habitat type, all localities of all recognized species were marked in special maps. Inventories were done during all vegetation period; however, more attention was paid to spring and summer aspects of vegetation. Flora lists of both cities are given in Appendix 1; the species nomenclature follows Gavrilova & Šulcs (1999).

Data were stored in MS Excel data bases. Data processing and statistical analysis was done using MS Excel and SPSS programs. In order to estimate the differences in groups of synanthropic elements and types of distribution ranges, Z-test was applied (Arhipova & Bāliņa 2003). In calculations of the statistical validity, the total number of species in a certain species group in particular flora of the cities (e.g. archeophytes, neophytes, oceanic species etc.) was taken as the total population number instead of the total number of species in each city.

Systematic structure

953 vascular plant species were found in Daugavpils (49 % of total number of vascular plant species in Latvia) that belong to 110 families and 441 genera. In Ventspils, 866 vascular plant species were registered comprising 45 % of total number of all vascular species in Latvia and belonging to 110 families and 409 genera.

Commonly on a regional scale the richest or the dominating families and their rank are analyzed (Klemm 1975; Толмачев 1970; ШМИДТ 1980). In both cities 10 dominant families which are the richest in species comprise over 50 % of total number of species: 56.3 % in Daugavpils and 53.7 % in Ventspils. Comparatively, in Latvia 10 dominant families encompass 48.1 % of the total number of species. This leads to a conclusion that the systematic structure of flora in Daugavpils and Ventspils in terms of dominant families is similar to that of Latvia in general. The role of 25 dominant families is reflected by their dominance in cities, where it is more pronounced than in the flora of Latvia in general.

The dominating role of prevalent families is well reflected also by the number of species in 25 dominant families. The curve of species number in the richest families is more pronounced in urban floras than in Latvia in general; if the difference in species number in five dominant families in Latvia and Daugavpils is 3.9 %, it reaches 9.1 % in 25 dominant families.

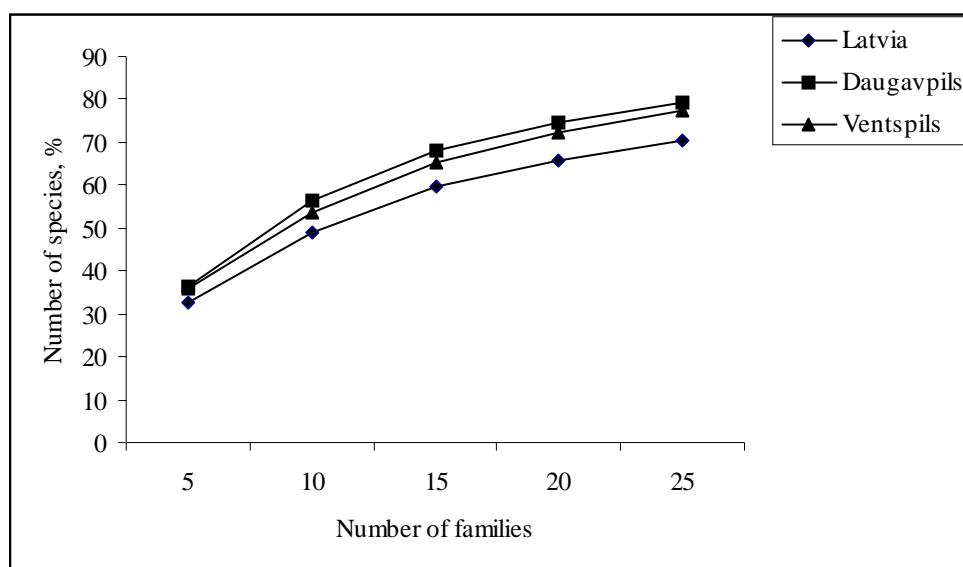


Fig. 2. Cumulative relation of species number in the richest families of floras in Latvia and both studied cities.

Urban flora and the role of dominating families in flora structure are well characterized also by comparison of the rank of dominant families in the flora of Daugavpils, Ventspils and Latvia in general. The ranks of dominant families in both cities are more similar to each other ($r = 0.94$) than the ranks compared between Daugavpils and Latvia ($r = 0.89$), or Ventspils and Latvia ($r = 0.88$).

In all cases (Daugavpils, Ventspils, Latvia) the largest number of species belongs to *Compositae* and *Graminae* families: 16.6 % of all species in Latvia, 19.1 % in Ventspils, and 20.2 % in Daugavpils (Table 1). In comparison to the sequence of the richest families in the flora of Latvia, the first richest families in both cities are followed by *Cyperaceae* and *Polygonaceae* families. High diversity of sedges (*Cyperaceae*) can be explained by availability of suitable habitats – moist soils and wetlands, particularly along Bušnieku Lake in Ventspils and Stropu Lake in Daugavpils. High number of species belonging to *Polygonaceae* reflects the diversity of ruderal habitats such as surroundings of dwellings, industrial objects, and highly disturbed forests.

Table 1.
Rank of 10 richest families in the floras of Latvia and both studied cities.

Dzimta Family	Latvija			Ventspils			Daugavpils		
	Skaitis Number	%	Kārtas Numurs Serial number	Skaitis Number	%	Kārtas numurs Serial number	Skaitis Number	%	Kārtas numurs Serial number
Compositae	196	9.5	1	87	10.0	1	105	11.0	1
Gramineae	184	7.1	2	79	9.1	2	88	9.2	2
Rosaceae	138	5.5	3	50	5.8	4	60	6.3	3
Leguminosae	107	5.2	4	40	4.6	5	43	4.5	6
Cruciferae	101	5.1	5	39	4.5	6	51	5.3	4
Cyperaceae	99	4.0	6	54	6.2	3	45	4.7	5
Scrophulariaceae	78	3.7	7	32	3.7	7	34	3.5	9
Caryophyllaceae	71	3.2	8	31	3.6	8	43	4.5	7
Labiatae	62	2.9	9	27	3.1	9	38	4.0	8
Umbelliferae	57	2.8	10	20	2.3	(12)	26	2.7	(12)
Polygonaceae	48	1.9	(13)	27	3.1	10	32	3.3	10

Synanthropic elements of flora

The degree of tolerance against natural or anthropogenic disturbances, presence of human activities and anthropogenic pressure differ greatly among various plant species. Thus the composition of plant species and communities indicates the intensity of human impact and the level of environmental disturbance. Vegetation of human settlements, particularly towns and cities, differs from natural vegetation with considerably higher proportion of synanthropic species which indicate the duration and intensity of human activities and type of human-caused impact. In order to estimate the of naturalness of vegetation different indicators are used such as proportion of native and exotic species, structure of exotic species pool (species grouping by arrival time, arrival mode and stability in local flora), degree of hemerobity etc. (Jalas 1955; Schlüter 1984, 1987; Sudnik-Wojcikowska 1988; Dierschke 1994).

In order to characterize the synanthropization of the flora in Ventspils and Daugavpils all vascular plant species were grouped into indigenous species (apophytes) and exotic species (antropophytes). In Ventspils, the proportion of indigenous species is 78.2 % (670 species), and the proportion of exotics is 21.8 % (187 species). In comparison, the flora of Daugavpils the indigenous species comprise 74.9 % (707 species), while 25.1 % (237 species) of all recognized species are of non-native origin.

The best indicators for the stability of flora are the proportion of exotic species as well as the stability of species composition under changing environmental conditions. On the basis of the classification system of exotic

species by Kornas, Medwecka-Kornas (1986) and Weinert (1985), the exotics were classified into two groups: archeophytes (arrived before 1600) and neophytes (after 1600). Deliberately introduced exotics (ergasiophygophytes) or garden escapees and ephemeral species (ephemerophytes) which are rare and often rapidly vanishing from the local flora (Laiviņš, Zundāne 1989; Gavrilova, Šulcs 1999) were analyzed separately. Totally in both cities 298 exotic species were found with 110 neophytes (37 % of the total number), 103 ergasiophygophytes (35 %), 56 archeophytes (19 %), and 29 ephemerophytes (9 %). The proportion of synanthropic elements in the flora of both cities is heterogeneous (Fig. 3). In Daugavpils, the proportion of neophytes ($z = 8.5 > z_{\alpha} 0.001$) and ephemerophytes ($z = 6.6 > z_{\alpha} 0.001$) is higher than that of Ventspils, while Ventspils is characterized by higher proportion of ergasiophygophytes ($z = 5.8 > z_{\alpha} 0.001$). No significant difference in proportion of archeophytes in both cities was found ($z = 0.4 < z_{\alpha} 0.05$).

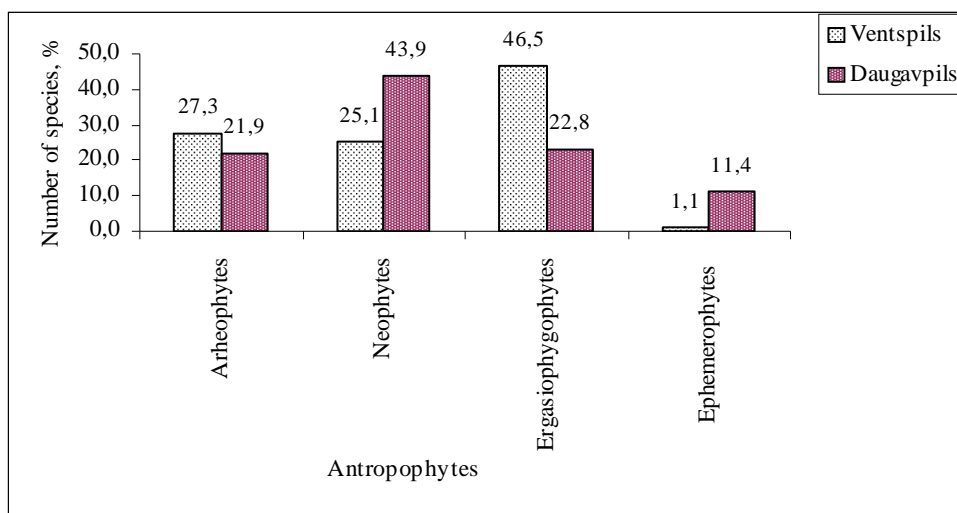


Fig. 3. The structure of anthropophytes in the flora of Ventspils and Daugavpils

In the spectrum of exotic flora, the least difference was found in the archeophyte flora – 84 % of archeophyte species listed in floras of both cities were present in both cities. Archeophytes specific only for Daugavpils were *Ballota nigra*, *Anagallis arvensis*, *Galeopsis ladanum*, *Silene noctiflora*, while *Papaver argemone*, *P. dubium*, *Veronica opaca* and *Chenopodium hybridum* were found only in Ventspils. More than 90 % of archeophytes are annual species (therophytes), most of them are characterized as weeds with ruderal (r) and mixed competitive–ruderal (cr) life strategy.

There is considerably higher proportion of neophytes in Daugavpils (104) than in Ventspils (47 species); 38 % of neophyte species are present in both cities.

Among the neophytes, therophytes and hemicryptophytes with mixed-competitive (cr) and competitive-stress tolerant-ruderal (csr) life strategy are dominating. In Daugavpils, more than half of the neophytes (65 %) belong to the sub-continental and continental species groups, while in Ventspils 67 % of neophytes are oceanic and slightly oceanic.

Similarly to neophytes, there is also larger proportion of ephemeroxytes (occasional species) in Daugavpils than in Ventspils. Significantly, no ephemeroxyte species common for both cities were found – higher proportion of occasional species were found in Daugavpils (27 species, 93 % of the total number of ephemeroxytes), while in Ventspils only two ephemeroxyte species *Anisantha sterilis* and *Commelina communis* were found. Most of the ephemeroxytes are therophytes (49 %) with competitive-ruderal (cr) life strategy. More than half (55 %) of ephemeroxytes in Daugavpils are sub-continental and continental species, while both species found in Ventspils belong to the sub-oceanic group.

Larger number of ergasiophytophytes were found in Ventspils (87 species) than in Daugavpils (54 species), while the percentage of ergasiophytophytes comprise 37 % of total species number. In both cities, as the most abundant and visible garden escapees among the shrubs (nanofanerophytes) and trees (fanerophytes) several species such as *Amelanchier spicata*, *Rosa rugosa*, *Sambucus nigra*, *S. racemosa*, *Syringa vulgaris*, *Rosa pimpinellifolia*, *Symphoricarpos albus*, *Acer negundo* etc were present. Several species, e.g. *Lycium barbatum*, *Rosa glauca*, *R. pomifera*, *Acer ginnala*, *Ulmus minor* were found only in Daugavpils, while *Hippophaë rhamnoides*, *Pinus mugo*, *Berberis thunbergii*, *Cerasus vulgaris*, *C. avium*, *Acer pseudoplatanus*, *Fagus sylvatica*, *Sorbus intermedia*, *S. x hybrida* etc. were present only in Ventspils. In Ventspils, several hamephytes, e.g. *Sedum album*, *S. rupestre*, *S. spurium*, *Vinca minor*, *Veronica filiformis* are often found in the vicinity of graveyards and on sandy soils in then nearest surroundings of human dwellings. Being among the most enduring species in urban flora, species with competitive (c) and mixed competitive stress tolerant-ruderal (csr) life strategy prevail.

In order to estimate the degree of synanthropization of urban vascular flora the indicator values of hemerobity (in Greek *hemeros* – cultivated, domesticated, *bios* – life) and urbanity developed by Kowarik (1988) and Frank et al. (1988, 1990) were used. The indicator values for hemerobity (oligo-hemerobous, meso-hemerobous, β -hemerobous, α -hemerobous, poly-hemerobous) and urbanity (urbanophobous, meso-urbanophobous, urbano-neutral, meso-urbanophilous, urbanophilous) have not been calculated for all species which were present in Ventspils and Daugavpils, thus the analysis is not comprehensive, although it gives a general insight into the degree of synanthropization of the flora in both cities.

In the structure of urbanity, urbanophobous and meso-urbanophobous species prevail, reaching 66.4 % of total number of species in Ventspils, and 63.9 % in Daugavpils. The proportion of urbanophilous and meso-urbanophilous species is 5.6 % in Ventspils, and 6.6 % in Daugavpils. Similarly, the species are grouped by the degree of hemerobity. There is comparatively high proportion of oligo- and

meso-hemerobous species (normally occur outside of human settlements): 60.7 % of total species number in Ventspils, and 56.7 in Daugavpils; the proportion of eu-hemerobous (β -, α -hemerobous – species occurring mainly in urban environments) in both cities is low – 12.8 % in Ventspils, and 14.2 % in Daugavpils.

The tendencies of synanthropization of the urban vegetation are well reflected also by grouping of apophytes by habitat types which are well suited to growth and spread of native plants. The structure of apophytes in urban floras is similar in both cities (Fig. 4); statistically valid differences were found only between two apophyte groups only. In Ventspils, there is higher proportion of species related to sandy substrates ($z = 2.4 > z_{\alpha} 0.05$), while the proportion of ruderal species is higher in Daugavpils ($z = 3.2 > z_{\alpha} 0.01$) which largely results from the high density of railways and roads.

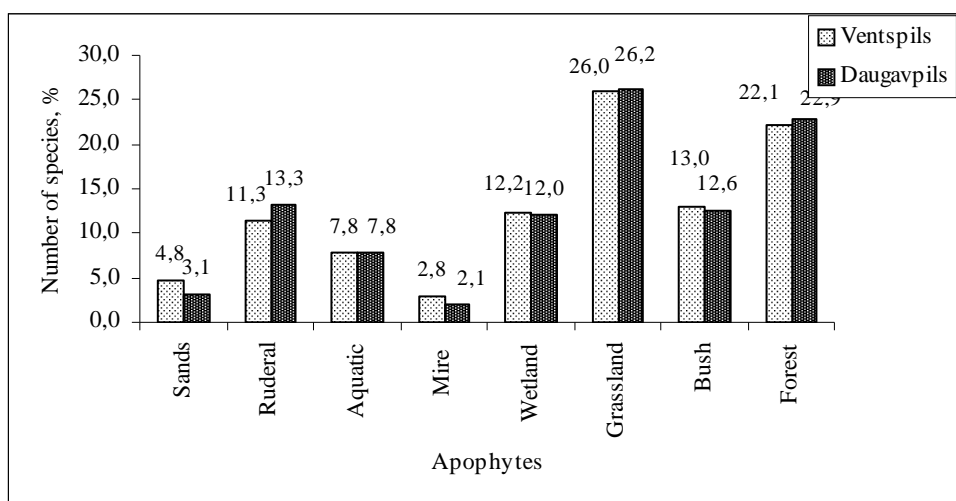


Fig. 4. The structure of apophytes in the flora of Ventspils un Daugavpils.

Structure of species distribution ranges

The structure of species ranges is tightly related to the historical formation of flora and outlines the future tendencies. The principles of range diagnostics developed by the German geographers and geobotanists (Lautensach 1952; Troll 1961) are currently widely used in chorological studies. The approach is based on the recognition of the species range in three geographical dimensions: (1) the location of the range within the biogeographic zone (north – south dimension); (2) sectoriality - the location of the range on terrestrial sectors in regard to the oceanic coastline (west – east dimension); (3) the location of the range in the altitudinal zone (dimension of vertical zonality). The sectoriality (second dimension) is characterized by two parameters: the location of the species range within the

climate continentality sectors and the occurrence of species in different terrestrial regions (e.g. European and/or Asian species etc.).

In analysis of distribution ranges for floras of Ventpils and Daugavpils the widely used Central-European diagnostic system (Meusel et al. 1965, 1978; Schubert, Went 1990; Jäger, Werner 2002) was applied. For species which are not present in Central Europe and thus not included in the literature sources mentioned above, several sources, e.g. *The Flora of the USSR* (Комаров 1934-1960) was used to define the species ranges.

Firstly, the vascular plant floras of both cities were divided into two groups: Holarctic species, and species ranging in various flora kingdoms (Paleotropical, Neotropical etc.). This approach was chosen because the territory of Latvia belongs to the Holarctic flora kingdom, and the structure of species distribution ranges in the northern hemisphere reflects the peculiarities of floral genesis and macrogeographical linkage. Cosmopolitan species with wide range are largely reflecting the anthropogenic and environmental impacts on the particular flora.

On the basis of this approach, five zonal types of the ranges were defined:

- Panzonal (from southern austral to northern boreal zone),
- Holarctic polyzonal (meridional - boreal zone),
- Holarctic southern (meridional - temperate zone),
- Holarctic moderate (sub-meridional – temperate zone),
- Holarctic northern (sub-meridional-boreal, for some species also arctic zone).

Following the same approach, ten types of sectoriality were distinguished:

- Pansectorial (Europe, Asia, America, Africa),
- Circumpolar,
- European,
- European-Siberian,
- European-West Siberian,
- European-West Asian (including Asia Minor),
- European-Asian,
- European-American,
- Asian,
- American.

Six types of oceanity-continentality:

- Indifferent,
- Oceanic,
- Slightly oceanic,
- Sub-oceanic,
- Sub-continental,
- Continental.

In Latvia, plain (planar) species prevail, thus no altitudinal groups were marked out; many of them occur on higher elevations in the meridional and sub-meridional zones, while in southern Holarctic they are montane.

In the structure of distribution ranges in both cities, the sharpest differences between the floras of both cities appear in continentality types (Fig. 5). In comparison to Ventspils, the flora of Daugavpils is characterized by higher proportion of sub-continental ($z = 6.5 > z_{\alpha} 0.001$) and continental ($z = 5.8 > z_{\alpha} 0.001$) species, while sub-oceanic ($z = 4.9 > z_{\alpha} 0.001$) and sub-oceanic species ($z = 3.3 > z_{\alpha} 0.01$) lag behind.

The analysis of the zonal spectrums of species distribution show that Holarctic southern ($z = 4.8 > z_{\alpha} 0.001$), Holarctic moderate ($z = 2.9 > z_{\alpha} 0.01$), and panzonal ($z = 3.7 > z_{\alpha} 0.001$) distribution types are the most informative; no statistically significant difference was found in the proportion of species groups belonging to Holarctic northern and Holarctic polyzonal types (Fig. 6). The flora of Daugavpils is distinctive with the largest proportion of three most distinguishable groups of zonal types.

In terms of sectoriality structure, there is significantly larger proportion of European-West Asian ($z = 6.4 > z_{\alpha} 0.001$), European-Asian ($z = 4.2 > z_{\alpha} 0.001$), and European-Siberian (including European-West Siberian) ($z = 3.4 > z_{\alpha} 0.001$) species in Daugavpils than in Ventspils (Fig. 7). The number of European species is similar in Ventspils and Daugavpils (237 and 224, respectively); the statistical validity for difference in proportion of European species in each city was found by $Z 0.12$.

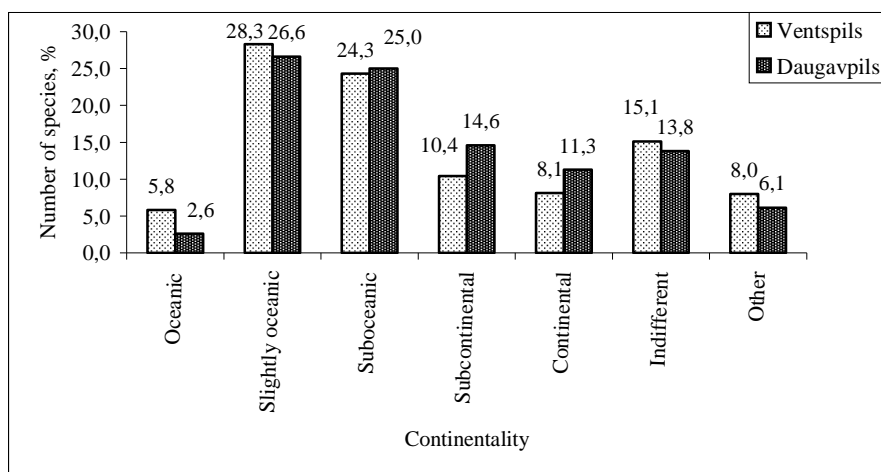


Fig. 5. The continentality structure of the species ranges.

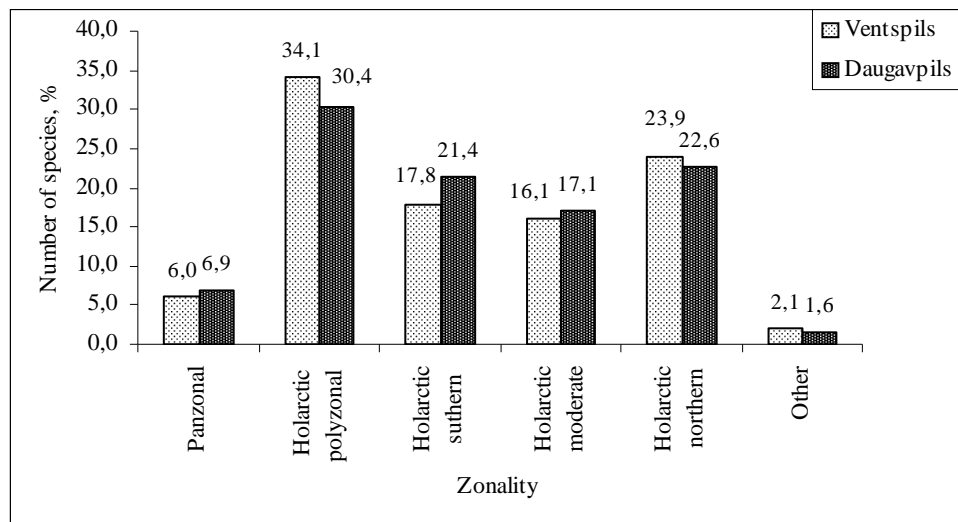


Fig. 6. The zonal structure of the species ranges.

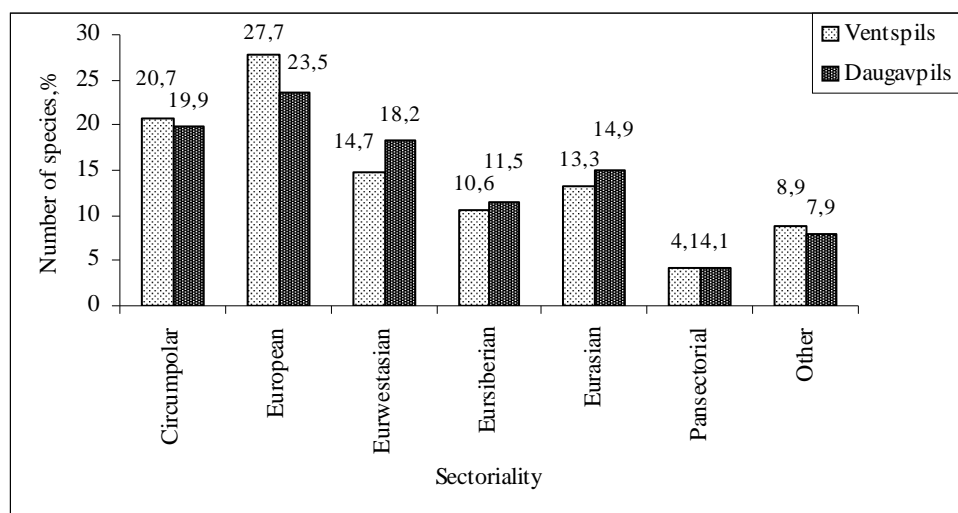


Fig. 7. The sectorial structure of the species ranges.

DISCUSSION

In order to analyze the diversity of taxa, the number of species in Ventspils and Daugavpils was compared to the number of species in Central European cities (in Germany, Poland, the Czech Republic, Switzerland) and to the regional and local floras in various regions of Latvia. For analysis of the relevance the well

known equation by Arenarius which is widely used in both biogeography and comparative floristics was applied: $S = aX^z$, where S – the number of species in the particular area, X – the area of the territory, a , z – positive constant numbers (MacArthur, Wilsons 1967; Stieperaere 1979; Малышев 1975).

The species-area relation (the relation between the number of species and the area of city) was calculated for 25 Central European cities, the constant of spatial floristic diversity z is 0.21 (Fig. 8). Using the constant a and z calculated for the Central European cities, theoretically the prospective number of species in Ventspils and Daugavpils was 674 and 714, respectively, which is considerably lower than the actual number of species: the total number of species in Ventspils exceeds the calculated number with 192 species, and in Daugavpils with 238. Consequently, the total number of species in the Latvian cities is significantly higher than in the Central European cities. Similarly, in Kazan with the area 3.7 times larger than in Daugavpils, there are 914 vascular plant species registered (Ilminskich 1987), which is somewhat less than in Daugavpils.

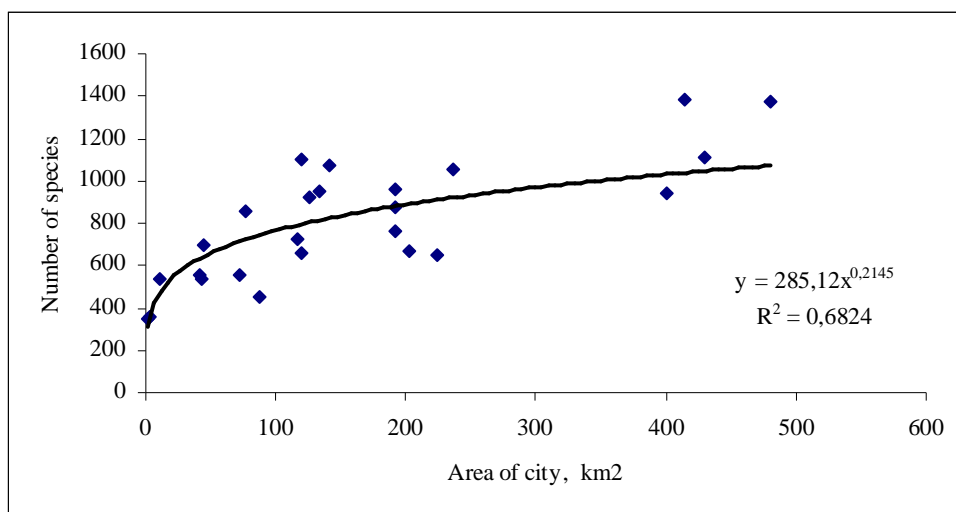


Fig. 8. Species – area relation in Central European cities.

In order to analyze the floristic diversity in Latvia, species-area relation was calculated for 71 local ($< 1000 \text{ km}^2$) and regional ($> 1000 \text{ km}^2$) vascular floras for sites of various sizes (Appendix 2). The constant of spatial floristic diversity z calculated for the Latvian regional and local floras was 0.14 (Fig. 9), thus the theoretical total number of species in Ventspils is supposed to reach 573 and 595 in Daugavpils. If comparing the theoretical numbers with the actual ones, the calculated numbers are lower for about 300 to 350 species in both cities.

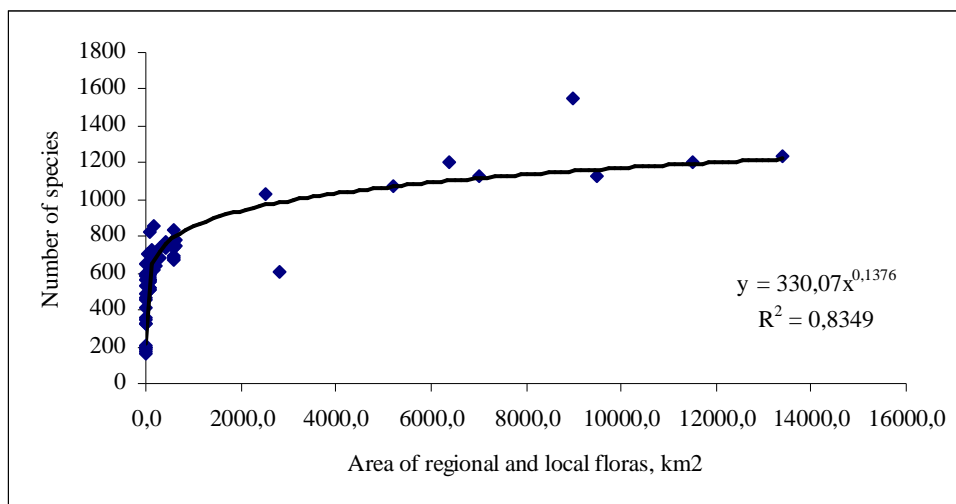


Fig. 9. Species–area relation in regional and local flora in Latvia.

As mentioned above, the floristic diversity of both Latvian cities is partly defined by the distribution of natural and semi-natural habitats (lakes, wetlands, dunes, grasslands, forests) enclosed in the area of the cities bordering with human dwellings and industrial areas, thus allowing island-like persistence of habitat and floristic diversity within the cities.

The urban environment is highly modified by humans and often also polluted; however, the total number of vascular plant species is higher in cities than that of rural areas. High abundance of plant species in cities is related to large habitat diversity within relatively small area and saturation with both native and exotic synanthropic species. Following the calculated values for species-area relation in Latvia there are 766 species per city in average, and 622 species in average in Latvia. The comparison is not fully correct, because the corrections for geographical location is not taken into account (the number of species in relation to geographical latitude and altitude).

In general, the synanthropization of the vascular flora in Ventspils and Daugavpils is not high, since the total number of exotic species does not exceed 25 % of the total number of species. Large areas of forests, sands and water bodies determine high naturalness of flora. Among the anthropophytes as the richest families *Compositae* (neophytes, ergasiophygophytes), *Cruciferae* (neophytes, archeophytes, ephemerophytes), *Gramineae* (neophytes, ephemerophytes) and *Rosaceae* (ergasiophygophytes) should be mentioned – species that spread mainly in highly disturbed and modified habitats such as ruderal sites, street, road and railway verges, build-up areas, while exotic plant species belonging to *Rosaceae* family are found in areas comparatively less affected by human activities and in modified semi-natural sites (allotments, greeneries, forests).

In cities exotic species colonize mainly sites which are moderately rich to rich in nitrogen as well as neutral and alkaline soils (Fig. 10, 11). Thus we can assume that alkaline and rich substrates in cities as well as in Latvia in general (Laiviņš 1997) facilitates their growth, vitality and spread in urban environment.

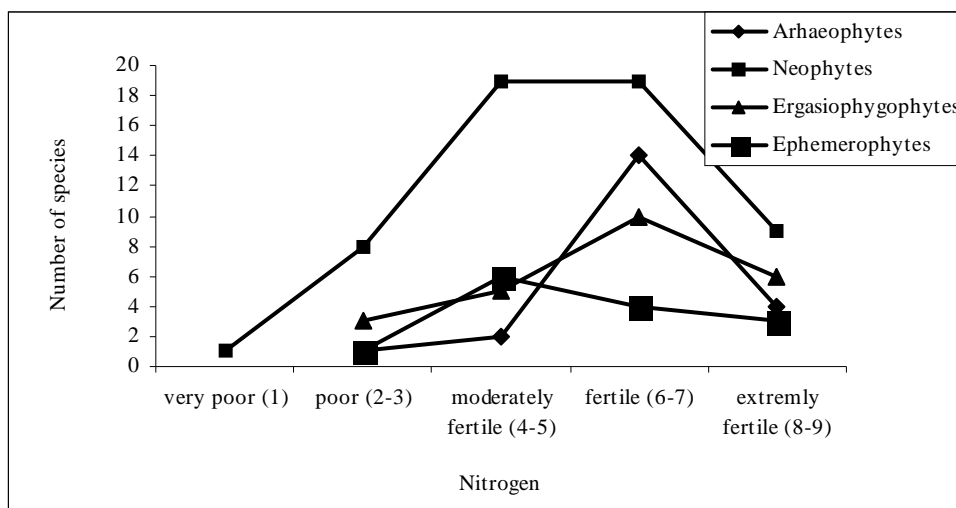


Fig. 10. Division of antrophopytes in Ventspils and Daugavpils flora into groups of nitrogen richness (Ellenberg's values).

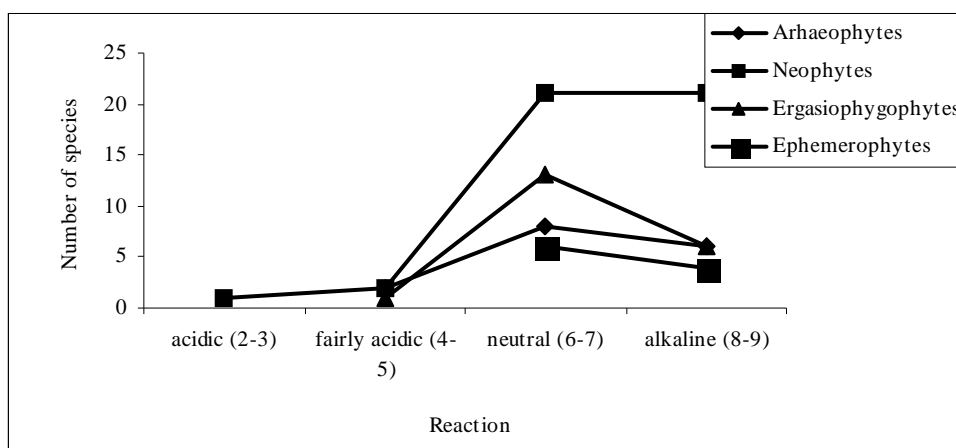


Fig. 11. Division of antrophopytes in Ventspils and Daugavpils flora into groups of soil reaction (Ellenberg's value).

The structure of distribution ranges of plant species in Ventspils and Daugavpils clearly show the general regional differences in biota between the west and east part of Latvia (coastal and south-east geobotanical regions of Latvia). The natural transition of plant species and communities from coastal to continental areas can be called the west-east (meridional) gradient of biota which is predominantly determining the peculiarities of biota in Latvia. In the example of urban flora in Ventspils and Daugavpils, there are more oceanic and sub-oceanic species in Ventspils (West Latvia), while continental and sub-continental species predominate in Daugavpils (East Latvia). These regional differences are well pronounced also in high proportion of European-West Asian, European-Siberian, and European-Asian species in the flora of Daugavpils. The qualitative and quantitative differences in flora between the west and east part of Latvia and the change of species composition from coastal to continental regions in Latvia were called the gradient (decline) of flora (Florengefälle) by K. Kupffer (Kupffer 1925). The same phenomenon was defined as west-east floristic element by N. Malta (Malta 1934); A. Rasiņš called it the west species 'isopory' (Расиньш 1964), while I. Fatore defined it as the 'layout of edge species' (species with ranges crossing the territory of Latvia) (Fatore 1992).

Although the environmental features characteristic for cities such as large proportion of highly disturbed areas, comparatively drier soils, larger circadian and seasonal fluctuations of temperatures etc. are typical for both study cities, the flora of Daugavpils is distinctive with sub-continental and continental European – West-Siberian species (*Chenopodium acerifolium*, *Iris sibirica*, *Silene otites*, *S. chlorantha*, *Pulsatilla patens*, *Centaurea prygia*, *Potentilla bifurca*, *Rumex pseudonatronatus*, *Allium angulosum* etc.) and sub-continental and continental European – West Asian (including Asia Minor) species (*Camelina sativa*, *C. pilosa*, *Potentilla recta*, *Hieracium echoides*, *H. bifurca*, *Artemisia austriaca*, *Veronica prostrata*, *V. teucrium* etc.) which had not been found in Ventspils.

Differences in structure of distribution ranges of flora in Ventspils and Daugavpils appear to be the most well pronounced in sub-continental and European-West Siberian species groups (z-test values) and present the significance of Sarmatic, Pontic and South-Siberian flora elements in the florogenesis in East Latvia. In Latvia, the same conformity is evident also in local floras of lake islands and chorology of species in grassland communities, e.g. in the flora of protected lake islands in Latgale (East Latvia) the role of temperate-submeridional species is more significant than on the lake islands in West Latvia. Similarly, the geographic range of characteristic species for grassland communities belonging to the class Festuco-Brometea, association *Centaureo-Fragarietum* (characteristic for Upland of Latgale) runs farther into South-East Europe and West Asia (Rūsiņa 2007).

The results of chorological analysis of urban flora and spectrum of species distribution ranges reflect the peculiarities in genesis of flora and plant communities as well as the general tendencies of vegetation transformation in Latvia. In comparison to Daugavpils, the flora of Ventspils is more conservative

with less shifting species composition. The flora of Ventspils have formed under continuous impact of moderate maritime climate with low temperature fluctuations; intensive synanthropization of had been hindered by oligomesothropic conditions. In contrary, the flora of Daugavpils is more unstable with shifting species composition that was formed in more continental situation with larger temperature fluctuations and more intensive human-caused disturbances. The territory of Daugavpils is crossed by so called Kupffer's biogeographical line appearing to have the edge effect on the composition of biota.

Both cities are located on the routes of species migration. The flora of Daugavpils is remarkably richer in exotic species: the number of ephemerophytes is 13.5 and the number of neophytes is 2.2 times higher than in Ventspils. This perhaps leads to an assumption that the species migration along the coast of the Baltic Sea is slower than in South-East Latvia and Daugavpils which results from the peculiarities of topography and hydrological networks in South-East Latvia (Valleys of River Daugava and River Laucesa, the ancient valley of Ilūkste-Eglaine, the Baltic ridge with sub-glacial gullies etc.) as well as transportation corridors.

ACKNOWLEDGEMENTS

The authors thank Agnese Priede for the translation of the manuscript in English.

LITERATŪRA

- Arhipova I., Bāliņa S. 2003.** *Statistika ekonomikā*. Datorzinību Centrs, Rīga, 352 lpp.
- Buhse F. B. 1870.** Zur Flora Rigas. *Korrespondenzblatt des Naturforscher-Vereins zu Riga* 18:97-99.
- Buhse F. B. 1872.** Zur Flora Rigas. *Korrespondenzblatt des Naturforscher-Vereins zu Riga* 19:10-11.
- Diercke C. 1867.** Flora Riga's. *Korrespondenzblatt des Naturforscher-Vereins zu Riga* 16:55-59.
- Dierschke H. 1994.** *Pflanzensoziologie. Grundlagen und Methoden*. Verlag Eugen Ulmer, Stuttgart, 683 S.
- Fatare I. 1992.** Latvijas floras komponentu izplatības analīze un tās nozīme augu sugu aizsardzības koncepcijas nodrošināšanā. *Vides Aizsardzība Latvijā*. LR Vides Aizsardzības komitejas Pētījumu centrs, Rīga, 3:1-259.
- Fatare I., Tabaka L. 2001.** Anotēts augu sugu saraksts. Tabaka L. *Latvijas flora un veģetācija. Zemgales ģeobotāniskais rajons*. Latvijas Universitāte, Rīga, 19-64. lpp.
- Gavrilova G., Laiviņš M. 1992.** *Botāniskie liegumi. Lukna, Čūžpurvs, Vīdāle, Dižkalni, Piešdanga, Gavieze, Vērene*. Zinātne, Rīga, 216 lpp.

- Frank D., Klotz S., Westhus W. 1988.** Biologisch-ökologischen Daten zur Flora der DDR. *Wissenschaftliche Beiträge Martin-Luther-Universität Halle-Wittenberg* 1988/60 (P35):1-103.
- Frank D., Klotz S., Westhus W. 1990.** Biologisch-ökologischen Daten zur Flora der DDR. 2. völlig neu bearbeitete Auflage. *Wissenschaftliche Beiträge Martin-Luther-Universität Halle-Wittenberg* 1990/32 (P41):1-167.
- Ilminkich N. 1987.** Die Analyse der Flora der Stadt Kazan. 1. Die Spezifik der Stadflora. *Wissenschaftliche Zeitschrift Universität Halle* 3:39-47.
- Jalas J. 1955.** Hemerobe und hemerohore Pflanzenarten. Ein terminologischer Reformversuch. *Acta Societatis pro Fauna et Flora Fennicae* 72 11:1-15.
- Jäger E. J., Werner K. 2002** (Hrsg.). *Rothmaler Exkursionsflora von Deutschland*. 18. bearbeit. Auflage. Gefäßpflanzen: Grundband. Spektrum Akademischer Verlag, Heidelberg, Berlin, 640 S.
- Jukna J. 1979.** *Ko vēstī Lielie Kangari*. Zinātne, Rīga, 53 lpp.
- Klotz A. 1987.** Floristische und vegetationskundliche Untersuchungen in Städten der DDR. *Düsseldorfer Geobotanisches Kolloquium* 4:61-69.
- Kļaviņš M., Blumberga D., Briede A., Grišule G., Andrušaitis A., Āboliņa K. 2008.** *Klimata mainība un globālā sasilšana*. LU Akademiskais apgāds, Rīga, 174 lpp.
- Kornas J., Medwecka-Kornas A. 1986.** *Geografia roślin*. Państwowe wydawnictwo naukowe, Warszawa, 529 p.
- Kottkowitz Th. 1878.** *Gymnospermen und Monocotyledonen der Flora Rigensis*. Riga, 27 S.
- Kottkowitz Th. 1879.** *Die Dicotyledonen der Flora Rigensis*. Riga, 75 S.
- Kowarik I. 1988.** Zum menschlichen Einfluss auf Flora und Vegetation. Theoretische Konzepte und ein Quantifizierungsansatz am Beispiel von Berlin (West). *Landscaptsentwicklung und Umweltforschung* 56:1-280.
- Kupffer K. 1925.** Grundzüge der Pflanzengeographie des ostbaltischen Gebietes. *Abhandlungen des Herder-Instituts zu Riga* 1, 6:1-224.
- Laiviņš M.** Environmental changes related dynamics of the number of sites of rare indigenous and exotic plant species in Latvia. *Baltic Forestry* 3 2: 9-18.
- Laiviņš M. 1998.** Latvijas boreālo priežu mežu sinantropizācija un eitrofikācija. *Latvijas Veģetācija* 1:1-137.
- Laiviņš M., Zundāne A. 1989.** *Latvijas ziedaugu un paparžaugu datu katalogs. I. Sinantropie elementi*. Salspils, 40 lpp.
- Landolt E. 1991.** Die Entstehung einer mitteleuropäischen Stadflora am Beispiel der Stadt Zürich. *Annali Di Botanici* 49:109-147.
- Lautensach H. 1952.** Der Geographische Formenwandel. *Colloquium Geographicum* 3:VIII+1-191.
- Malta N. 1934.** Kurzemes floras elementi. *Ģeogrāfiski Raksti* 3/4:5-11.
- Meusel H., Jäger E., Weinert E. 1965.** *Vergleichende Chorologie der zentraleuropäische Flora*. VEB Gustav Fischer Verlag, Jena, Text. Bd. 1:1-583.

- Meusel H., Jäger E., Rauschert S., Weinert E. 1978.** *Vergleichende Chorologie der zentraleuropäische Flora*. VEB Gustav Fischer Verlag, Jena, Text. Bd. 2:1-418.
- Rēriha I. 1998.** *Kurzemes dabas rezervātu vaskulāro augu flora*. Slīteres Valsts rezervāts, Dundaga.
- Rūsiņa S. 2007.** Latvijas mezofīto un kserofīto zālāju daudzveidība un kontaktsabiedrības. *Latvijas Veģetācija* 12:1-366.
- Schlüter H. 1984.** Kennzeichnung und Bewertung des Natürlichkeitsgrades der Vegetation. *Acta Botanica Slovaca. Series A. Taxonomica, Geobotanica*, Suppl. 1:277-283.
- Schlüter H. 1987.** Vegetationsmerkmale zur Kennzeichnung und Bewertung von Hemerobie und ökologischer Stabilität. Schubert R., Hilbig W. (Hrsg.) *Erfassung und Bewertung anthropogener Vegetationsveränderungen. Wissenschaftliche Beiträge Martin-Luther-Universität Halle-Wittenberg 1987/4* (P 26), Teil 1:13-19.
- Schubert R., Went W. 1990.** (Hrsg.). *Rothmaler Exkursionsflora von Deutschland*. Kritischer Band. 8. Auflage. Volk und Wissen Verlag GmbH, Berlin, 811 S.
- Stieperaere H. 1979.** The species-area relation of the Belgian flora of vascular plants, and its use for evaluation. *Bulletin de la Societe Royale de Botanique de Belgique* 112 2:193-200.
- Sudnik-Wojcikowska B. 1988.** Flora synanthropization and anthropopressure zones in a large urban agglomeration (exemplified by Warsaw). *Flora* 180:259-265.
- Tabaka L., Eglīte Z., Āboliņa A. 1991.** *Klāņu purvs. Latvijas aizsargājamo teritoriju flora*. Zinātne, Rīga, 163 lpp.
- Troll C. 1961.** Klima und Pflanzenkleid der Erde in dreidimensional Sicht. *Naturwissenschaften* 48(9):332-348.
- Weinert E. 1985.** Ruderalpflanzen als Umweltzeiger. *Gledischia* 13 1:169-182.
- Абеле Г. Т., Миезите И. Я. 1982.** *Заповедник Крусткалны. Флора охраняемых территорий Латвии*. Зинатне, Рига, 108 стр.
- Биркмане К. Я., Юкна Я. Я. 1974.** Видовой состав флоры. Табака Л. В. (ред.) *Флора и растительность Латвийской ССР. Приморская низменность*. Зинатне, Рига, с. 22-43.
- Биркмане К. Я., Клявиня Г.Б., Табака Л. В., Талла Б. П., Юкна Я. Я. 1977.** Видовой состав флоры. Табака Л. В. (ред.) *Флора и растительность Латвийской ССР. Курземский геоботанический район*. Зинатне, Рига, с. 20-65.
- Вимба Э. К. 1985.** *Терветский парк лесных ландшафтов. Флора охраняемых территорий Латвии*. Зинатне, Рига, 103 стр.
- Гаврилова Г.Б., Табака Л.В. 1985.** Флора города Даугавпилс. Табака Л. В. (ред.) *Флора и растительность Латвийской ССР. Восточно-Латвийский геоботанический район*. Зинатне, Рига, с. 184-269.

- Дамберга Р., Квиесе Д., Лебедека Г. 1982. Флора резервата Рочи национального парка Гауя Латвийской ССР. *Лесное хозяйство. Труды Латвийской сельскохозяйственной академии*. Елгава 194:41-52.
- Клявиня Г.Б., Плотниекс М. Р., Табака Л. В., Талла Б. П., Юкна Я. Я. 1979. Структура флоры геоботанического района. Табака Л. В. (ред.) *Флора и растительность Латвийской ССР. Северо-Видземский геоботанический район*. Зинатне, Рига, с. 18-78.
- Клявиня Г.Б., Плотниекс М. Р., Табака Л. В., Фатаре И. Я., Цепурите Б. П., Эглите З. П. 1982. Структура флоры. Табака Л. В. (ред.) *Флора и растительность Латвийской ССР. Юго-Восточный геоботанический район*. Зинатне, Рига, с. 26-92.
- Комаров В. Л. 1934-1960 (ред.) *Флора СССР*. Изд-во АН СССР, Москва-Ленинград, тт. 1-30.
- Лайвиньш М. 1988. Сравнительный анализ хорологических групп видов сосудистых растений озерных островов Латвии. *Jaunākais Mežsaimniecībā* 30:16-31.
- Мальшев Л. И. 1975. Количественный анализ флоры: пространственное разнообразие, уровень видового богатства и репрезентативность участков обследования. *Ботанический журнал* 60 (11):1537-1550.
- Расиньш А. П. 1964. Материалы к фитогеографическому делению Латвийской ССР. Изучение растительного покрова Саарема. Тарту, 7-30 с.
- Табака Л. В., Клявиня Г. Б., Плотниекс М. Р. 1977. Некоторые методические вопросы изучения видового состава флоры западной Латвии. Табака Л. В. (ред.) *Флора и растительность Латвийской ССР. Курземский геоботанический район*. Зинатне, Рига, с.86-120.
- Табака Л. И., Клявиня Г. Б. 1981. *Долина реки Абава. Флора охраняемых территорий Латвии*. Зинатне, Рига, 131 стр.
- Табака Л. В., Фатаре И. Я., Плотниекс М. Р. 1987. Систематическая структура флоры. Табака Л. В. (ред.) *Флора и растительность Латвийской ССР. Средне-Латвийский геоботанический район*. Зинатне, Рига, с. 15-89.
- Табака Л. В., Фатаре И. Я., Плотниекс М. Р. 1990. Структура флоры. Табака Л. В. (ред.) *Флора и растительность Латвийской ССР. Центрально-Видземский геоботанический район*. Зинатне, Рига, с. 16-81.
- Темникова Н. С. 1958. *Климат Латвийской ССР*. Издательство АН Латвийской ССР, Рига, 232 с.
- Толмачев А. И. 1970. О некоторых количественных соотношениях во флорах земного шара. *Вестник Ленинградского Университета* 15:62-74.
- Фатаре И. 1989. *Флора долины реки Даугавы*. Зинатне, Рига, 167 стр.
- Фатаре И. Я., Табака Л. В., Плотниекс М. Р., Барониня В. К., Гаврилова Г. Б., Лодзиня И. А., Ранка Х. Р., Страздиньш Ю. Г., Цепурите Б. П., Эглите З. П. 1985. Структура флоры. Табака Л. В. (ред.) *Флора и*

растительность Латвийской ССР. Восточно-Латвийский геоботанический район. Зинатне, Рига, с. 20-109.

Шмидт В.М. 1980. *Статистические методы в сравнительной флористике.* Издательство Ленинградского университета, Ленинград, 175 с.

Шульц А. А. 1972. Адвентивные растения как засорители агроценозов и рудеральных мест в Латвии. Сарма П. Э. (ред.) *Охрана природы в Латвийской ССР.* Зинатне, Рига, с.79-102.

Ventspils un Daugavpils vaskulāro augu floras biogeogrāfiskā analīze

Māris Laiviņš, Ģertrūde Gavrilova

Kopsavilkums

Raksturvārdi: pilsētu flora, sugu skaits, sinantropie elementi, areālu struktūra, Latvija

Rakstā analizēta divu Latvijas pilsētu vaskulāro augu sugu flora: Ventspilī (platība 55.4 km²) konstatētas 866, bet Daugavpilī (72.5 km²) – 953 sugas (floras inventarizācija veikta 1975-1999.g.). Pilsētu teritorijas ir piesātinātas ar augu sugām, sugu skaits laukuma vienībā Ventspilī un Daugavpilī ir lielāks nekā Centrāleiropas pilsētās un ārpuspilsētu florās Latvijā, kas saistīts ar lielo biotopu dažādību un mēreno antropogēno noslodzi (3/4 no visām sugām ir apofīti) Ventspilī un Daugavpilī.

Pilsētu vaskulāro augu sugu sastāvs atspoguļo biotas reģionālās atšķirības, kādas pastāv starp Piejūras un Dienvidaustrumu ģeobotānisko rajonu: sugu skaits ar okeānisko un vāji okeānisko izplatību samazināšanās un subkontinentālo un kontinentālo sugu skaita būtisku pieaugumu rietumu – austrumu virzienā. Abas pilsētas atrodas eventuālo augu sugu migrācijas ceļos. Daugavpils flora ir ievērojami bagātāka ar jaunāka laika (neofītiem) svešzemju sugām (efemerofītu skaits Daugavpilī ir 13.5, bet neofītu – 2.2 reizes lielāks nekā Ventspilī). Iespējams, ka Ventspils flora ir konservatīvāka, lēnāk sugu migrācija noris gar Baltijas jūras piekrasti, bet Daugavpils flora ir mainīgāka, vides apstākļi (temperatūru svārstības, vīrsas formas, transporta mezgli utt.) Dienvidaustrumlatvijā veicina ievērojami intensīvāku sugu apriti.

Appendix 1. List of the vaskular plant taxa
Ve – Ventspils, Da – Daugavpils

Acer ginnala Maxim. - krasta kļava	Da
Acer negundo L. - ošlapu kļava	Ve, Da
Acer platanoides L. - parastā kļava	Ve, Da
Acer pseudoplatanus L. - kalnu kļava	Ve
Achillea micrantha Willd. - smilts pelašķis	Da
Achillea millefolium L. - parastais pelašķis	Ve, Da
Acinos arvensis (Lam.) Dandy - māršilu kalnmētra	Ve, Da
Acorus calamus L. - smaržīgā kalme	Ve, Da
Actaea spicata L. - vārpainā krauklene	Ve
Aegopodium podagraria L. - podagras gārsa	Ve, Da
Aesculus hippocastanum L. - parastā zirgkastaņa	Ve, Da
Aethusa cynapium L. - sunpētersīlis	Ve, Da
Agrimonia eupatoria L. - parastais ančītis	Ve, Da
Agrimonia pilosa Ledeb. - spīlvainais ančītis	Da
Agropyron desertorum (Fisch. ex Link) Schult. - tuksneša pavārpata	Da
Agropyron pectinatum (M. Bieb.) P. Beauv. - ķemmveida pavārpata	Da
Agrostemma githago L. - lauka kokalis	Da
Agrostis canina L. - suņu smilga	Ve, Da
Agrostis gigantea Roth - baltā smilga	Ve, Da
Agrostis stolonifera L. - ložņu smilga	Ve, Da
Agrostis tenuis Sibth. - parastā smilga	Ve, Da
Agrostis vinealis Schreb. - vīnkalnu smilga	Da
Ajuga genevensis L. - Ženēvas cekuliņš	Da
Ajuga reptans L. - ložņu cekuliņš	Da
Alchemilla acutiloba Opiz - smaildaivainais rasaskrēsliņš	Ve, Da
Alchemilla cymatophylla Juz. - viļņainais rasaskrēsliņš	Da
Alchemilla filicaulis Buser - diegveida rasaskrēsliņš	Ve, Da
Alchemilla glabra Neygenf. - kailais rasaskrēsliņš	Ve
Alchemilla glaucescens Wallr. - zilganais rasaskrēsliņš	Ve, Da
Alchemilla gracilis Opiz - slaidais rasaskrēsliņš	Da
Alchemilla monticola Opiz - kalnu rasaskrēsliņš	Ve, Da
Alchemilla plicata Buser - ielocītais rasaskrēsliņš	Da
Alchemilla sarmatica Juz. - Sarmatijas rasaskrēsliņš	Ve, Da
Alchemilla snarskisi Czerep. - Snarska rasaskrēsliņš	Da
Alchemilla subcrenata Buser - ierantainais rasaskrēsliņš	Da
Alchemilla subglobosa C.G. Westerl. - ieapaļais rasaskrēsliņš	Da
Alchemilla viridifolia Snarskis - zaļlapu rasaskrēsliņš	Da
Alisma gramineum Lej. - zālainā cirvene	Da
Alisma plantago-aquatica L. - parastā cirvene	Ve, Da
Allium angulosum L. - šķautņainais sīpols	Da
Allium oleraceum L. - krūmāju sīpols	Ve, Da
Allium schoenoprasum L. - maurloks	Da
Allium scorodoprasum L. - ķiploku sīpols	Ve
Alnus glutinosa (L.) Gaertn. - melnalksnis	Ve, Da
Alnus incana (L.) Moench - baltalksnis	Ve, Da
Alopecurus aequalis Sobol. - līdzīgā lapsaste	Ve, Da
Alopecurus geniculatus L. - liektā lapsaste	Ve, Da
Alopecurus myosuroides Huds. - peļastīšu lapsaste	Da
Alopecurus pratensis L. - pļavas lapsaste	Ve, Da
Alyssum calycinum L. - kausainā alise	Da
Alyssum gmelinii Jord. - Gmelina alise	Ve
Alyssum turkestanicum Regel et Schmalh. - Turkestānas alise	Da
Amaranthus albus L. - baltais amarants	Da
Amaranthus blitoides S. Watson - balandu amarants	Ve, Da
Amaranthus blitum L. - zilganais amarants	Da
Amaranthus palmeri S. Watson - Palmera amarants	Da
Amaranthus retroflexus L. - liektais amarants	Ve, Da
Ambrosia artemisiifolia L. - vērmellapu ambrozija	Da
Amelanchier spicata (Lam.) K. Koch - vārpainā korinte	Ve, Da
Ammophila arenaria (L.) Link - smiltāja kāpuniedre	Ve

Anagallis arvensis L. - tīruma pavirza	Da
Anchusa officinalis L. - ārstniecības vēršmēle	Ve, Da
Andromeda polifolia L. - polijlapu andromeda	Ve, Da
Androsace septentrionalis L. - ziemeļu vairodzene	Da
Anemone nemorosa L. - baltais vizbulis	Ve, Da
Anemone ranunculoides L. - dzeltenais vizbulis	Ve, Da
Anemone sylvestris L. - meža vizbulis	Da
Anethum graveolens L. - smaržīgā dille	Ve
Angelica archangelica L. - dižzirdzene	Ve, Da
Angelica sylvestris L. - meža zirdzene	Ve, Da
Anisantha sterilis (L.) Nevski - neauglīgā jumtauza	Ve
Anisantha tectorum (L.) Nevski - īstā jumtauza	Ve, Da
Antennaria dioica (L.) Gaertn. - divmāju kaķpēdiņa	Ve, Da
Anthemis arvensis L. - tīruma ilzīte	Ve, Da
Anthemis cotula L. - suņu ilzīte	Da
Anthemis ruthenica M. Bieb. - Krievzemes ilzīte	Da
Anthemis tinctoria L. - dzeltenā ilzīte	Ve, Da
Anthoxanthum odoratum L. - parastā smaržzāle	Ve, Da
Anthriscus sylvestris (L.) Hoffm. - meža suņburkšķis	Ve, Da
Anthyllis arenaria (Rupr.) Juz. - smiltāja pārkonamoliņš	Ve, Da
Anthyllis maritima Schweigg. - jūrmalas pārkonamoliņš	Ve, Da
Anthyllis vulneraria L. - brūču pārkonamoliņš	Ve
Anthyllis x baltica Juz. ex Kloczkova - Baltijas pārkonamoliņš	Ve, Da
Apera spica-venti (L.) P. Beauv. - parastā rudzuzmilga	Ve, Da
Aquilegia vulgaris L. - parastā ozolīte	Da
Arabidopsis thaliana (L.) Heynh. - Tāla sīkplikstiņš	Ve, Da
Arabis gerardii (Besser) W.D.J. Koch - Žerāra smiltsķērsa	Da
Arabis sagittata (Bertol.) DC. - pūkainā smiltsķērsa	Ve, Da
Arctium lappa L. - lielais diždadzis	Da
Arctium minus (Hill) Bernh. - mazais diždadzis	Ve, Da
Arctium tomentosum Mill. - pūkainais diždadzis	Ve, Da
Arctostaphylos uva-ursi (L.) Spreng. - parastā miltene	Ve, Da
Arenaria procera Spreng. - zālāju smiltenīte	Da
Arenaria serpyllifolia L. - māršilu smiltenīte	Ve, Da
Armeria vulgaris Willd. - parastā armērija	Ve, Da
Armoracia rusticana P. Gaertn., B. Mey. et Scherb. - mārrutks	Ve, Da
Aronia prunifolia (Marshall) Rehder - plūmjlapu aronija	Ve
Arrhenatherum elatius (L.) J. et C. Presl - augstā dižauza	Ve, Da
Artemisia abrotanum L. - dievkociņš	Ve
Artemisia absinthium L. - vērmēle	Ve, Da
Artemisia austriaca Jacq. - Austrijas vībotne	Da
Artemisia campestris L. - lauka vībotne	Ve, Da
Artemisia marschalliana Spreng. - Maršala vībotne	Ve
Artemisia sieversiana Willd. - Sīversā vībotne	Da
Artemisia umbrosa (Besser) Pamp. - ēnainā vībotne	Da
Artemisia vulgaris L. - parastā vībotne	Ve, Da
Asarum europaeum L. - parastā kumeljpēda	Ve, Da
Asparagus officinalis L. - ārstniecības asparāgs	Da
Asperugo procumbens L. - gulošā skarbene	Da
Aster salignus Willd. - vītulu miķelīte	Da
Astragalus arenarius L. - smiltāja tragantzīrnis	Ve, Da
Astragalus danicus Retz. - Dānijas tragantzīrnis	Da
Astragalus glycyphyllos L. - saldlapu tragantzīrnis	Ve, Da
Athyrium filix-femina (L.) Roth - parastā sievpaparde	Ve, Da
Atriplex hortensis L. - dārza balodene	Ve, Da
Atriplex littoralis L. - jūrmalas balodene	Ve
Atriplex oblongifolia Waldst. et Kit. - garlapu balodene	Da
Atriplex patula L. - plašā balodene	Ve, Da
Atriplex prostrata Boucher ex DC. - šķēplapu balodene	Ve, Da
Atriplex rosea L. - rožainā balodene	Da
Atriplex sagittata Borkh. - spožā balodene	Da
Atriplex tatarica L. - Tatārijas balodene	Da
Avena fatua L. - vējauza	Ve, Da
Avena sativa L. - sējas auza	Ve, Da
Ballota nigra L. - melnā zilaine	Da

Barbarea stricta Andrz. - stāvaugļu zvērene	Ve, Da
Barbarea vulgaris R. Br. - parastā zvērene	Ve, Da
Batrachium aquatile (L.) Dumort. - parastā ūdensgundega	Ve
Batrachium circinatum (Sibth.) Spach - apallapu ūdensgundega	Ve, Da
Batrachium peltatum (Schrank) Bercht. et J. Presl - trejlapu ūdensgundega	Ve
Batrachium trichophyllum (Chaix) Bosch - spilvlapu ūdensgundega	Ve, Da
Beckmannia eruciformis (L.) Host - parastā bekmanija	Da
Bellis perennis L. - ilggadīgā mārupūķe	Ve, Da
Berberis thunbergii DC. - Tunberga bārbele	Ve
Berberis vulgaris L. - parastā bārbele	Ve, Da
Berteroa incana (L.) DC. - parastā sirmene	Ve, Da
Betula pendula Roth - āra bērzs	Ve, Da
Betula pubescens Ehrh. - purva bērzs	Ve, Da
Bidens cernua L. - nokarenais sunītis	Ve, Da
Bidens tripartita L. - trejdaivu sunītis	Ve, Da
Bistorta major Gray - lielā zalkšsūrene	Ve, Da
Blysmus compressus (L.) Panz. ex Link - plakanā blizme	Ve, Da
Blysmus rufus (Huds.) Link - rūsganā blizme	Ve
Botrychium lunaria (L.) Sw. - pumēness ķekarpaparde	Ve, Da
Brachypodium sylvaticum (Huds.) P. Beauv. - meža īskāje	Da
Brassica campestris L. - lauka rācenis	Ve, Da
Brassica napus L. - kālis, rapsis	Ve
Brassica nigra (L.) W.D.J. Koch - melnā sinepe	Da
Brassica rapa L. - turneipsis	Ve
Briza media L. - parastā trīsene	Ve, Da
Bromopsis erecta (Huds.) Fourr. - staltā zaķauza	Da
Bromopsis inermis (Leys.) Holub - bezakotu zaķauza	Ve, Da
Bromus japonicus Thunb. - Japānas lāčauza	Ve, Da
Bromus mollis L. - mīkstā lāčauza	Ve, Da
Bromus racemosus L. - ķekarainā lāčauza	Da
Bromus squarrosus L. - izspūrusī lāčauza	Ve, Da
Buglossoides arvensis (L.) I.M. Johnst. - tīruma brūnsēkle	Ve, Da
Bunias orientalis L. - austrumu dižpērkone	Ve, Da
Butomus umbellatus L. - čemurainais puķumeldrs	Ve, Da
Cakile baltica Jord. ex Pobed. - jūrmalas šķēpene	Ve
Calamagrostis arundinacea (L.) Roth - niedru ciesa	Ve, Da
Calamagrostis canescens (Weber) Roth - iesirmā ciesa	Ve, Da
Calamagrostis epigeios (L.) Roth - slotiņu ciesa	Ve, Da
Calamagrostis meinshausenii (Tzvelev) Viljasoo - Meinshauzena ciesa	Ve, Da
Calamagrostis neglecta (Ehrh.) P. Gaertn., B. Mey. et Scherb. - purva ciesa	Ve, Da
Calammophila baltica (Flüggé ex Schrad.) Brand - Baltijas kāpuciesa	Ve
Calla palustris L. - purva cūkausis	Ve, Da
Callitriche cophocarpa Sendtn. - daudzziedu ūdenīte	Ve, Da
Callitriche palustris L. - pavasara ūdenīte	Ve, Da
Calluna vulgaris (L.) Hull - sila vīrsis	Ve, Da
Caltha palustris L. - purva purene	Ve, Da
Calystegia inflata Sweet - uzpūstais dižvītenis	Ve, Da
Calystegia sepium (L.) R. Br. - žogu dižvītenis	Ve, Da
Camelina microcarpa Andrz. - sīkaugļu idra	Ve, Da
Camelina pilosa (DC.) N.W. Zinger - pūkainā idra	Da
Camelina sativa (L.) Crantz - sējas idra	Da
Campanula cervicaria L. - briēžu pulkstenīte	Ve
Campanula glomerata L. - kamolainā pulkstenīte	Ve, Da
Campanula latifolia L. - platlapu pulkstenīte	Da
Campanula patula L. - pļavas pulkstenīte	Ve, Da
Campanula persicifolia L. - dižā pulkstenīte	Ve, Da
Campanula rapunculoides L. - tīruma pulkstenīte	Ve, Da
Campanula rotundifolia L. - apallapu pulkstenīte	Ve, Da
Cannabis sativa L. - sējas kaņepe	Ve, Da
Capsella bursa-pastoris (L.) Medik. - parastais plikstiņš	Ve, Da
Cardamine amara L. - rūgtā ķērsa	Ve, Da
Cardamine dentata Schult. - zobainā ķērsa	Ve, Da
Cardamine pratensis L. - pļavas ķērsa	Ve, Da
Cardaminopsis arenosa (L.) Hayek - parastā sīkķērsa	Ve, Da
Cardaria draba (L.) Desv. - droņņu sirdšķērsa	Da

Carduus acanthoides L. - akantlapu dzelksnis	Ve, Da
Carduus crispus L. - cirtainais dzelksnis	Ve, Da
Carduus nutans L. - nokarenais dzelksnis	Ve, Da
Carex acuta L. - slaidais grīslis	Ve, Da
Carex acutiformis Ehrh. - krastmalas grīslis	Ve, Da
Carex appropinquata Schumach. - satuvinātais grīslis	Ve, Da
Carex arenaria L. - smilts grīslis	Ve
Carex buxbaumii Wahlenb. - Buksbauma grīslis	Ve
Carex caryophyllea Latourr. - pavasara grīslis	Da
Carex cespitosa L. - ciņu grīslis	Ve, Da
Carex chordorrhiza Ehrh. - tiesakņu grīslis	Ve, Da
Carex cinerea Pollich - iesimais grīslis	Ve, Da
Carex contigua Hoppe - vārpainais grīslis	Ve, Da
Carex diandra Schrank - divputekšņlapu grīslis	Ve, Da
Carex digitata L. - pirkstainais grīslis	Ve, Da
Carex dioica L. - divmāju grīslis	Ve
Carex disticha Huds. - divrindu grīslis	Ve, Da
Carex echinata Murray - aslapu grīslis	Ve, Da
Carex elata All. - augstais grīslis	Ve
Carex elongata L. - pagarinātais grīslis	Ve, Da
Carex ericetorum Pollich - virsāja grīslis	Ve, Da
Carex flacca Schreb. - zilganais grīslis	Ve
Carex flava L. - dzeltenais grīslis	Ve, Da
Carex globularis L. - apaļvārpu grīslis	Da
Carex hartmanii Cajander - Hartmana grīslis	Ve, Da
Carex hirta L. - pūkainais grīslis	Ve, Da
Carex hostiana DC. - Hosta grīslis	Ve
Carex lasiocarpa Ehrh. - pūkaugļu grīslis	Ve, Da
Carex lepidocarpa Tausch - zviņaugļu grīslis	Ve
Carex leporina L. - zaķu grīslis	Ve, Da
Carex limosa L. - dūkstu grīslis	Ve
Carex nigra (L.) Reichard - dzelzszāle	Ve, Da
Carex pallescens L. - bālganais grīslis	Ve, Da
Carex panicea L. - sāres grīslis	Ve, Da
Carex paniculata L. - skarainais grīslis	Ve
Carex pauciflora Lightf. - mazziedu grīslis	Da
Carex pilulifera L. - lodvārpu grīslis	Ve, Da
Carex praecox Schreb. - agrais grīslis	Ve, Da
Carex pseudocyperus L. - dižmeldru grīslis	Ve, Da
Carex remota L. - attālvārpu grīslis	Ve
Carex riparia Curtis - krasta grīslis	Da
Carex rostrata Stokes - uzpūstais grīslis	Ve, Da
Carex scandinavica E.W. Davies - Skandināvijas grīslis	Ve
Carex serotina Mérat - vēlais grīslis	Ve, Da
Carex supina Willd. ex Wahlenb. - zemais grīslis	Da
Carex vaginata Tausch - makstainais grīslis	Ve, Da
Carex vesicaria L. - pūslīšu grīslis	Ve, Da
Carex vulpina L. - lapsu grīslis	Ve, Da
Carlina vulgaris L. - parastais zeltādzis	Da
Carum carvi L. - plāvas ķimene	Ve, Da
Centaurea calcitrapa L. - starainā dzelzene	Da
Centaurea cyanus L. - parastā rudzupuķe	Ve, Da
Centaurea diffusa Lam. - skrajā dzelzene	Da
Centaurea jacea L. - plāvas dzelzene	Ve, Da
Centaurea phrygia L. - bārķšu dzelzene	Da
Centaurea rhenana Boreau - skarainā dzelzene	Da
Centaurea scabiosa L. - lielā dzelzene	Ve, Da
Centaureum erythraea Rafn - čemuru augstiņš	Ve, Da
Centaureum littorale (Turner) Gilmour - jūrmalas augstiņš	Ve
Cerastium arvense L. - tīruma radzene	Ve, Da
Cerastium dubium (Bastard) Guépin - šaubīgā radzene	Da
Cerastium holosteoides Fr. - velēnu radzene	Ve, Da
Cerastium semidecandrum L. - piecputekšņlapu radzene	Ve, Da
Cerasus avium (L.) Moench - saldais ķirsis	Ve
Cerasus vulgaris Mill. - parastais ķirsis	Ve, Da

Ceratophyllum demersum L. - iegrimusī raglape	Ve, Da
Cerinthe minor L. - mazā vaskainīte	Da
Chaenorhinum minus (L.) Lange - mazā mazvīrcēle	Ve, Da
Chaerophyllum aromaticum L. - smaržīgā kārvele	Da
Chaerophyllum hirsutum L. - skarbmatainā kārvele	Da
Chamaedaphne calyculata (L.) Moench - ārkauša kasandra	Da
Chamaenerion angustifolium (L.) Scop. - šaurlapu ugunspuķe	Ve, Da
Chelidonium majus L. - lielā strutene	Ve, Da
Chenopodium acerifolium Andr. - kļavlapu balanda	Da
Chenopodium album L. - baltā balanda	Ve, Da
Chenopodium bonus-henricus L. - labā Indriķa balanda	Da
Chenopodium botrys L. - smaržīgā balanda	Da
Chenopodium foliosum Asch. - lapainā balanda	Da
Chenopodium glaucum L. - zilganā balanda	Ve, Da
Chenopodium hybridum L. - bastarda balanda	Ve
Chenopodium pedunculare Bertol. - kātainā balanda	Ve, Da
Chenopodium polyspermum L. - daudzsēklu balanda	Da
Chenopodium rubrum L. - sarkanā balanda	Ve, Da
Chenopodium strictum Roth - stāvā balanda	Ve, Da
Chenopodium suecicum Murr - zaļā balanda	Ve, Da
Chenopodium urticum L. - pilsētas balanda	Da
Chimaphila umbellata (L.) W.P.C. Barton - čemuru palēks	Ve, Da
Chondrilla juncea L. - doņveida hondrilla	Da
Chrysosplenium alternifolium L. - pamišlapu pakrēslīte	Ve, Da
Cichorium intybus L. - parastais cigoriņš	Ve, Da
Cicuta virosa L. - indīgais velnartūks	Ve, Da
Circaea alpina L. - Alpu raganzāļīte	Da
Circaea lutetiana L. - lielā raganzāļīte	Da
Cirsium acaule Scop. - zemais dadzis	Ve
Cirsium arvense (L.) Scop. - tīruma usne	Ve, Da
Cirsium heterophyllum (L.) Hill - dažādlapu dadzis	Ve
Cirsium oleraceum (L.) Scop. - lēdzerkste	Ve, Da
Cirsium palustre (L.) Scop. - purva dadzis	Ve, Da
Cirsium setosum (Willd.) Bess. - sarainā usne	Ve, Da
Cirsium vulgare (Savi) Ten. - asais dadzis	Ve, Da
Cladium mariscus (L.) Pohl - dižā aslape	Ve
Clinopodium vulgare L. - parastā smaržmētra	Ve, Da
Cnidium dubium (Schkuhr) Thell. - mānīgā knīdija	Da
Coeloglossum viride (L.) Hartm. - zaļā dobziede	Ve, Da
Comarum palustre L. - purva vārnkāja	Ve, Da
Commelina communis L. - parastā komelīna	Ve
Conioselinum tataricum Hoffm. - Tatārijas stobulis	Ve
Conium maculatum L. - plankumainais suņstobrs	Ve, Da
Consolida regalis Gray - tīruma zilausis	Ve, Da
Convallaria majalis L. - parastā kreimene	Ve, Da
Convolvulus arvensis L. - tīruma tītenis	Ve, Da
Conyza canadensis (L.) Cronquist - Kanādas jānītis	Ve, Da
Corallorrhiza trifida Châtel. - trejdaivu koraļlsakne	Ve, Da
Corispermum algidum Iljin - salcietīgā kamieļzāle	Ve, Da
Corispermum declinatum Stephan ex Iljin - noliektā kamieļzāle	Da
Corispermum hyssopifolium L. - izoplapu kamieļzāle	Da
Corispermum leptopterum (Asch.) Iljin - plānspārnu kamieļzāle	Ve, Da
Coronilla varia L. - mainīgā vainadzīte	Da
Corydalis solida (L.) Clairv. - blīvais cīrulītis	Ve, Da
Corylus avellana L. - parastā lazda	Ve, Da
Corynephorus canescens (L.) P. Beauv. - iesirmā kāpsmildzene	Ve
Cotoneaster lucidus Schtdl. - spožā klintene	Ve, Da
Crataegus alemanniensis Cinovskis - Vācijas vilkābele	Ve, Da
Crataegus curvisepala Lindm. - likirbuļu vilkābele	Ve
Crepis biennis L. - divgadīgā cietpiene	Ve, Da
Crepis paludosa (L.) Moench - purva cietpiene	Ve, Da
Crepis tectorum L. - tīruma cietpiene	Ve, Da
Cruciata laevipes Opiz - skropstainā krustmadara	Ve, Da
Cucubalus baccifer L. - melnodzene	Da
Cuscuta epithymum (L.) L. - ābolīna vija	Da

Cuscuta europaea L. - Eiropas vija	Ve, Da
Cynoglossum officinale L. - ārstniecības suņmēle	Ve, Da
Cynosurus cristatus L. - parastā sekstaine	Ve, Da
Cyripedium calceolus L. - dzeltenā dzežužurpīte	Da
Dactylis glomerata L. - parastā kamolzāle	Ve, Da
Dactylorhiza baltica (Klinge) N.I. Orlova - Baltijas dzežužurpīte	Ve, Da
Dactylorhiza fuchsii (Druce) Soó - Fuksa dzežužurpīte	Ve
Dactylorhiza incarnata (L.) Soó - stāvlapu dzežužurpīte	Ve, Da
Dactylorhiza maculata (L.) Soó - plankumainā dzežužurpīte	Ve, Da
Dactylorhiza russowii (Klinge) Holub - Rusova dzežužurpīte	Da
Daphne mezereum L. - parastā zalktene	Ve
Datura stramonium L. - parastais velnābols	Ve, Da
Daucus carota L. - savvaļas burkāns	Ve, Da
Deschampsia cespitosa (L.) P. Beauv. - parastā ciņusmilga	Ve, Da
Deschampsia flexuosa (L.) Nees - liektā ciņusmilga	Ve, Da
Descurainia sophia (L.) Webb ex Prantl - Sofijas smalkžodzene	Ve, Da
Dianthus arenarius L. subsp. arenarius - smiltāja neļķe	Ve
Dianthus arenarius L. subsp. borussicus Vierh. - Prūsijas smiltāja neļķe	Da
Dianthus barbatus L. - čemurneļķe	Ve
Dianthus deltooides L. - dzirkstelīte	Ve, Da
Dianthus versicolor Fisch. ex Link - daudzkrāsu neļķe	Da
Digitaria ischaemum (Schreb.) Muhl. - lineārā pasāre	Da
Digitaria sanguinalis (L.) Scop. - asinssarkanā pasāre	
Diphasiastrum complanatum (L.) Holub - parastais plakanstaipeknis	Da
Diphasiastrum tristachyum (Pursh) Holub - trejvārpu plakanstaipeknis	Da
Diplotaxis muralis (L.) DC. - mūru divsēkle	Ve, Da
Diplotaxis tenuifolia (L.) DC. - šaurlapu divsēkle	Ve
Draba nemorosa L. - birtālas drojene	Da
Dracocephalum thymiflorum L. - māršilu pūķgalve	Da
Drosera anglica Huds. - garlapu rasene	Ve
Drosera rotundifolia L. - apaļlapu rasene	Ve, Da
Dryopteris carthusiana (Vill.) H.P. Fuchs - dzeloņainā ozolpāpārde	Ve, Da
Dryopteris cristata (L.) A. Gray - sekstainā ozolpāpārde	Ve, Da
Dryopteris expansa (C. Presl) Fraser-Jenk. et Jermy - tumšplēkšņainā ozolpāpārde	Ve
Dryopteris filix-mas (L.) Schott - melnā ozolpāpārde	Ve
Echinochloa crusgalli (L.) P. Beauv. - parastā gaišsāre	Ve, Da
Echinocystis lobata (Michx.) Torr. et A. Gray - adataināis dzeloņgurķis	?, Da
Echinops sphaerocephalus L. - zilā ežziede	Da
Echium vulgare L. - zilais daglītis	Ve, Da
Elaeagnus argentea Pursh - sudraba eleagns	Ve
Elatine hydrophila L. - ūdenspiparu sīkeglīte	Da
Eleocharis acicularis (L.) Roem. et Schult. - adatu pameldrs	Da
Eleocharis palustris (L.) Roem. et Schult. - purva pameldrs	Ve, Da
Eleocharis quinqueflora (Hartmann) O. Schwarz - mazziēdu pameldrs	Ve
Eleocharis uniglumis (Link) Schult. - vienplēkšnes pameldrs	Ve, Da
Elodea canadensis Michx. - Kanādas elodeja	Ve, Da
Elsholtzia ciliata (Thunb.) Hyl. - matainā sievmētra	Ve, Da
Elymus caninus (L.) L. - suņu ciņuvārpata	Ve, Da
Elytrigia repens (L.) Nevski - ložņu vārpata	Ve, Da
Empetrum nigrum L. - melnā vistene	Ve, Da
Epilobium adenocaulon Hausskn. - stublāja kazroze	Ve, Da
Epilobium hirsutum L. - pūkainā kazroze	Ve, Da
Epilobium montanum L. - kalnu kazroze	Ve, Da
Epilobium palustre L. - purva kazroze	Ve, Da
Epilobium parviflorum Schreb. - sīkziēdu kazroze	Ve, Da
Epilobium roseum Schreb. - sārta kazroze	Ve, Da
Epilobium rubescens Rydb. - iesārta kazroze	Ve
Epipactis atrorubens (Hoffm. ex Bernh.) Besser - tumšsarkanā dzeguzene	Ve, Da
Epipactis helleborine (L.) Crantz - platlapu dzeguzene	Ve
Epipactis palustris (L.) Crantz - purva dzeguzene	Ve, Da
Equisetum arvense L. - tīruma kosa	Ve, Da
Equisetum fluviatile L. - upes kosa	Ve, Da
Equisetum hyemale L. - ziemzālā kosa	Ve, Da
Equisetum palustre L. - purva kosa	Ve, Da
Equisetum pratense Ehrh. - pļavas kosa	Ve, Da

Equisetum sylvaticum L. - meža kosa	Ve, Da
Equisetum variegatum Schleich. ex F. Weber et D. Mohr - raibā kosa	Ve
Eragrostis cilianensis (All.) Vignolo - skropstainā eragoste	Da
Eragrostis minor Host - mazā eragoste	Da
Erigeron acris L. - asais jānītis	Ve, Da
Eriophorum gracile W.D.J. Koch - slaidā spilve	Ve
Eriophorum latifolium Hoppe - platlapu spilve	Da
Eriophorum polystachion L. - šaurlapu spilve	Ve, Da
Eriophorum vaginatum L. - makstainā spilve	Ve, Da
Erodium cicutarium (L.) L'Hér. - velnarutku grābeklīte	Ve, Da
Erodium lebelii Jord. - Lēbeļa grābeklīte	Ve
Erophila verna (L.) Besser - pavasara drojenīte	Ve
Erucastrum armoracioides (Czern. ex Turcz.) Cruchet	Da
Erucastrum gallicum (Willd.) O.E. Schulz - Gallijas pazvēre	Ve, Da
Eryngium planum L. - plakanā zilpodze	Da
Erysimum canescens Roth - skrajā pārkonene	Da
Erysimum cheiranthoides L. - parastā pārkonene	Ve, Da
Erysimum durum J. et C. Presl - cietā pārkonene	Da
Erysimum hieracifolium L. - maurāglapu pārkonene	Da
Erysimum repandum L. - jomotā pārkonene	Da
Euonymus europaea L. - Eiropas segliņš	Ve, Da
Euonymus verrucosa Scop. - kārpainais segliņš	Da
Eupatorium cannabinum L. - lielā krastkaņepe	Ve, Da
Euphorbia cyparissias L. - ciprešu dievkrēsliņš	Ve, Da
Euphorbia helioscopia L. - saules dievkrēsliņš	Ve, Da
Euphorbia peplus L. - dārza dievkrēsliņš	Da
Euphorbia virgata Waldst. et Kit. - rīkšu dievkrēsliņš	Ve, Da
Euphrasia brevifolia Burnat et Gremli - īsspilvu žibulītis	Da
Euphrasia parviflora Schag. - īsais žibulītis	Ve, Da
Euphrasia stricta D. Wolff ex J.F. Lehm. - stāvais žibulītis	Ve, Da
Euphrasia x reuteri Wettst. - Reitera žibulītis	Ve, Da
Fagopyrum esculentum Moench - sējas griķis	Ve, Da
Fagopyrum tataricum (L.) Gaertn. - Tatārijas griķis	Ve, Da
Fagus sylvatica L. - parastais dižskābardis	Ve
Fallopia convolvulus (L.) Á. Löve - dārza vējgriķis	Ve, Da
Fallopia dumetorum (L.) Holub - krūmāju vējgriķis	Ve, Da
Festuca arenaria Osbeck - smiltāja auzene	Ve
Festuca arundinacea Schreb. - niedru auzene	Ve
Festuca gigantea (L.) Vill. - milzu auzene	Da
Festuca ovina L. - aitu auzene	Ve, Da
Festuca polesica Zapal. - Poļesjes auzene	Da
Festuca pratensis Huds. - pļavas auzene	Ve, Da
Festuca rubra L. - sarkanā auzene	Ve, Da
Festuca sabulosa (Andersson) H. Lindb. - kāpu auzene	Ve
Festuca trachyphylla (Hack.) Krajina - raupjā auzene	Ve, Da
Ficaria verna Huds. - pavasara mazpurenīte	Ve, Da
Filaginella uliginosa (L.) Opiz - dumbbrāja zakpēdiņa	Ve, Da
Filago arvensis L. - firuma pūtele	Ve, Da
Filipendula ulmaria (L.) Maxim. - parastā vīgrieze	Ve, Da
Filipendula vulgaris Moench - lielziedu vīgrieze	Ve, Da
Fragaria moschata Duch. - smaržīgā zemene	Ve, Da
Fragaria vesca L. - meža zemene	Ve, Da
Fragaria viridis Duch. - spradzene	Ve, Da
Frangula alnus Mill. - parastais krūklis	Ve, Da
Fraxinus excelsior L. - parastais osis	Ve, Da
Fumaria officinalis L. - ārstniecības matuzāle	Ve, Da
Gagea lutea (L.) Ker Gawl. - meža zeltstarīte	Ve, Da
Galeobdolon luteum Huds. - parastā zeltnātrīte	Ve, Da
Galeopsis bifida Boenn. - šķeltais aklis	Ve, Da
Galeopsis ladanum L. - platlapu aklis	Da
Galeopsis pubescens Besser - mīksts aklis	Da
Galeopsis speciosa Mill. - raibais aklis	Ve, Da
Galeopsis tetrahit L. - parastais aklis	Ve, Da
Galinsoga parviflora Cav. - sīkziedu sīkgalvīte	Ve, Da
Galinsoga quadriradiata Ruiz et Pav. - matainā sīkgalvīte	Ve, Da

Galium album Mill. - baltā madara	Ve, Da
Galium aparine L. - ķeraiņu madara	Ve, Da
Galium boreale L. - ziemeļu madara	Ve, Da
Galium elongatum C. Presl - pagarinātā madara	Da
Galium mollugo L. - mīkstā madara	Ve, Da
Galium odoratum (L.) Scop. - smaržīgā madara	Ve, Da
Galium palustre L. - purva madara	Ve, Da
Galium rivale (Sibth. et Sm.) Griseb. - upmalu madara	Ve, Da
Galium rubioides L. - rubiju madara	Da
Galium spurium L. - neīstā madara	Ve, Da
Galium uliginosum L. - dūkstu madara	Ve, Da
Galium verum L. - īstā madara	Ve, Da
Galium x pomeranicum Retz. - dzeltenbaltā madara	Ve, Da
Gentiana cruciata L. - krustlapu drudzene	Da
Gentiana pneumonanthe L. - tumšzilā drudzene	Da
Gentianella amarella (L.) Börner - rūgtā druzenīte	Da
Geranium bohemiacum L. - Bohēmijas gandrene	Ve
Geranium molle L. - mīkstā gandrene	Ve
Geranium palustre L. - purva gandrene	Ve, Da
Geranium pratense L. - pļavas gandrene	Ve, Da
Geranium pusillum L. - sīkā gandrene	Ve, Da
Geranium robertianum L. - Roberta gandrene	Ve, Da
Geranium sanguineum L. - asinssārtā gandrene	Ve, Da
Geranium sibiricum L. - Sibīrijas gandrene	Da
Geranium sylvaticum L. - meža gandrene	Ve, Da
Geum aleppicum Jacq. - austrumu bitene	Da
Geum rivale L. - pļavas bitene	Ve, Da
Geum urbanum L. - pilsētas bitene	Ve, Da
Geum x intermedium Ehrh. - vidējā bitene	Da
Gladiolus imbricatus L. - jumstiņu gladiola	Da
Glechoma hederacea L. - efeju sētložņa	Ve, Da
Glyceria fluitans (L.) R. Br. - peldošā ūdenszāle	Ve, Da
Glyceria maxima (Hartm.) Holmb. - dzižā ūdenszāle	Ve, Da
Glyceria plicata (Fr.) Fr. - krokainā ūdenszāle	Ve, Da
Glyceria x pedicellata F. Towns. - šaurvārpu ūdenszāle	Ve
Goodyera repens (L.) R. Br. - ložņu saulenīte	Ve, Da
Gratiola officinalis L. - ārstniecības rūgtene	Da
Grossularia reclinata (L.) Mill. - nokarenā ērkšķoga	Ve, Da
Gymnadenia conopsea (L.) R. Br. - odū gimnadenija	Da
Gymnocarpium dryopteris (L.) Newman - Linneja kailpārde	Ve
Gypsophila elegans M. Bieb. - gleznā ģipsene	Da
Gypsophila fastigiata L. - garkātu ģipsene	Da
Gypsophila muralis L. - tīruma ģipsene	Da
Gypsophila paniculata L. - skarainā ģipsene	Ve, Da
Hedera helix L. var. helix - Eiropas efeja	Ve
Helianthemum nummularium (L.) Mill. subsp. nummularium - naudiņu saulrozīte	Ve, Da
Helianthemum nummularium subsp. obscurum (Čelak.) Holub - naudiņu saulrozīte	Ve, Da
Helianthus tuberosus L. - topinambūrs	Ve, Da
Helichrysum arenarium (L.) Moench - dzeltenā kaķpēdiņa	Da
Helictotrichon pratense (L.) Besser - kailā pļavauzīte	Ve, Da
Helictotrichon pubescens (Huds.) Pilg. - pūkainā pļavauzīte	Ve, Da
Hepatica nobilis Mill. - zilā vizbulīte	Ve, Da
Heracleum sibiricum L. - Sibīrijas latvānis	Ve, Da
Heracleum sosnowskyi Manden. - Sosnovska latvānis	Ve, Da
Herminium monorchis (L.) R. Br. - vienguma hermīnija	Ve
Herniaria glabra L. - kailā trūkumzāle	Ve, Da
Hesperis matronalis L. - smaržīgā vakarene	Ve
Hieracium laevicaule Jord. - gludstublāju mauraga	Ve
Hieracium murorum L. - mūru mauraga	Ve, Da
Hieracium umbellatum L. - čemuru mauraga	Ve, Da
Hieracium vulgatum Fr. - parastā mauraga	Ve, Da
Hierochloa hirta (Schränk) Borbás - cietmatainā mārsmilga	Ve, Da
Hierochloa odorata (L.) P. Beauv. - smaržīgā mārsmilga	Ve, Da
Hippophaë rhamnoides L. - parastais smiltsērskšis	Ve
Hippuris vulgaris L. - parastā skujene	Ve

Hirschfeldia incana (L.) Lagr.-Foss. - sirmā briežzvēre	Da
Holcus lanatus L. - villainā meduszāle	Ve
Holcus mollis L. - mīkstā meduszāle	Ve
Honckenya peploides (L.) Ehrh. - biežlapainā sālsvirza	Ve
Hordeum vulgare L. - parastais miezis	Ve
Hottonia palustris L. - purva sermulīte	Ve, Da
Humulus lupulus L. - parastais apinis	Ve, Da
Huperzia selago (L.) Bernh. ex Schrank et Mart. - apdzīra	Ve, Da
Hydrilla verticillata (L.f.) Royle - mieturu hidrilla	Da
Hydrocharis morsus-ranae L. - parastā mazlēpe	Ve, Da
Hydrocotyle vulgaris L. - parastā vairoglāpe	Ve
Hylotelephium carpaticum (G. Reuss) Soják - Karpatu čīkstene	Da
Hylotelephium maximum (L.) Holub - lielā čīkstene	Ve, Da
Hylotelephium triphyllum (Haw.) Holub - parastā čīkstene	Ve, Da
Hyoscyamus niger L. - melnā drīģene	Ve, Da
Hypericum maculatum Crantz - plankumainā asinszāle	Ve, Da
Hypericum perforatum L. - divšķautņņu asinszāle	Ve, Da
Hypochoeris radicata L. - sakņu pelūde	Ve, Da
Impatiens glandulifera Royle - puķu sprigane	Ve, Da
Impatiens noli-tangere L. - meža sprigane	Ve, Da
Impatiens parviflora DC. - sīkziedu sprigane	Ve, Da
Inula britannica L. - britu stāģe	Da
Inula helenium L. - helēniju ālante	Ve
Inula salicina L. - vītoli ālante	Ve, Da
Iris pseudacorus L. - purva skalbe	Ve, Da
Iris sibirica L. - Sibīrijas skalbe	Da
Isoetes lacustris L. - gludsporu ezerene	Da
Jasione montana L. - kalnu norgalvīte	Ve, Da
Jovibarba globifera (L.) J. Pam. - atvašu saulrietenis	Ve, Da
Juncus alpino-articulatus Chaix - Alpu donis	Ve, Da
Juncus articulatus L. - posmainais donis	Ve, Da
Juncus balticus Willd. - Baltijas donis	Ve
Juncus bufonius L. - krupju donis	Ve, Da
Juncus bulbosus L. - sīpoliņu donis	Ve
Juncus compressus Jacq. - plakanais donis	Ve, Da
Juncus conglomeratus L. - kamolu donis	Ve, Da
Juncus effusus L. - plašais donis	Ve, Da
Juncus filiformis L. - tievais donis	Ve, Da
Juncus inflexus L. - zilganais donis	Ve
Juncus nastanthus V.I. Krecz. et Gontsch. - blīvziedu donis	Da
Juncus nodulosus Wahlenb. - mezglainais donis	Ve
Juncus ranarius Songeon et E.P. Perrier ex Billot - varžu donis	Da
Juncus squarrosus L. - skrajais donis	Ve
Juncus tenuis Willd. - maigais donis	Da
Juniperus communis L. - Zviedrijas kadiķis	Ve, Da
Knautia arvensis (L.) Coult. - tīruma pēterene	Ve, Da
Kochia densiflora (Moq.) Aellen - blīvziedu kohija	Ve, Da
Koeleria delavignei Czern. ex Domin - stepes kelērija	Da
Koeleria glauca (Spreng.) DC. - zilganā kelērija	Ve, Da
Koeleria grandis Besser ex Gorski - dižā kelērija	Da
Lactuca serriola L. - kompasa salāts	Ve, Da
Lactuca tatarica (L.) C.A. Mey. - Tatārijas salāts	Ve, Da
Lamium album L. - baltā panātre	Ve, Da
Lamium amplexicaule L. - skaujošā panātre	Ve, Da
Lamium hybridum Vill. - bastarda panātre	Ve, Da
Lamium maculatum (L.) L. - plankumainā panātre	Ve
Lamium purpureum L. - sārtā panātre	Ve, Da
Lappula squarrosa (Retz.) Dumort. - parastā lipene	Da
Lapsana communis L. - parastā salātene	Ve, Da
Lathyrus maritimus (L.) Bigelow - jūrmalas dedestiņa	Ve
Lathyrus palustris L. - purva dedestiņa	Ve, Da
Lathyrus pratensis L. - pļavas dedestiņa	Ve, Da
Lathyrus sylvestris L. - meža dedestiņa	Ve, Da
Lathyrus vernus (L.) Bernh. - pavasara dedestiņa	Da
Lavatera thuringiaca L. - Tīringas lavatera	Ve, Da

Ledum palustre L. - purva vaivariņš	Ve, Da
Lemna minor L. - mazais ūdensziņš	Ve, Da
Lemna trisulca L. - trejdaivu ūdensziņš	Ve, Da
Leontodon autumnalis L. - rudens vēlpiene	Ve, Da
Leontodon hispidus L. - matainā vēlpiene	Ve, Da
Leonurus quinquelobatus Gilib. - piecdaivu mātere	Ve, Da
Lepidium densiflorum Schrad. - blīvziedu cietķērsa	Ve, Da
Lepidium latifolium L. - platlapu cietķērsa	Da
Lepidium perfoliatum L. - skauļlapu cietķērsa	Da
Lepidium ruderales L. - parastā cietķērsa	Ve, Da
Lepidothea suaveolens (Pursh) Nutt. - maura kumelīte	Ve, Da
Leucanthemum vulgare Lam. - parastā pipene	Ve, Da
Leymus arenarius (L.) Hochst. - smiltāja kāpukviesis	Ve, Da
Lilium martagon L. - martagonlīlija	Ve
Limosella aquatica L. - ūdeņu dūpene	Da
Linaria loeselii Schweigg. - Lēzela vīrcle	Ve
Linaria repens (L.) Mill. - ložņu vīrcle	Ve
Linaria vulgaris Mill. - parastā vīrcle	Ve, Da
Linnaea borealis L. - ziemeļu linneja	Ve, Da
Linum catharticum L. - plavas liniņš	Ve, Da
Listera cordata (L.) R. Br. - sirdsveida divlape	Ve, Da
Liparis loeselii (L.) Rich. - Lēzela lipāre	Ve
Listera ovata (L.) R. Br. - ovālā lipāre	Ve, Da
Lobelia dortmanna L. - Dortmaņa lobēlija	Da
Lolium perenne L. - daudzgadīgā airene	Ve, Da
Lonicera caerulea L. subsp. caerulea - zilais sausserdis	Ve
Lonicera caerulea L. subsp. pallasii (Ledeb.) Browicz - Pallasas sausserdis	Ve
Lonicera tatarica L. - Tātārijas sausserdis	Ve, Da
Lonicera xylosteum L. - parastais sausserdis	Ve, Da
Lotus ambiguus Besser ex Spreng. - šaubīgais vanagnadziņš	Ve
Lotus balticus Miniaev - Baltijas vanagnadziņš	Ve, Da
Lotus callunetorum (Juxip) Miniaev - virsāju vanagnadziņš	Ve, Da
Lotus corniculatus L. - ragainais vanagnadziņš	Ve, Da
Lupinus polyphyllus Lindl. - daudzlapu lupīna	Ve
Luzula campestris (L.) DC. - lauka zemzālīte	Ve, Da
Luzula luzuloides (Lam.) Dandy et Wilmott - birtalas zemzālīte	Da
Luzula multiflora (Ehrh.) Lej. - daudziedu zemzālīte	Ve, Da
Luzula pallidula Kirschner - bālganā zemzālīte	Ve
Luzula pilosa (L.) Willd. - pūkainā zemzālīte	Ve, Da
Lychnis coronaria (L.) Desr. - lielā guntiņa	Ve
Lychnis flos-cuculi L. - plavas spulgnāglene	Ve, Da
Lycium barbarum L. - parastā līcija	Da
Lycopodiella inundata (L.) Holub - palu staipeknītis	Ve
Lycopodium annotinum L. - gada staipeknis	Ve, Da
Lycopodium clavatum L. - vāliņu staipeknis	Ve, Da
Lycopsis arvensis L. - lauka aitene	Ve, Da
Lycopus europaeus L. - Eiropas vilknadze	Ve, Da
Lysimachia nummularia L. - plavas zeltene	Ve, Da
Lysimachia vulgaris L. - parastā zeltene	Ve, Da
Lythrum salicaria L. - vītolu vējmietīņš	Ve, Da
Maianthemum bifolium (L.) F.W. Schmidt - divlapu žagatiņa	Ve, Da
Malaxis monophyllos (L.) Sw. - purvāja vienlape	Ve
Malus domestica Borkh. - mājas ābele	Ve, Da
Malus sylvestris (L.) Mill. - mežābele	Ve, Da
Malva alcea L. - rožu malva	Ve, Da
Malva moschata L. - smaržīgā malva	Ve
Malva neglecta Wallr. - novārta malva	Ve, Da
Malva pusilla Sm. - mazā malva	Ve, Da
Malva sylvestris L. - meža malva	Da
Matricaria recutita L. - ārstniecības kumelīte	Ve, Da
Matteuccia struthiopteris (L.) Tod. - parastā strauspārde	Da
Medicago falcata L. - sirpjveida lucerna	Ve, Da
Medicago lupulina L. - apiņu lucerna	Ve, Da
Medicago romanica Prodán - Rumānijas lucerna	Da
Medicago sativa L. - sējas lucerna	Ve, Da

Medicago x varia Martyn - hibrīdlucerna	Ve, Da
Melampyrum nemorosum L. - birztaļas nārbulis	Ve, Da
Melampyrum polonicum (Beauverd) Soó - Polijas nārbulis	Da
Melampyrum pratense L. - pļavas nārbulis	Ve, Da
Melampyrum sylvaticum L. - meža nārbulis	Ve, Da
Melandrium album (Mill.) Garcke - baltā spulgotne	Ve, Da
Melandrium dioicum (L.) Coss. et Germ. - sarkanā spulgotne	Ve, Da
Melica nutans L. - nokarenā pumpursmilga	Ve, Da
Melilotus albus Medik. - baltais amoliņš	Ve, Da
Melilotus officinalis (L.) Pall. - ārstniecības amoliņš	Ve, Da
Melilotus wolgicus Poir. - Volgas amoliņš	Da
Mentha aquatica L. - ūdensmētra	Ve, Da
Mentha arvensis L. - tīruma mētra	Ve, Da
Mentha longifolia (L.) Huds. - garlapu mētra	Da
Mentha x piperita L. - piparmētra	Ve
Mentha x verticillata L. - mieturu mētra	Ve
Menyanthes trifoliata L. - trejlapu puplaksis	Ve, Da
Mercurialis perennis L. - daudzgadīgā kaņepene	Ve, Da
Milium effusum L. - izplestā ēnsmilga	Da
Moehringia trinervia (L.) Clairv. - trejdziņu mēringija	Ve, Da
Molinia caerulea (L.) Moench - zilganā molinija	Ve, Da
Moneses uniflora (L.) A. Gray - vienziēda sūnactiņa	Ve, Da
Monotropa hypopitys L. - parastā lāčtauce	Ve, Da
Mycelis muralis (L.) Dumort. - mūru mežsalāts	Ve, Da
Myosotis arvensis (L.) Hill - tīruma neaizmirstule	Ve, Da
Myosotis cespitosa Schultz - ciņu neaizmirstule	Ve, Da
Myosotis micrantha Pall. ex Lehm. - smilts neaizmirstule	Ve, Da
Myosotis palustris (L.) L. - purva neaizmirstule	Ve, Da
Myosotis ramosissima Rochel ex Schult. - pakalnu neaizmirstule	Ve
Myosotis sparsiflora Pohl - sīkziedu neaizmirstule	?
Myosotis sylvatica Ehrh. ex Hoffm. - meža neaizmirstule	Ve, Da
Myosoton aquaticum (L.) Moench - ūdensvirza	Ve, Da
Myosurus minimus L. - sīkā pelāstīte	Da
Myrica gale L. - parastā purvmīrte	Ve
Myriophyllum alterniflorum DC. - pamīšziedu daudzlāpe	Ve
Myriophyllum spicatum L. - vārpainā daudzlāpe	Ve, Da
Myriophyllum verticillatum L. - mieturu daudzlāpe	Ve, Da
Nardus stricta L. - stāvā vilkakūla	Ve, Da
Naumburgia thyrsoflora (L.) Rchb. - dzeltenā ķekarzeltene	Ve, Da
Neottia nidus-avis (L.) Rich. - parastā ligzdene	Ve
Nepeta cataria L. - parastā kaķumētra	Da
Neslia paniculata (L.) Desv. - skarainā paidra	Ve, Da
Nicandra physalodes (L.) Gaertn. - spuldzeņu nikandra	Da
Nonea pulla (L.) DC. - tumšā noneja	Da
Nuphar lutea (L.) Sm. - dzeltenā lēpe	Ve, Da
Nymphaea alba L. - baltā ūdensroze	Ve
Nymphaea candida C. Presl - sniegbaltā ūdensroze	Ve, Da
Odontites vulgaris Moench - parastais sārtžibultis	Ve, Da
Oenanthe aquatica (L.) Poir. - ūdens padīle	Da
Oenothera biennis L. - divgadīgā naktssvece	Ve, Da
Oenothera rubricaulis Kleb. - sārtstumbra naktssvece	Ve, Da
Omalotheca sylvatica (L.) Sch.Bip. et F.W. Schultz - meža zaķpēdiņa	Ve, Da
Onobrychis arenaria (Kit.) DC. - smiltāju esparsete	Da
Ononis arvensis L. - tīruma blaktene	Ve, Da
Ononis repens L. - ložņu blaktene	Ve
Onopordum acanthium L. - asais baldadzis	Da
Ophioglossum vulgatum L. - parastā čūskmēlīte	Da
Orchis mascula (L.) L. - vīru dzeģužpuķe	Ve
Orchis militaris L. - bruņcepuru dzeģužpuķe	Ve, Da
Origanum vulgare L. - parastā raudene	Ve, Da
Orobancha pallidiflora Wimm. et Grab. - bālziedu brūnkāte	Da
Orthilia secunda (L.) House - laimes palēcīte	Ve, Da
Oxalis acetosella L. - meža zaķskābene	Ve, Da
Oxalis stricta L. - Eiropas zaķskābene	Ve, Da
Oxycoccus palustris Pers. - lielā dzērvene	Ve, Da

Padus avium Mill. - parastā ieva	Ve, Da
Panicum capillare L. - matveida sāre	Da
Panicum dichotomiflorum Michx. - zarotā sāre	Da
Panicum miliaceum L. - sējas sāre	Ve, Da
Papaver argemone L. - sarainā magone	Ve
Papaver dubium L. - lauka magone	Ve
Papaver rhoeas L. - zīda magone	Ve, Da
Papaver somniferum L. - miega magone	Ve, Da
Paris quadrifolia L. - čūskoga	Ve, Da
Parnassia palustris L. - purva atālene	Ve, Da
Parthenocissus quinquefolia (L.) Planch. - pieclapiņu mežvīns	Ve
Pastinaca sativa L. - sējas pastinaks	Ve, Da
Pedicularis palustris L. - purva jāņegļīte	Ve, Da
Persicaria amphibia var. aquaticum - abinieku blussūrene	Ve, Da
Persicaria amphibia var. terrestre - abinieku blussūrene	Ve, Da
Persicaria hydropiper (L.) Spach - ūdenspipars	Ve, Da
Persicaria lapathifolia (L.) Gray - skābeņlapu blussūrene	Ve, Da
Persicaria maculosa Gray - parastā blussūrene	Ve, Da
Persicaria minor (Huds.) Opiz - mazā blussūrene	Ve, Da
Persicaria mitis (Schrank) Opiz ex Assenov - maigā blussūrene	Da
Persicaria scabra (Moench) Moldenke - skarbā blussūrene	Ve, Da
Petasites hybridus (L.) P. Gaertn., B. Mey. et Scherb. - bastarda tūsklape	Da
Petasites spurius (Retz.) Rchb. - neīstā tūsklape	Ve, Da
Peucedanum oreoselinum (L.) Moench - kalnu rūgtdille	Da
Peucedanum palustre (L.) Moench - purva rūgtdille	Ve, Da
Phalacrolooma annuum (L.) Dumort. - vasaras jānītis	Ve
Phalaris canariensis L. - Kanāriju spulgzāle	Da
Phalaroides arundinacea (L.) Rauschert - parastais miežubrālis	Ve, Da
Phegopteris connectilis (Michx.) Watt - pūkainā plūksnpaparde	Ve, Da
Phleum arenarium L. - smiltāja timotiņš	Ve
Phleum nodosum L. - mezglainais timotiņš	Ve, Da
Phleum phleoides (L.) H. Karst. - stepes timotiņš	Ve, Da
Phleum pratense L. - pļavas timotiņš	Ve, Da
Phragmites australis (Cav.) Trin. ex Steud. - parastā niedre	Ve, Da
Physalis alkekengi L. - Franšē fizālis	Ve
Physocarpus opulifolius (L.) Maxim. - irbeņlapainais fizālis	Ve
Phyteuma spicatum L. - vārpainā septiņvīre	Ve, Da
Picea abies (L.) H. Karst. - parastā egle	Ve, Da
Picris hieracioides L. - mauragu rūgtpiene	Ve, Da
Pilosella bauhini (Besser) Arv.-Touv.	Da
Pilosella echioides (Lumn.) F.W. Schultz et Sch.Bip.	Da
Pilosella floribunda (Wimm. et Grab.) Fr. - daudziedu pamauraga	Ve, Da
Pilosella officinarum F.W. Schultz et Sch.Bip. - matainā pamauraga	Ve, Da
Pilosella praealta (Vill. ex Gochnat) F.W. Schultz et Sch.Bip. - augstā pamauraga	Ve, Da
Pilosella x calodon (Tausch ex Peter) Soják	Da
Pilosella x flagellaris (Willd.) Arv.-Touv.	Da
Pimpinella saxifraga L. - klinšu noraga	Ve, Da
Pinguicula vulgaris L. - parastā kreimule	Ve
Pinus mugo Turra - kalnu priede	Ve
Pinus sylvestris L. - parastā priede	Ve, Da
Plantago arenaria Waldst. et Kit. - smilts ceļteka	Da
Plantago lanceolata L. - šaurlapu ceļteka	Ve, Da
Plantago major L. - lielā ceļteka	Ve, Da
Plantago media L. - vidējā ceļteka	Ve, Da
Platanthera bifolia (L.) Rich. - smaržīgā naktsvijole	Ve, Da
Poa angustifolia L. - šaurlapu skarene	Ve, Da
Poa annua L. - maura skarene	Ve, Da
Poa compressa L. - plakanā skarene	Ve, Da
Poa crispata Thuill. - cirtainā skarene	Da
Poa nemoralis L. - birtalas skarene	Ve, Da
Poa palustris L. - purva skarene	Ve, Da
Poa pratensis L. - pļavas skarene	Ve, Da
Poa subcaerulea Sm. - zilganā skarene	Ve
Poa trivialis L. - parastā skarene	Ve, Da
Polemonium caeruleum L. - zilā kāpnīte	Da

Polygala amarella Crantz - lauka ziepenīte	Ve, Da
Polygala comosa Schkuhr - cekulainā ziepenīte	Ve, Da
Polygala vulgaris L. - parastā ziepenīte	Ve, Da
Polygonatum multiflorum (L.) All. - daudziedu mugurene	Ve, Da
Polygonatum odoratum (Mill.) Druce - ārstniecības mugurene	Ve, Da
Polygonum arenastrum Boreau - maura sūrene	Ve, Da
Polygonum aviculare L. - dažādlapu sūrene	Ve, Da
Polygonum bellardii All. - Bellarda sūrene	Da
Polygonum calcatum Lindm. - kaļķu sūrene	Ve, Da
Polygonum neglectum Besser - novārta sūrene	Ve, Da
Polypodium vulgare L. - parastā saldskānīte	Ve, Da
Populus alba L. - baltā apse	Da
Populus balsamifera L. - balzama papele	Ve
Populus berolinensis (K.Koch) Dippel - Berlīnes papele	Ve
Populus nigra L. - melnā apse	Ve
Populus tremula L. - parastā apse	Ve, Da
Populus x canadensis Moench - Kanādas papele	Ve
Populus x petrovskiana (Schroed. ex Regie) Dipp.- Petrovskas papele	Ve
Potamogeton alpinus Balb. - Alpu glīvene	Ve, Da
Potamogeton berchtoldii Fieber - Berhtolda glīvene	Ve, Da
Potamogeton compressus L. - plakanā glīvene	Ve, Da
Potamogeton crispus L. - krokainā glīvene	Ve, Da
Potamogeton filiformis Pers. - pavedienu glīvene	Da
Potamogeton friesii Rupr. - Frīza glīvene	Ve, Da
Potamogeton gramineus L. - zālainā glīvene	Ve, Da
Potamogeton lucens L. - spožā glīvene	Ve, Da
Potamogeton natans L. - peldošā glīvene	Ve, Da
Potamogeton obtusifolius Mert. et W.D.J. Koch - struplapu glīvene	Da
Potamogeton pectinatus L. - ķemmveida glīvene	Ve, Da
Potamogeton perfoliatus L. - skaujošā glīvene	Ve, Da
Potamogeton praelongus Wulfen - visgarā glīvene	Ve, Da
Potamogeton pusillus L. - sīkā glīvene	Da
Potamogeton rutilus Wolff. - iesārtā glīvene	Ve, Da
Potentilla anserina L. - maura retējs	Ve, Da
Potentilla arenaria Borkh. - smiltāju retējs	Da
Potentilla argentea L. - sudraba retējs	Ve, Da
Potentilla bifurca L. - dakšainais retējs	Da
Potentilla erecta (L.) Raeusch. - stāvais retējs	Ve, Da
Potentilla goldbachii Rupr. - Goldbaha retējs	Da
Potentilla heidenreichii Zimmeter - Heidenreihā retējs	Ve, Da
Potentilla impolita Wahlenb. - blāvais retējs	Ve, Da
Potentilla intermedia L. - vidējais retējs	Da
Potentilla norvegica L. - Norvēģijas retējs	Ve, Da
Potentilla recta L. - taisnais retējs	Da
Potentilla reptans L. - ložņu retējs	Ve, Da
Potentilla silesiaca R. Uechtr. - Silēzijas retējs	Da
Potentilla supina L. - zemais retējs	Da
Poterium polygamum Waldst. et Kit. - gliemežu zaļvāļīte	Da
Poterium sanguisorba L. - mazā zaļvāļīte	Da
Primula farinosa L. - bezdelīgācīņa	Ve
Primula veris L. - gaiļbikstīte	Ve, Da
Prunella vulgaris L. - parastā brūngalvīte	Ve, Da
Prunus divaricata Ledeb. - Kaukāza plūme	Ve, Da
Prunus insititia L. - mazā plūme	Ve
Ptarmica cartilaginea (Ledeb. ex Rchb.) Ledeb. - skrimšļainā ķērmelīte	Da
Ptarmica vulgaris Blackw. ex DC. - parastā ķērmelīte	Ve, Da
Pteridium aquilinum (L.) Kuhn - parastā ērgļpaparde	Ve, Da
Puccinellia distans (Jacq.) Parl. - attālā pukcinellija	Ve, Da
Pulmonaria obscura Dumort. - ārstniecības lakacis	Da
Pulsatilla patens (L.) Mill. - meža silpurene	Da
Pulsatilla pratensis (L.) Mill. - pļavas silpurene	Ve, Da
Pulsatilla teklae Zāmelis - Teklas silpurene	Da
Pulsatilla x wolfgangiana (Besser) Juz. - Volfganga silpurene	Da
Pyrola chlorantha Sw. - zaļziedu ziemičiete	Ve, Da
Pyrola media Sw. - vidējā ziemičiete	Ve

Pyrola minor L. - mazā ziemciete	Ve, Da
Pyrola rotundifolia L. - apaļlapu ziemciete	Ve, Da
Pyrus communis L. - mājas bumbiere	Ve
Pyrus pyrastrer Burgsd. var. achras (Gaertn.) Cinovskis - meža bumbiere	Ve, Da
Quercus robur L. - parastais ozols	Ve, Da
Ranunculus acris L. - kodīgā gundega	Ve, Da
Ranunculus auricomus L. - zeltainā gundega	Ve, Da
Ranunculus bulbosus L. - bumbuļu gundega	Da
Ranunculus bulbosus L. - bumbuļu gundega	Ve
Ranunculus cassubicus L. - Kašubijas gundega	Ve
Ranunculus fallax (Wimm. et Grab.) Sloboda - Alemana gundega	Da
Ranunculus flammula L. - rāvas gundega	Ve, Da
Ranunculus lingua L. - garlapu gundega	Ve, Da
Ranunculus polyanthemos L. - daudzziedu gundega	Ve, Da
Ranunculus repens L. - ložņu gundega	Ve, Da
Ranunculus reptans L. - plašā gundega	Ve, Da
Ranunculus sceleratus L. - jaunā gundega	Ve, Da
Raphanus raphanistrum L. - pērkone	Ve, Da
Raphanus sativus L. - rutks	Ve
Rapistrum rigosum (L.) All. - krunkainais rācenītis	Da
Reseda alba L. - baltā rezēda	Da
Reseda lutea L. - dzeltenā rezēda	Ve, Da
Reynoutria japonica Houtt. - Japānas dižsūrene	Ve, Da
Reynoutria sachalinensis (F. Schmidt) Nakai - Sahalīnas dižsūrene	Ve
Rhamnus cathartica L. - parastais pabērzs	Ve, Da
Rhinanthus minor L. - mazais zvagulis	Ve, Da
Rhinanthus serotinus (Schönh.) Oborný - vēlais zvagulis	Ve, Da
Rhinanthus vernalis (N.W. Zinger) Schischk. et Serg. - lielais zvagulis	Ve
Rhynchospora alba (L.) Vahl - parastais baltmeldrs	Da
Ribes alpinum L. - alpīnā vērene	Ve, Da
Ribes nigrum L. - parastā upene	Ve, Da
Ribes rubrum L. - sarkanā jāņoga	Ve, Da
Ribes spicatum E. Robson - vārpainā jāņoga	Ve, Da
Rorippa amphibia (L.) Besser - abinieku paķērsa	Ve, Da
Rorippa austriaca (Crantz) Besser - Austrijas paķērsa	Da
Rorippa palustris (L.) Besser - purva paķērsa	Ve, Da
Rorippa sylvestris (L.) Besser - meža paķērsa	Da
Rosa glauca Pourr. - sārtlapu roze	Da
Rosa pimpinellifolia L. - dzeloņainā roze	Ve, Da
Rosa pomifera Herrm. subsp. glandulosa (Schmalh.) Šmite - ābolu roze	Da
Rosa rugosa Thunb. - rievainā roze	Ve, Da
Rosa subcanina (H. Christ) Dalla Torre et Sarnth. - potcelmu roze	Ve
Rosa vosagiaca N.H.F. Desp. - Vogēžu roze	Da
Rubus caesius L. - zilganā kazene	Ve, Da
Rubus idaeus L. - meža avene	Ve, Da
Rubus nessensis Hall - melnā cūcene	Ve, Da
Rubus saxatilis L. - klinšu kaulene	Ve, Da
Rudbeckia hirta L. - pūkainā rudbekija	Da
Rudbeckia laciniata L. - šķeltlapu rudbekija	Ve
Rumex acetosa L. - parastā skābene	Ve, Da
Rumex acetosella L. - mazā skābene	Ve, Da
Rumex aquaticus L. - ūdeņu skābene	Ve, Da
Rumex confertus Willd. - blīvā skābene	Ve, Da
Rumex crispus L. - cirtainā skābene	Ve, Da
Rumex hydrolapathum Huds. - krastmalas skābene	Ve, Da
Rumex longifolius DC. - garlapu skābene	Ve, Da
Rumex maritimus L. - jūrmalas skābene	Da
Rumex obtusifolius L. - struplapu skābene	Ve, Da
Rumex pseudonatronatus (Borbás) Borbás ex Murb.- Somijas skābene	Da
Rumex tenuifolius (Wallr.) A. Löve - smalklapu skābene	Da
Rumex thyrsiflorus Fingerh. - piramidālā skābene	Ve, Da
Rumex triangulivalvis (Danser) Rech.f.- vītollapu skābene	Da
Sagina nodosa (L.) Fenzl - mezglainā gaurenīte	Ve, Da
Sagina procumbens L. - gulošā gaurenīte	Ve, Da
Sagittaria sagittifolia L. - parastā bultene	Ve, Da

Salix acutifolia Willd. - smaillapu vītols	Ve, Da
Salix alba L. - baltais vītols	Ve, Da
Salix aurita L. - ausainais kārkls	Ve, Da
Salix caprea L. - blīgzna	Ve, Da
Salix cinerea L. - pelēkais kārkls	Ve, Da
Salix daphnoides Vill. - smiltāju kārkls	Ve
Salix fragilis L. - trauslais vītols	Ve, Da
Salix myrsinifolia Salisb. - mīrsīnlapu kārkls	Ve, Da
Salix pentandra L. - šķetra	Ve, Da
Salix purpurea L. - purpura kārkls	Ve, Da
Salix rosmarinifolia L. - vilku kārkls	Ve, Da
Salix starkeana Willd. - Stārķes kārkls	Ve
Salix triandra L. - vicu kārkls	Ve, Da
Salix viminalis L. - klūdziņu kārkls	Ve, Da
Salsola australis R. Br. - Krievijas sālszāle	Da
Salsola collina Pall. - pakalnu sālszāle	Da
Salsola kali L. - kālija sālszāle	Ve
Salvia pratensis L. - plavas salvija	Da
Salvia verticillata L. - mieturu salvija	Ve, Da
Sambucus nigra L. - melnais plūškoks	Ve, Da
Sambucus racemosa L. - sarkanais plūškoks	Ve, Da
Sanicula europaea L. - Eiropas dziedēnīte	Da
Saponaria officinalis L. - ārstniecības ziepjusakne	Ve, Da
Saxifraga granulata L. - plavas akmeņlauzīte	Ve, Da
Saxifraga tridactylites L. - trejzobu akmeņlauzīte	Ve
Scheuchzeria palustris L. - purva šeihcērija	Da
Schoenus ferrugineus L. - rūsganā melncere	Ve
Scilla siberica Haw. - Sibīrijas zilsniedzīte	Ve
Scirpus lacustris L. - ezetra meldrs	Ve, Da
Scirpus sylvaticus L. - meža meldrs	Ve, Da
Scirpus tabernaemontani C.C. Gmel. - zilganais meldrs	Ve, Da
Scleranthus annuus L. - vasaras žultzālīte	Ve, Da
Scleranthus perennis L. - ziemas žultzālīte	Ve, Da
Scolochloa festucacea (Willd.) Link - ūdeņu ērkšķuzāle	Da
Scorzonera humilis L. - zemā raudupe	Ve, Da
Scrophularia nodosa L. - gumainā cūknātre	Ve, Da
Scutellaria galericulata L. - parastā ķiverene	Ve, Da
Sedum acre L. - kodīgais laimiņš	Ve, Da
Sedum album L. - baltais laimiņš	Ve
Sedum rupestre L. - atliektais laimiņš	Ve
Sedum sexangulare L. - maigais laimiņš	Ve
Sedum spurium M. Bieb. - maldu laimiņš	Ve, Da
Selinum carvifolia (L.) L. - ķimeņlapu selīne	Ve, Da
Senecio congestus (R. Br.) DC. - purva krustaine	Da
Senecio jacobaea L. - Jekaba krustaine	Ve, Da
Senecio paludosus L. - krastmalu krustaine	Ve, Da
Senecio sylvaticus L. - meža krustaine	Ve, Da
Senecio vernalis Waldst. et Kit. - pavasara krustaine	Ve, Da
Senecio viscosus L. - lipīgā krustaine	Ve, Da
Senecio vulgaris L. - parastā krustaine	Ve, Da
Serratula tinctoria L. - krāsu zeltlape	Da
Seseli libanotis (L.) W.D.J. Koch - kalnu briežsakne	Da
Sesleria caerulea (L.) Ard. - zilganā seslērija	Ve, Da
Setaria pumila (Poir.) Schult. - zilganā sarene	Da
Setaria viridis (L.) P. Beauv. - zaļā sarene	Ve, Da
Sieglingia decumbens (L.) Bernh. - pazvilā misīņsmilga	Ve, Da
Silene borysthenica (Gruner) Walters - sīkziedu plaukšķene	Ve
Silene chlorantha (Willd.) Ehrh. - zaļziedu plaukšķene	Da
Silene dichotoma Ehrh. - dakšainā plaukšķene	Da
Silene noctiflora L. - nakts plaukšķene	Da
Silene nutans L. - nokarenā plaukšķene	Ve, Da
Silene otites (L.) Wibel - ausainā plaukšķene	Da
Silene tatarica (L.) Pers. - Tatārijas plaukšķene	Da
Silene vulgaris (Moench) Garcke - parastā plaukšķene	Ve, Da
Sinapis arvensis L. - tīruma sinepe	Ve, Da

Sisymbrium altissimum L. - augstā žodzene	Ve, Da
Sisymbrium loeselii L. - Lēzela žodzene	Ve, Da
Sisymbrium officinale (L.) Scop. - ārstniecības žodzene	Ve, Da
Sisymbrium wolgense M. Bieb. ex E. Fourn.- Volgas žodzene	Ve, Da
Sium latifolium L. - platlapu cemere	Ve, Da
Solanum dulcamara L. - bebrukārklis	Ve, Da
Solanum nigrum L. - melnā naktene	Ve, Da
Solidago canadensis L. - Kanādas zeltgalvīte	Ve, Da
Solidago virgaurea L. - dzeltenā zeltgalvīte	Ve, Da
Sonchus arvensis L. - tīruma mīkstpiene	Ve, Da
Sonchus asper (L.) Hill - dzeloņainā mīkstpiene	Ve, Da
Sonchus oleraceus L. - dārza mīkstpiene	Ve, Da
Sorbaria sorbifolia (L.) A. Braun	Ve
Sorbus aucuparia L. - parastais pīlādzis	Ve, Da
Sorbus intermedia (Ehrh.) Pers. - Zviedrijas pīlādzis	Ve
Sorbus teodorii Liljef. - Teodora pīlādzis	Ve
Sorbus x hybrida L. - hibrīdpīlādzis	Ve
Sorghum halepense (L.) Pers. - Halebas sorgo	Da
Sparganium emersum Rehmman - vienkāršā ežgalvīte	Ve, Da
Sparganium erectum L. - lielā ežgalvīte	Da
Sparganium microcarpum (Neuman) Raunk. - sīkaugļu ežgalvīte	Ve, Da
Sparganium minimum Wallr. - mazā ežgalvīte	Ve, Da
Spergula arvensis L. - tīruma gaurs	Ve, Da
Spergularia rubra (L.) J. et C. Presl - rožainais pagauris	Ve, Da
Spiraea alba Du Roi - baltā spireja	Ve
Spirodela polyrhiza (L.) Schleid. - parastā spirodela	Ve, Da
Stachys annua (L.) L. - vasaras sārmenē	Da
Stachys officinalis (L.) Trevis.	Da
Stachys palustris L. - purva sārmenē	Ve, Da
Stachys recta L. - stāvā sārmenē	Da
Stachys sylvatica L. - meža sārmenē	Ve, Da
Stellaria alsine Grimm - dūkstu virza	Ve
Stellaria graminea L. - zāļlapu virza	Ve, Da
Stellaria holostea L. - cietā virza	Da
Stellaria longifolia Muhl. ex Willd. - skrajā virza	Da
Stellaria media (L.) Vill. - parastā virza	Ve, Da
Stellaria nemorum L. - birtālas virza	Ve, Da
Stellaria palustris Retz. - purva virza	Ve, Da
Stratiotes aloides L. - parastais elsis	Ve, Da
Subularia aquatica L. - ūdeņu subulārija	Da
Succisa pratensis Moench - pļavas vilkmēle	Ve, Da
Swida sanguinea (L.) Opiz - asinssarkanais grimonis	Ve, Da
Symphoricarpos albus (L.) S.F. Blake - baltā sniegoga	Ve, Da
Symphytum officinale L. - ārstniecības tauksakne	Ve, Da
Syringa vulgaris L. - parastais ceriņš	Ve, Da
Tanacetum vulgare L. - parastais biškrēsliņš	Ve, Da
Taraxacum officinale F.H. Wigg. s.l. - ārstniecības pienene	Ve, Da
Taraxacum palustre- purva pienene	Ve
Taraxacum suecicum G.E. Haglund	Ve
Taxus baccata L. - parastā īve	Ve
Telekia speciosa (Schreb.) Baumg. - krāšņā telēkija	Ve
Thalictrum aquilegifolium L. - ozolišu saulkrēsliņš	Da
Thalictrum flavum L. - dzeltenais saulkrēsliņš	Ve, Da
Thalictrum lucidum L. - šaurlapu saulkrēsliņš	Da
Thalictrum minus L. - mazais saulkrēsliņš	Ve, Da
Thalictrum simplex L. - vienkāršais saulkrēsliņš	Ve
Thelypteris palustris Schott - parastā purvparde	Ve, Da
Thladiantha dubia Bunge - mainīgā tliadanta	Da
Thlaspi arvense L. - tīruma naudulis	Ve, Da
Thymus marschallianus Willd. - Maršala māršils	Da
Thymus ovatus Mill. - lielais māršils	Ve, Da
Thymus serpyllum L. - mazais māršils	Ve, Da
Tilia cordata Mill. - parastā liepa	Ve, Da
Tilia platyphyllos Scop. - platlapu liepa	Ve
Tilia x vulgaris Hayne - platlapu liepa	Ve

Torilis japonica (Houtt.) DC. - Japānas sārtburkšķis	Ve, Da
Tragopogon heterospermus Schweigg. - pūkainais plostbārdis	Ve
Tragopogon pratensis L. - pļavas plostbārdis	Ve, Da
Trichophorum alpinum (L.) Pers. - Alpu mazmeldrs	Ve
Trientalis europaea L. - Eiropas septiņstarīte	Ve, Da
Trifolium alpestre L. - Alpu āboliņš	Da
Trifolium arvense L. - mataināis āboliņš	Ve, Da
Trifolium aureum Pollich - dzeltenais āboliņš	Da
Trifolium campestre Schreb. - tīruma āboliņš	Ve
Trifolium dubium Sibth. - sīkais āboliņš	Ve, Da
Trifolium elegans Savi - smalkais āboliņš	Da
Trifolium hybridum L. - bastarda āboliņš	Ve, Da
Trifolium medium L. - zirgu āboliņš	Ve, Da
Trifolium montanum L. - kalnu āboliņš	Ve, Da
Trifolium pratense L. - sarkanais āboliņš	Ve, Da
Trifolium repens L. - baltais āboliņš	Ve, Da
Trifolium spadiceum L. - brūnais āboliņš	Ve, Da
Triglochin maritimum L. - jūrmalas āžloks	Ve
Triglochin palustre L. - purva āžloks	Ve, Da
Tripleurospermum perforatum (Mérat) M. Lainz - nesmaržīgā suņkumelīte	Ve, Da
Trisetum flavescens (L.) P. Beauv. - pļavas zeltauzīte	Ve, Da
Triticum aestivum L. - kviešis	Ve
Trollius europaeus L. - Eiropas saulpurne	Ve, Da
Trommsdorffia maculata (L.) Bernh. - plankumainā urlaja	Ve, Da
Turritis glabra L. - kāilais tornītis	Ve, Da
Tussilago farfara L. - parastā mällēpe	Ve, Da
Typha angustifolia L. - šaurlapu vilkvālīte	Ve, Da
Typha latifolia L. - platlapu vilkvālīte	Ve, Da
Ulmus glabra Huds. - parastā goba	Ve, Da
Ulmus laevis Pall. - parastā vīksna	Ve, Da
Ulmus minor Mill. - stepes goba	Da
Ulmus pumila L. - zemā goba	Da
Urtica dioica L. - lielā nātre	Ve, Da
Urtica urens L. - sīkā nātre	Ve, Da
Utricularia australis R. Br. - dienvidu pūslene	Ve
Utricularia intermedia Hayne - vidējā pūslene	Ve
Utricularia minor L. - mazā pūslene	Ve
Utricularia vulgaris L. - parastā pūslene	Ve
Vaccaria hispanica (Mill.) Rauschert - Spānijas vakārija	Da
Vaccinium myrtillus L. - mellene	Ve, Da
Vaccinium uliginosum L. - zilene	Ve, Da
Vaccinium vitis-idaea L. - brūklene	Ve, Da
Valeriana officinalis L. - ārstniecības baldriāns	Ve, Da
Verbascum lychnitidis L. - miltainais deviņvīruspēks	Da
Verbascum nigrum L. - melnais deviņvīruspēks	Ve, Da
Verbascum thapsus L. - parastais deviņvīruspēks	Ve, Da
Veronica agrestis L. - lauka veronika	Ve, Da
Veronica anagallis-aquatica L. - upmalas veronika	Ve, Da
Veronica arvensis L. - tīruma veronika	Ve, Da
Veronica beccabunga L. - avota veronika	Ve, Da
Veronica chamaedrys L. - birtzālas veronika	Ve, Da
Veronica filiformis Sm. - pavedienu veronika	Ve
Veronica incana L. - sirmā veronika	Da
Veronica longifolia L. - garlapu veronika	Ve, Da
Veronica officinalis L. - zemteka	Ve, Da
Veronica opaca Fr. - blāvā veronika	Ve
Veronica persica Poir. - Persijas veronika	Ve
Veronica prostrata L. - skrajā veronika	Da
Veronica scutellata L. - vairoga veronika	Ve, Da
Veronica serpyllifolia L. - mārsilu veronika	Ve, Da
Veronica spicata L. - vārpu veronika	Ve, Da
Veronica teucrium L. - krasta veronika	Da
Veronica verna L. - pavasara veronika	Ve, Da
Viburnum opulus L. - parastā irbene	Ve, Da
Vicia angustifolia Reichard - šaurlapu vīķis	Ve, Da

Vicia cassubica L. - Kašubijas vīķis	Ve
Vicia cracca L. - vanagu vīķis	Ve, Da
Vicia hirsuta (L.) Gray - pūkainais vīķis	Ve, Da
Vicia lathyroides L. - dedestīņu vīķis	Ve
Vicia sativa L. - sējas vīķis	Ve, Da
Vicia sepium L. - žogu vīķis	Ve, Da
Vicia sylvatica L. - meža vīķis	Da
Vicia tenuifolia Roth - smalklapu vīķis	Da
Vicia tetrasperma (L.) Schreb. - četršķekļu vīķis	Ve, Da
Vinca minor L. - mazā kapmirte	Ve
Vincetoxicum hircundinaria Medik. - ārstniecības indaine	Da
Viola arvensis Murray - tūruma vijolīte	Ve, Da
Viola canina L. - suņu vijolīte	Ve, Da
Viola elatior Fr. - augstā vijolīte	Da
Viola epipsila Ledeb. - sūnāja vijolīte	Ve, Da
Viola mirabilis L. - brīnumainā vijolīte	Ve, Da
Viola montana L. - kalnu vijolīte	Da
Viola odorata L. - smaržīgā vijolīte	Ve, Da
Viola palustris L. - purva vijolīte	Ve, Da
Viola riviniana Rchb. - Rivina vijolīte	Ve, Da
Viola rupestris F.W. Schmidt - smiltāja vijolīte	Ve, Da
Viola tricolor L. - trejkrāsu vijolīte	Ve, Da
Viscaria vulgaris Bernh. - parastā sveķene	Da
Visnaga daucoides P. Gaertn. - burkānu visnags	Da
Xanthium albinum (Widder) H. Scholz - krastmalas smaildadzis	Da
Xanthium strumarium L. - dziedzerainais smaildadzis	Da
Zannichellia palustris L. - purva diedzene	Da

Appendix 2. Number of species in lokal and regional floras of the Latvia

Flora	Platība, km ² Area, km ²	Sugu skaits Number of species	Avots Sources
Čūžupurvs	1.3	584	Gavrilova, Laiviņš 1992
Abava	68.8	825	Табака, Клявиня 1981
Klaņu purvs	9.6	527	Табака u.c. 1991
Lukna	1.6	413	Gavrilova, Laiviņš 1992
Gavieze	1.1	321	Gavrilova, Laiviņš 1992
Vīdale	0.5	210	Gavrilova, Laiviņš 1992
Dižkalni	0.5	327	Gavrilova, Laiviņš 1992
Piešdanga	0.1	363	Gavrilova, Laiviņš 1992
Grīņi	14.8	560	Rēriha 1998
Slītere	150.4	862	Rēriha 1998
Tērvete	13.5	594	Вимба 1985
Mežotne	0.2	169	Laiviņš 1989
Talsi	70.0	519	Табака и др. 1977
Nica	70.0	567	Табака и др. 1977
Užava	70.0	565	Табака и др. 1977
Irbe	70.0	523	Табака и др. 1977
Ķemeri	70.0	705	Табака и др. 1977
Kuldīga_a	70.0	574	Табака и др. 1977
Kuldīga_b	157.0	621	Табака и др. 1977

Kuldīga_c	280.0	682	Табака и др. 1977
Kuldīga_d	437.5	733	Табака и др. 1977
Kuldīga_e	630.0	745	Табака и др. 1977
Kandava_a	70.0	665	Табака и др. 1977
Kandava_b	157.0	697	Табака и др. 1977
Kandava_c	280.0	737	Табака и др. 1977
Kandava_d	437.5	765	Табака и др. 1977
Kandava_e	630.0	778	Табака и др. 1977
Krustkalni	2826.0	604	Абеле, Миезите 1982
Nurmiži	8.7	345	Клявия и др. 1979
Lielie Kangari	6.7	492	Јукна 1979
Roči	10.9	451	Дамберга и др. 1982
Vērene	0.6	470	Gavrilova, Laiviņš 1992
Kuprava	0.3	200	Laiviņš 1989
Pahatnieki	0.1	163	Laiviņš 1989
Pilori	0.1	189	Laiviņš 1989
Rubeži	0.1	197	Laiviņš 1989
Ropaži	70.0	554	Табака и др. 1977
Ropaži	600.0	737	Табака и др. 1987
Ropaži	70.0	606	Табака и др. 1987
Bārbele	600.0	752	Табака и др. 1987
Bārbele	70.0	618	Табака и др. 1987
Salaca	70.0	514	Табака и др. 1977
Valka	70.0	507	Табака и др. 1977
Valka	600.0	673	Клявия и др. 1979
Salaca	600.0	678	Клявия и др. 1979
Rēzekne	600.0	771	Клявия и др. 1982
Medumi	600.0	834	Клявия и др. 1983
Rēzekne	70.0	594	Клявия и др. 1984
Medumi	70.0	646	Клявия и др. 1985
Daugavas ieleja	115.0	729	Фатаре 1989
Silciems-Sigulda	18.0	650	Клявия и др. 1979
Lauces ieleja	40.0	708	Клявия и др. 1985
Jēkabpils	70.0	600	Фатаре и др. 1985
Viļaka	70.0	596	Фатаре и др. 1985
Jēkabpils	600.0	776	Фатаре и др. 1985
Viļaka	600.0	689	Фатаре и др. 1985
Ērgļi	600.0	746	Фатаре и др. 1985
Ērgļi	70.0	581	Фатаре и др. 1985
Veclaicene	70.0	556	Табака и др. 1990
Araiši	70.0	562	Табака и др. 1990
Veclaicenes liegums	206.5	638	Табака и др. 1990

Vestienas liegums	258.8	679	Табака и др. 1990
Vecpiebalgas liegums	95.3	566	Табака и др. 1990
Zemgale	2500.0	1026	Фатаре, Табака 2001
Kurzeme	11500.0	1201	Биркмане и др. 1977
Piejūra	9000.0	1553	Биркмане, Юкна 1974
Viduslatvija	6400.0	1205	Табака и др. 1987
Vidzemes augstiene	5200.0	1075	Табака и др. 1990
Ziemeļvidzeme	9500.0	1127	Клявиня и др. 1979
Austrumlatvija	13400.0	1233	Фатаре и др. 1985
Latgale	7000.0	1132	Клявиня и др. 1985