

Phytosociological analysis of basophilic Scots pine forests in the Southeastern Alps

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Key words: phytosociology, synsystematics, Scots pine, Black pine, forest, Slovenian Alps, Natura 2000, habitat type.

Ključne besede: fitocenologija, sinsistematička, rdeči bor, črni bor, gozd, slovenske Alpe, Natura 2000, habitatni tip.

Abstract

Based on hierarchical classification of more than 300 phytosociological relevés of basophilic black and (or) Scots pine communities in the Southern, Eastern and Southeastern Alps we described a new association *Rhodothamno chamaecisti-Pinetum sylvestris*, into which we classify stands that have until now been discussed in the framework of subassociations *Fraxino orni-Pinetum nigrae pinetosum sylvestris*, *laricetosum deciduae* and (partly) *caricetosum humilis*, and are floristically slightly similar also to certain forms of the association *Erico-Pinetum sylvestris*. The stands of the new association are for now classified into Natura 2000 habitat type Southeastern-European *Pinus sylvestris* forests (91R0), within it we propose a special habitat subtype Southeastern-Alpine Scots pine forests, and into a new forest site type Southeastern-Alpine Scots pine forest. At the contact of the Julian and Dinaric Alps we described a new subassociation *Genisto januensis-Pinetum sylvestris campanuletosum cespitosae*, which comprises also a Natura 2000 species *Primula carniolica*.

Izvleček

Na podlagi hierarhične klasifikacije več kot 300 fitocenoloških popisov bazoljubnih združb črnega in (ali) rdečega bora v Južnih, Vzhodnih in Jugovzhodnih Alpah smo opisali novo asociacijo *Rhodothamno chamaecisti-Pinetum sylvestris*, v katero uvrščamo sestoje, ki smo jih do zdaj obravnavali v okviru subasociacij *Fraxino orni-Pinetum nigrae pinetosum sylvestris*, *laricetosum deciduae* in (deloma) *caricetosum humilis*, floristično pa so nekoliko podobni tudi nekaterim obliskim asociacijam *Erico-Pinetum sylvestris*. Sestoje nove asociacije za zdaj uvrščamo v Natura 2000 habitatni tip Jugovzhodnoevropski gozdovi rdečega bora (91R0), kot poseben podtip Jugovzhodnoalpski gozdovi rdečega bora in v nov gozdnih rastiščni tip Jugovzhodnoalpsko rdečeborovje. Na stiku Julijskih Alp in Dinarskega gorstva smo opisali novo subasociacijo *Genisto januensis-Pinetum sylvestris campanuletosum cespitosae*, v kateri uspeva tudi Natura 2000 vrsta *Primula carniolica*.

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Introduction

Scots pine (*Pinus sylvestris*) and black pine (*Pinus nigra*) are very different in terms of their distribution area and ecological characteristics. Both are pioneers and occur as such in forests in most of Slovenia, sometimes they are even planted. Their natural sites are frequently (Scots pine) or almost exclusively (black pine) on very steep dolomite slopes where other tree species cannot compete. Such natural forest stands have long been the subject of phytosociological research: Aichinger (1933), Schmid (1936), Tomazič (1940), M. Wraber (1960), T. Wraber (1979), Piskernik (1979), Dakskobler (1998a, b, 1999, 2006), Accetto (1999, 2001, 2008, 2010, 2013, 2015), Cimperšek (2005), Zupančič & Žagar (2010), Dakskobler et al. (2015). According to the findings from neighbouring Alpine regions of Italy and Austria (Poldini 1969, 1982, Poldini & Vidali 1999, Martin-Bosse 1967, Franz 2002, Eichberger et al. 2004, 2007a,b, E. & S. Pignatti 2014, 2016), black and (or) Scots pine stands on very steep, rocky dolomite sites and in erosion areas in the Alpine part of Slovenia have so far been classified into the association *Fraxino orni-Pinetum nigrae*, including the more or less pure Scots pine stands that are treated at the rank of subassociations *pinetosum sylvestris*, *lari-cetosum deciduae* and *caricetosum humilis*. Ecologically similar Scots (and black) pine stands outside the Alps, in the northern part of the Dinaric Alps, are classified into the association *Genisto januensis-Pinetum sylvestris* (including subassociation *pinetosum nigrae*), whereas black pine stands are classified into several associations (*Carici sempervirentis-Pinetum nigrae*, *Daphno alpinae-Pinetum nigrae*, *Primulo carniolicae-Pinetum nigrae*, *Thymo prae-cocis-Pinetum nigrae*).

With a phytosociological analysis of extensive relevé material on basophilic Scots and black pine communities in the Southern, Southeastern and Eastern Alps (triggered by the applied research project by Šilc et al. 2017) we are looking into whether it makes sense to differentiate predominantly pure Scots pine stands that sporadically occur in the Julian Alps, the Kamnik-Savinja Alps and in the Karavanke Mts. from the predominantly pure black pine stands on similar sites in the Julian Alps and western Karavanke Mts., rarely also in the Kamnik-Savinja Alps (the Kokra Valley). Given that they occur on similar sites, can they be treated within the habitat type (Sub)Mediterranean pine forests with endemic black pines (9530*), even though they are actually Scots pine stands in the Southern-Alpine region? Is it correct for pure Scots pine stands where black pine does not occur at all to be classified into the association named explicitly after black pine – *Fraxino orni-Pinetum nigrae*? Is the basophilic Scots

pine community in the Southeastern Alps ecologically and floristically different from basophilic Scots pine communities elsewhere in the Alps that are classified into the association *Erico-Pinetum sylvestris*?

Methods

A total of 389 relevés of *Pinus sylvestris* and *Pinus nigra* stands are stored in the FloVegSi database (Seliškar et al. 2003) and Vegetation database of Slovenia (Šilc 2012). Only 308 of these relevés were used in our analysis, because others were too different in ecological terms. The stand layers recorded on sites were merged into four main layers: the tree layer (E3), the shrub layer (E2), the herb layer (E1) and the moss layer (E0), where two shrub and two tree sublayers were merged in one shrub and one tree layer using Jennings et. al. (2009) equation:

$$C_i = \left[1 - \prod_{j=1}^n \left(1 - \frac{\% cov j}{100} \right) \right] \times 100$$

where *cov j* is species cover in sublayer *j*.

The relevés were compared by means of hierarchical classification using the Unweighted average linkage clustering method (UPGMA) and Wishart's similarity ratio. For this purpose, the original Braun-Blanquet cover values were converted into percentages and transformed by square root. In addition we analysed the Wishart's dissimilarity matrix using the principal coordinate analysis (PCoA) method. The ecological variables obtained from the relevés and weighted mean Pignatti ecological indicator values as estimates of ecological variables (Pignatti 2005) were added to the PCoA plot by regression as passive variables. Species accumulation curves (SAC) were used to compare diversity in different syntaxa. In identifying the indicator species of the syntaxa we used the Indicator Value Index (Dufrene & Legendre 1997). Numerical analyses were made with the software package SYN-TAX (Podani 2001) and R (R Core Team 2018), using the package "vegan" (Oksanen et al. 2018).

The variable *northness*, calculated as $(\cos(\text{azimuth}) + 1)/2$, reflects the heat received by the site and moves in the range from 0 (south exposition) to 1 (north exposition), symmetrically over west and east slopes.

Climate data (precipitation volume and mean temperature) were obtained from high resolution raster maps provided by the Environmental Agency of the Republic of Slovenia, Ministry of the Environment and Spatial Planning (<http://www.arso.gov.si/>).

The nomenclatural source for the names of vascular plants are the Mala flora Slovenije (Martinčič et al. 2007) and Flora alpina (Aeschimann 2004a,b). Martinčič

(2003, 2011) is the nomenclatural source for the names of mosses and Suppan et al. (2000) is the nomenclatural source for the names of lichenized fungi. The determination of mosses and lichenized fungi is not always reliable. The nomenclatural sources for the names of syntaxa are Theurillat (2004), Šilc & Čarni (2012) and Mucina et al. (2016). Buser (2009) is the source of data on the geological bedrock and the source for the nomenclature of soil types is Urbančič et al. (2005).

Results and Discussion

Relations of *Pinus sylvestris* forests in the SE Alps to similar *Pinus* communities in the SE Alps and the North Dinaric Alps

In the first step we compared, based on an extensive database (21 tables, 308 relevés) that comprised already published phytosociological relevés of basophilic pine forests

of the Sothern and Southeastern Alps (Martin-Bosse 1967, T. Wraber 1979, Poldini & Vidali 1999, Dakskobler 2006, Zupančič & Žagar 2010, E. & S. Pignatti 2014, 2016) and our unpublished relevés (Dakskobler, mscr., Rozman, mscr.), the floristic composition of basophilic communities with dominant black and (or) Scots pine (Appendix 1). Scots pine relevés from the Southeastern Alps grouped separately from the southeastern-Alpine black pine community (*Fraxino orni-Pinetum nigrae*) and the Alpine Scots pine community (*Erico-Pinetum sylvestris*) (Figure 1).

Based on these comparisons we were able to isolate a group of 52 relevés with dominant Scots pine (Table 1). These included several already published relevés from the Julian Alps, the Karavanke Mts. and the Kamnik-Savinja Alps (T. Wraber 1979: *Pinetum austroalpinum pinetosum sylvestris*; Dakskobler 2006: *Fraxino orni-Pinetum nigrae pinetosum sylvestris* var. *Larix decidua*; Zupančič & Žagar 2010: *Fraxino orni-Pinetum nigrae laricetosum* et *caricetosum humilis*) as well as new relevés (Rozman, Dakskobler), mainly from the Karavanke Mts. To ensure an adequate syntaxonomic designation we conducted an

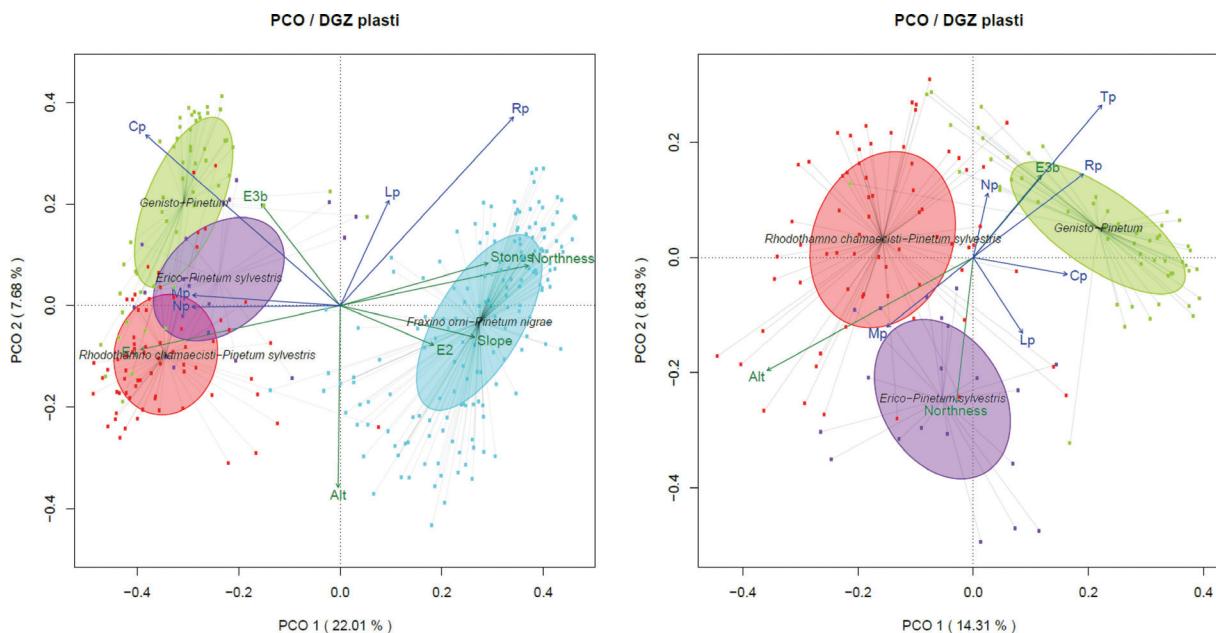


Figure 1: Two principal coordinate analysis (PCoA) ordination plots. The left ordination diagram comprises all Scots and black pine relevés, whereas the right only features the relevés with *Pinus sylvestris* as the dominant species. The ellipses represent the standard deviation of the relevés belonging to a particular pine syntaxon. The first two axes explain 22.01% and 7.68%, respectively, of the variability in data. Arrows represent ecological variables (E3b—upper tree layer coverage, E2—shrub layer coverage, E1—herb layer coverage, Alt—altitude, Slope—nagib, Stoniness—kamnitost, Northness—severnost) or their estimates (weighted mean Pignatti ecological indicator values: Lp—light, Cp—continentality, Rp—soil reaction, Mp—moisture, Np—nitrogen, Tp—temperature).

Slika 1: Dve slike ordinacije PCoA. Leva slika predstavlja ordinacijo vseh obravnavanih popisov rdečega bora, desna slika je ordinacija samo združb rdečega bora. Elipse predstavljajo standardni odštev popisov posameznih tabel borovih združb. Prvi dve osi ordinacije pojasnita 22.01% in 7.68% variabilnosti. Puščice predstavljajo ekološke spremenljivke (E3b—zastrost zgornje drevesne plasti, E2—zastrost grmovne plasti, E1—zastrost zeliščne plasti, Alt—nadmorska višina, Slope—nagib, Stoniness—kamnitost, Northness—severnost) ali njihove ocene (tehtana povprečja Pignattijevih ocen ekoloških dejavnikov: Lp—svetloba, Cp—kontinentalnost, Rp—reakcija tal, Mp—vlažnost, Np—dušik, Tp—temperatura).

other comparison with a synoptic table featuring eight syntaxa with dominant *Pinus sylvestris* from the wider area (Table 3, Figure 2).

Comparison shows that the studied stands are the most similar to the stands of the subassociation *Fraxino orni-Pinetum nigrae pinetosum sylvestris* from NE Italy and stands of the association *Erico-Pinetum sylvestris* from the Dolomites in northern Italy. Similarity with stands of the association *Genisto januensis-Pinetum sylvestris* from western Slovenia is less pronounced, and even less similar are different forms of the association *Erico-Pinetum sylvestris* from Austria, also to the stands of the subassociation *ostryetosum carpinifoliae* Franz 2002. Differences between the compared syntaxa are demonstrated also by the analysis of diagnostic species of individual phytosociological groups (Table 4). Differences are evident especially in the relative proportions of diagnostic species of classes *Erico-Pinetea*, *Vaccinio-Piceetea*, *Festuco-Brometea* in *Elyno-Seslerietea*, partly also in relative proportions of diagnostic species of orders *Fagetales sylvaticae* and *Quercetalia pubescenti-petraeae* and classes *Rhamno-Prunetea*, *Trifolio-Geranietea* and *Thlaspietea rotundifoliae*. Sørensen's similarity index (1948) showed that floristic similarity between the three syntaxa (RcPs-Si, FPnps and EPs-Do) is 55%, whereas Jaccard's index was 40%, which allows us to classify their stands into the same association (either *Erico-Pinetum sylvestris* or *Fraxino orni-Pinetum nigrae*). Classification into the association *Fraxino orni-Pinetum nigrae* (subassociations *pinetosum sylvestris*) is problematic because the studied stands do not comprise black pine. Its classification into a habitat type would mean that Scots pine stands are classified into a black pine habitat type. For other related tree species such as oak, we normally distinguish sessile oak communities from pubescent oak or Turkey oak communities – both at the level of association and habitat types (Šilc & Čarni 2012, Kutnar et al. 2012). Contrary to previous studies in the past (T. Wraber, L. Poldini, M. Zupančič) we believe that a Scots pine community should be named after this species and not after black pine. Another, more appropriate option would be to treat these stands as a special southeastern-Alpine geographical variant of the association *Erico-Pinetum sylvestris*, but with high number of good differential species. However, as this association evidently comprises very diverse stands (as evident in the synoptic table of this association for the territory of Austria and surroundings, Eichberger et al. 2007b) that all comprise Scots pine and winter heath (*Erica carnea*), and since geographical variant is not a rank regulated by the Code of Phytosociological Nomenclature (Weber et al. 2000), the performed comparisons allow for the third option – description of the new association *Rhodothamno-Pinetum sylvestris*. Its

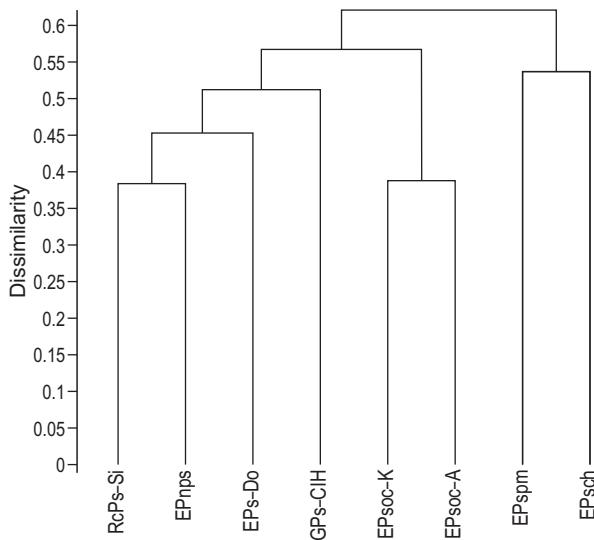


Figure 2: Dendrogram of eight communities with dominant *Pinus sylvestris* in the Southern, Eastern and Southeastern Alps, UPGMA, 1-similarity ratio (See legend below).

Slika 2: Dendrogram osmih združb s prevladajočim rdečim borom v Južnih, Vzhodnih in Jugovzhodnih Alpah, UPGMA, komplement Wishartovega koeficienta podobnosti (glej legendo spodaj).

- RcPs-Si *Rhodothamno-Pinetum sylvestris*, this article, Table 1 (52 relevés)
- FPnps *Fraxino orni-Pinetum nigrae pinetosum sylvestris*, NW Italy, (Poldini & Vidali 1999, Table 2, relevés 18–28 (11 relevés);
- EPs-Do *Erico-Pinetum sylvestris*, N Italy, Dolomites, E. & S. Pignatti 2016, Association Table 5.2 (20 relevés);
- GPs-CIH *Genisto-Pinetum sylvestris*, W Slovenia, Cerkno and Idrija Hills, this article, Table 2 (55 relevés);
- EPsoc-K *Erico-Pinetum sylvestris ostryetosum carpinifoliae*, Carinthia, Austria, Franz 2002, Table 34 (19 relevés);
- EPspm *Erico-Pinetum sylvestris pinetosum mugo*, Austria (Eichberger et al. 2007 b, Table 29, Column 2) (18 relevés);
- EPsch *Erico-Pinetum sylvestris caricetosum bumilis*, Austria and partly neighbouring countries (Eichberger et al. 2007 b, Table 29, Column 4) (36 relevés);
- EPsoc-A *Erico-Pinetum sylvestris ostryetosum carpinifoliae*, Austria (Eichberger et al. 2007 b, Table 29, Column 7) (27 relevés).

diagnostic species are Scots pine (*Pinus sylvestris*), which is the edifier of the community, as well as *Rhodothamnus chamaecistus*, *Laserpitium peucedanoides*, *Betonica alopecuroides*, *Campanula cespitosa*, *Valeriana saxatilis*, *Hieracium porrifolium*, *Cyclamen purpurascens*, *Anemone trifolia*, *Helleborus niger*, *Salix glabra*, *Chamaecytisus purpureus* and *Fraxinus ornus*. The listed species characterise intrazonal southeastern-Alpine Scots pine community on extreme rocky sites in the belt of Illyrian beech forests from the alliance *Armonio-Fagion* on very steep, sunny and shady dolomite slopes and jags on shallow initial soil in the montane and altimontane belt (from 530 to 1350 m a.s.l.). The eastern-Alpine species *Rhodothamnus chamaecistus* is very rare in the relevés of a similar Scots pine

community from northern and northeast Italy, but these relevés are within its distribution area. Other diagnostic species of the association *Rhodothamno-Pinetum sylvestris* occur in the Scots pine community from northern and northeast Italy, e.g. *Campanula cespitosa*, *Betonica alopecuroides*, *Fraxinus ornus*, *Chamaecytisus purpureus*, *Valeriana saxatilis*. Some of them occur also in the stands of the Illyrian (pre-Alpine-Dinaric) association *Genisto januensis-Pinetum sylvestris*, especially on the northwestern border of its distribution area, in the foothills of the Southern Julian Alps (Table 2). This peripheral form is characterised by several (southeastern-Alpine)-Illyrian species (*Genista januensis*, *Scabiosa bladnikiana*, *Salvia pratensis* subsp. *saccardiana*, *Phyteuma scheuchzeri* subsp. *columnae*, *Primula carniolica*) as well as *Campanula cespitosa*, *Allium ericotorum*, *Hieracium porrifolium* and *Chamaecytisus purpureus*, which are frequent also in the southeastern-Alpine Scots pine community. The entire floristic diversity is nevertheless evident, with the proportion of diagnostic species of the class *Vaccinio-Piceetea* in the Alpine Scots pine community totalling 11.7% and only 3.6% in the northern-Dinaric-pre-Alpine community, whereas the latter comprises a substantially higher proportion of diagnostic species of the class *Festuco-Brometea* and order *Quercetalia pubescenti-petraeae*. *Larix decidua* is a good differential species of the southeastern-Alpine Scots pine community against the pre-Alpine-Dinaric community.

The new association is divided into two subassociations. The stands of the slightly more thermophilous subassociation *euphorbiotsum amygdaloidis* occur at on average lower elevations and slightly warmer sites. The differential species of the subassociation are *Euphorbia amygdaloides*, *Euphorbia cyparissias* and *Teucrium chamaedrys*. We distinguish between two variants. The variant with *Gentiana asclepiadea* characterises stands that are very atypical for the studied community – their tree layer is dominated by larch and spruce rather than Scots pine (one of the relative differential species is also *Valeriana tripteris*). These stands indicate a certain similarity with stands of associations *Rhodothamno-Laricetum* and *Aposerido-Piceetum*, which indicates that they are unlikely to be primary Scots pine stands. The floristic composition of the variant with *Viola hirta* (its differential species are also *Vincetoxicum hirundinaria* and *Brachypodium rupestre*) possibly indicates the effects of past grazing of small ruminants. The localities of the relevés are in the western Karavanke Mts. and in the Savinja Alps, two relevés are also from the Julian Alps (Mala Pišnica). Differential species of the subassociation *sorbetosum aucupariae* are *Rhododendron hirsutum*, *Sorbus aucuparia*, *Vaccinium myrtillus* and *Juniperus communis*. *Sesleria caerulea* and species of the class *Elyno-Seslerietea* in particular also have a certain differential value. This

is evident in the indicator species analysis (Table 5). The species we identified as indicator species were those whose IndVal value was characteristic ($P < 0.05$) for a particular subassociation. Table 5 shows number of indicator species of particular phytosociological groups in each subassociation. Indicator species in the first subassociation do not comprise species of the class *Elyno-Seslerietea*, but feature more species of the class *Festuco-Brometea*, whereas the situation is reversed in the second subassociation.

Relevés of the subassociation *sorbetosum aucupariae* characterise comparatively colder sites with mor rendzina at slightly higher elevations. The localities of the relevés are in the eastern Karavanke Mts. and in the Julian Alps, only one relevé is from the Savinja Alps.

Scots pine stands in Table 2 are classified into the association *Genisto januensis-Pinetum sylvestris* and the new subassociation *campanuletosum cespitosae*. The differential species of the subassociation are the eastern-Alpine species *Campanula cespitosa* and the south-European montane species *Allium ericotosum*, which indicate a certain similarity with the Alpine Scots pine community and the vicinity of the Julian Alps. These two species are not mentioned in the phytosociological table of the original description of this association (Tomažič 1940). Currently known distribution of the stands of the new subassociation in Slovenia is shown in Appendix 2. The stands were inventoried in the Cerkno and the Idrija Hills, which partly belong to the foothills of the Julian Alps (pre-Alpine phytogeographical region) and partly to the Dinaric Alps (Dinaric phytogeographical region), and in the Trebuša Valley (Dinaric Alps) at elevations spanning 300 to 920 m, on steep to very steep sunny and shady dolomite slopes.

Synsystematic classification of newly described communities

According to the syntaxonomic system of higher units (Šilc & Čarni 2012, Mucina et al. 2016), studied Scots pine forests can be classified as follows:

Erico-Pinetea Horvat 1959

Erico-Pinetalia Horvat 1959 nom. conserv. propos.

Erico carneae-Pinion Br.-Bl. in Br.-Bl. et al. 1939
nom. invers. propos.

(*Fraxino ornii-Pinion nigrae-sylvestris* Zupančič 2007, group of basophilic *Pinus nigra* and (or) *Pinus sylvestris* communities in the Southeastern Alps and northern Dinaric Alps)

Rhodothamno chamaecisti-Pinetum sylvestris
ass. nov. hoc loco, nomenclatural type, *holotypus*, is relevé 17 in Table 1.

Syn: *Pinetum austroalpinum* (Aich. 1933) Br.-Bl. et Siss 1939 *pinetosum sylvestris* (Aichinger 1933) Br.-Bl. et Siss. 39) pro parte (T. Wraber 1979); *Fraxino orni-Pinetum nigrae* Martin-Bosse 1967 *pinetosum sylvestris* T. Wraber 1979 typus excluded (Poldini & Vidali 1999); *Fraxino orni-Pinetum nigrae pinetosum sylvestris* T. Wraber 1979 var. *Larix decidua* Dakskobler 2006, typus included (Dakskobler 2006); *Fraxino orni-Pinetum nigrae laricetosum deciduae* Zupančič & Žagar 2010, typus included, *Fraxino orni-Pinetum nigrae caricetosum humilis* Martin Bosse 1967, typus excluded pro parte (Zupančič & Žagar 2010).

-*euphorbietosum amygdaloidis* subass. nov. hoc loco, nomenclatural type, *holotypus*, is relevé 17 in Table 1

-*sorbetosum aucupariae* subass. nov. hoc loco, nomenclatural type, *holotypus*, is relevé 28 in Table 1

***Genisto januensis-Pinetum sylvestris* Tomažič 1940**

-*campanuletum cespitosae* Dakskobler in Rozman, Dakskobler et Šilc 2019 subass. nov. hoc loco, nomenclatural type, *holotypus*, is relevé 14 in Table 2.

Ecological conditions in the studied pine stands

Basophilic Scots pine forests from the association *Rhodothamno chamaecysti-Pinetum sylvestris* occur on predominantly dolomite bedrock at elevations ranging from 500 to 1500 m, with the highest occurrence density at the elevations between 1000 and 1200 m; stands from the association *Genisto januensis-Pinetum sylvestris* occur lower, at between 300 and 900 m a.s.l., and are the most frequent at elevations spanning 500 to 600 m (Figure 3). Mean annual temperature in the stands of the association *Rhodothamno chamaecysti-Pinetum sylvestris* is therefore lower (between 5 and 6 °C) than in the stands of the association *Genisto januensis-Pinetum sylvestris* (around 9

°C). Stands of the association *Genisto januensis-Pinetum sylvestris* receive between 1800 and 2000 mm annual precipitation, whereas the annual precipitation in the stands of the association *Rhodothamno chamaecysti-Pinetum sylvestris* varies substantially due to geographical conditions. The eastern Karavanke Mts. receive less precipitation (1400–1600 mm) than the western Karavanke Mts. and the Julian Alps (1800–2000 mm). Monthly distribution of precipitation for the western part of the distribution area of associations *Rhodothamno chamaecysti-Pinetum sylvestris* and *Genisto januensis-Pinetum sylvestris* indicates that most of the precipitation is received in autumn with a small peak in early summer (Figure 4), whereas the autumn maximum is not observed in the eastern part of the distribution area and maximum precipitation is received in summer months.

Warm aspects predominate in both communities, with surface rockiness for the most part below 20%. Stands of the association *Genisto januensis-Pinetum sylvestris* have a higher percentage of the tree layer cover, on average between 60 and 70%, whereas the stands of the association *Rhodothamno chamaecysti-Pinetum sylvestris* have between 50 and 60%. The herb layer cover in both communities exceeds 80% and in most part of the stands of the association *Rhodothamno chamaecysti-Pinetum sylvestris* the herb layer covers more than 90% of the forest floor. Trees are bigger in the stands of the association *Rhodothamno chamaecysti-Pinetum sylvestris*, with most trees measuring between 30 and 50 cm in diameter at breast height. Trees measuring more than 40 cm in diameter at breast height are very rare in the stands of the association *Genisto januensis-Pinetum sylvestris*. Trees are generally small, rarely taller than 20 m.

Species diversity of the studied stands is mainly 40 to 60 species per relevé, slightly higher in the stands of the association *Rhodothamno chamaecysti-Pinetum sylvestris*, where the tree layer is less dense and the herb layer more compact. For the association *Rhodothamno-Pinetum* we also determined a higher total number of species (Figure 3).

Figure 3: Ecological conditions (Altitude, Northness, Stoniness, E3-tree layer coverage, E2-shrub layer coverage, E1-herb layer coverage, MeanTemp/Y-mean annual temperature, SumPrec/Y-annual sum of precipitation), some stand parameters ((Dmax-maximum tree diameter, Hmax-height of the tallest trees) and species diversity in studied Scots pine stands.

Slika 3: Ekološke razmere (nadmorska višina, severnost, kamnitost, E3-zastrstost drevesne plasti, E2-zastrstost grmovne plasti, E1-zastrstost zeliščne plasti, MeanTemp/Y-srednja letna temperatura, SumPrec/Y-letna količina padavin), nekateri stojni parametri (Dmax-največji prsni premer, Hmax-višina najvišjih dreves) in vrstna pestrost v obravnavanih stojnih rdečega bora.

Figure 4: Distribution of mean monthly temperature and precipitation sums in the stands of associations *Genisto januensis-Pinetum sylvestris* and *Rhodothamno chamaecysti-Pinetum sylvestris*; the stands of the latter are presented separately for the eastern and western part of the distribution area.

Slika 4: Razpored povprečne mesečne temperature in padavinskih vsot v stojnih asociacij *Genisto januensis-Pinetum sylvestris* in *Rhodothamno chamaecysti-Pinetum sylvestris*; stojni te združbe so prikazani ločeno za vzhodni in zahodni del area.

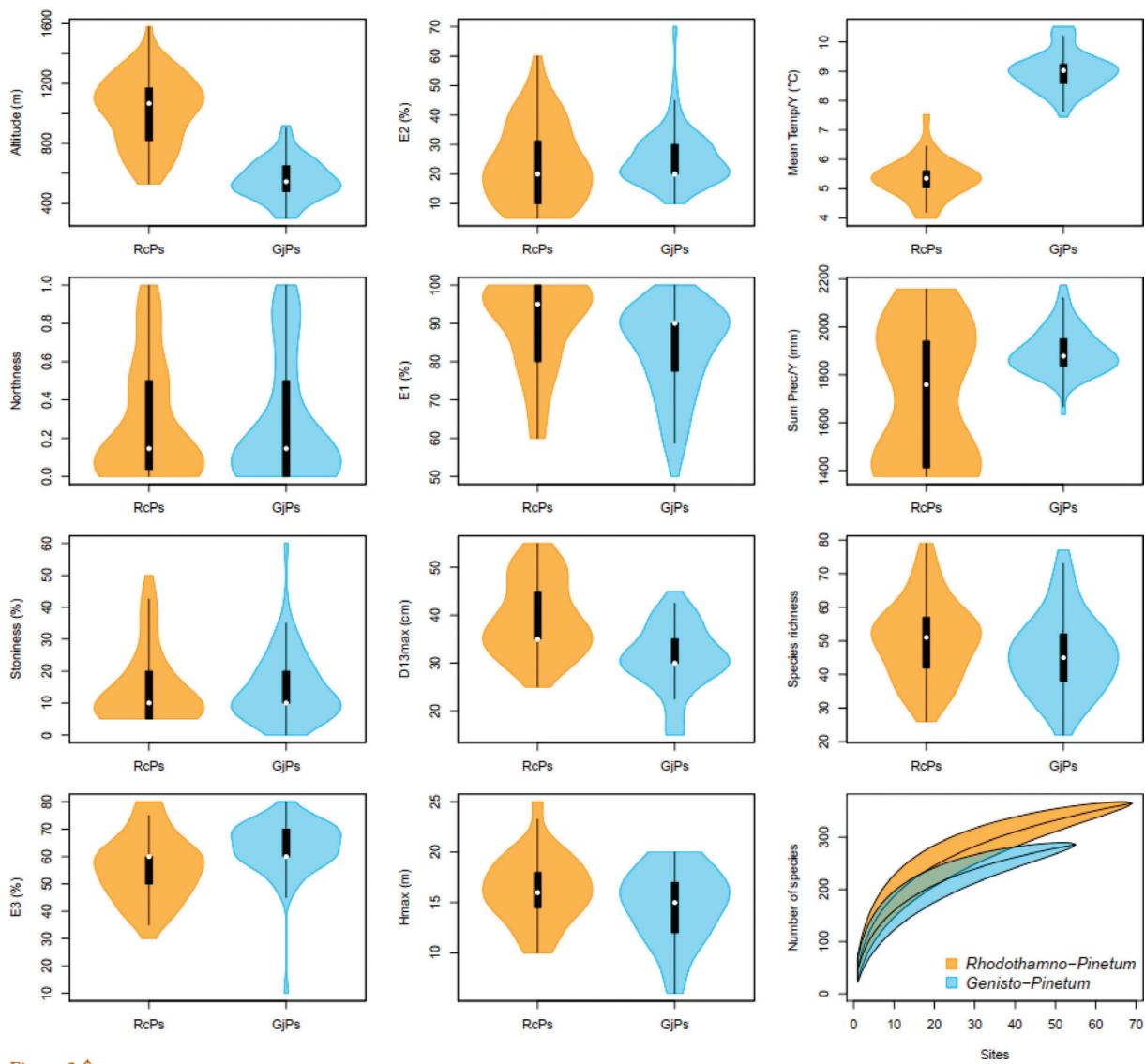
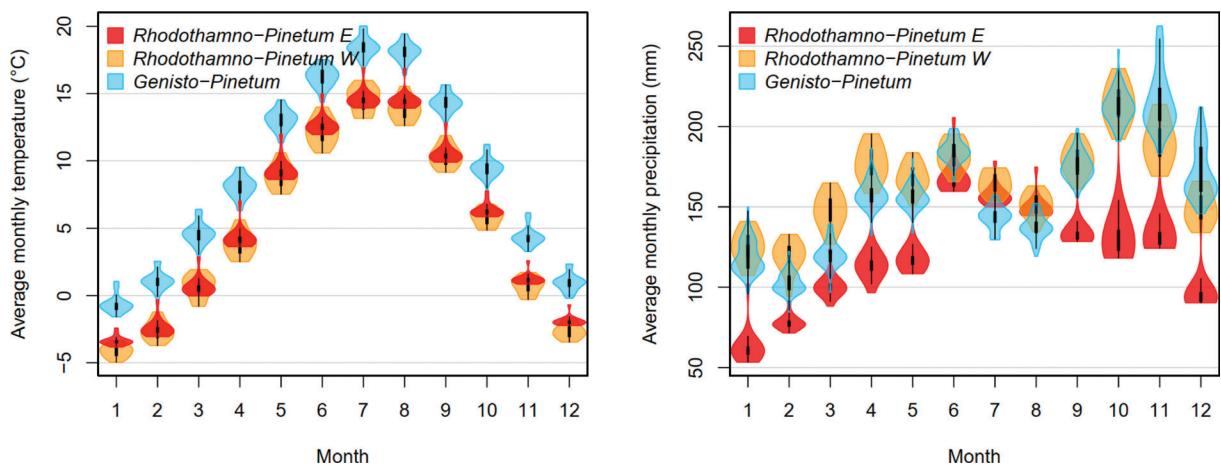


Figure 3 ↑

Figure 4 ↓



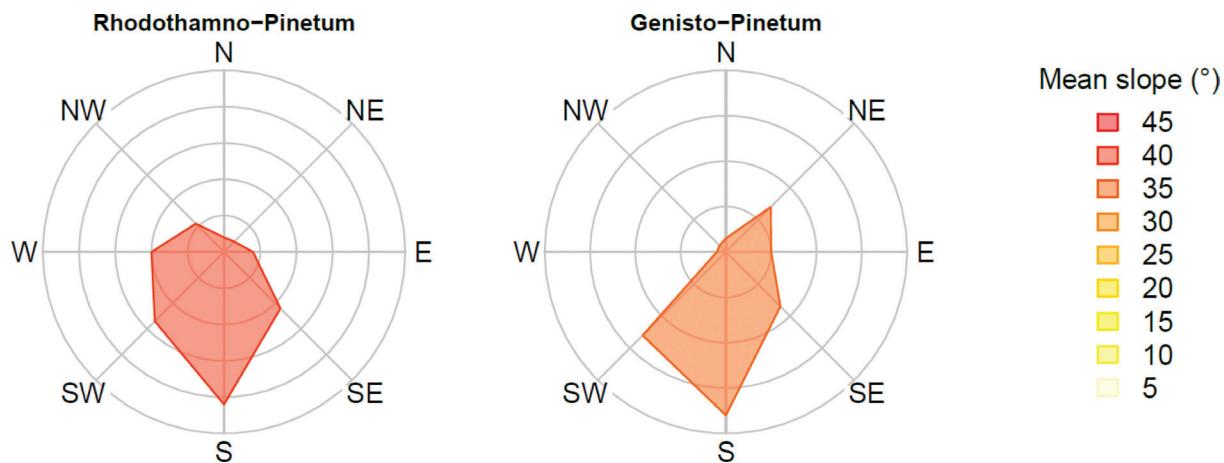


Figure 5: Rose diagrams of aspects showing mean slope in pine stands.
Slika 5: Roži nebesnih leg s prikazom povprečne strmine borovih stojev.

Sunny aspects on rather steep terrain prevail in both studied communities. The average slope of the stands of the association *Rhodothamno chamaecysti-Pinetum sylvestris* is about 40°, and about v 35° in the stands of the association *Genisto januensis-Pinetum sylvestris* (Figure 5).

Habitat typology and nature conservation status

None of the FFH (Fauna-Flora-Habitat Directive) habitat types in the existing European Nature Information System (EUNIS) classification is quite appropriate for the Scots pine community on extreme sites in the Southeastern Alps. The list of threatened habitats in Austria (Essl et al. 2002) classifies the stands of the association *Erico-Pinetum sylvestris* as Scots pine forests on carbonate bedrocks (Karbonat-Rotföhrenwald) and does not classify them under any FFH habitat type. The studied community also cannot be classified into the habitat type (Sub)Mediterranean pine forests with endemic black pines (9530*). Proposed solution for the stands of the new association is to be classified into a new habitat subtype Southeastern-Alpine Scots pine forests of the Natura 2000 habitat type Southeastern European Scots pine forests (91R0). The distribution of basophilic Scots and black pine communities these pine communities in Slovenia is shown in Figure 6.

In terms of phytosociology the southeastern-Alpine Scots pine stands, despite their ecological and floristic similarities with black pine stands, should not be classified into the association *Fraxino orni-Pinetum nigrae* because of the absence of black pine. Numerical comparison of a large number of relevés provided enough reasons for

them to be discussed separately in the syntaxonomic system. They could be classified into the Alpine association *Erico-Pinetum sylvestris*. Floristic similarity with stands of this association from the Dolomites is substantial, but considerably lower with the stands of this association in the Eastern Alps. Another option would be a new geographical variant. This rank is not discussed by the Code of Phytosociological Nomenclature. Describing a new association *Rhodothamno-Pinetum sylvestris* is therefore well-founded; this association can comprise also ecologically similar Scots pine stands on similar sites in the Southern and Southeastern Alps in northern and northeast Italy, but not the stands of the subassociation *Erico-Pinetum sylvestris ostryetosum carpinifolia* from southern Austria. Despite a number of shared diagnostic species and the fact that the transition between the Alps and the Dinarides is smooth, without sharp divisions, the studied stands still cannot be classified into the Illyrian (northern-Dinaric) association *Genisto-Pinetum sylvestris*. The differences in the composition by groups of diagnostic species are too obvious. Differential species include above all species from the class *Vaccinio-Piceetea*, in particular larch (*Larix decidua*) and mountain cranberry (*Vaccinium vitis-idaea*). Stands of the association *Rhodothamno-Pinetum sylvestris* are classified also in the new forest site type Southeastern-Alpine basophilic Scots pine forests, whereas the existing forest site type Basophilic forests of Scots pine should be renamed as Pre-Alpine-Dinaric basophilic Scots pine forests (Kutnar et al. 2012: 204).

The stands of the The Southeastern-Alpine Scots pine community (*Rhodothamno-Pinetum sylvestris*) in Slovenia populates at least 496 ha (Šilc et al. 2017) as well as large surface areas in the western Julian Alps, the Carnic Alps and the Friuli Dolomites (Del Favero et al. 1998: 100).

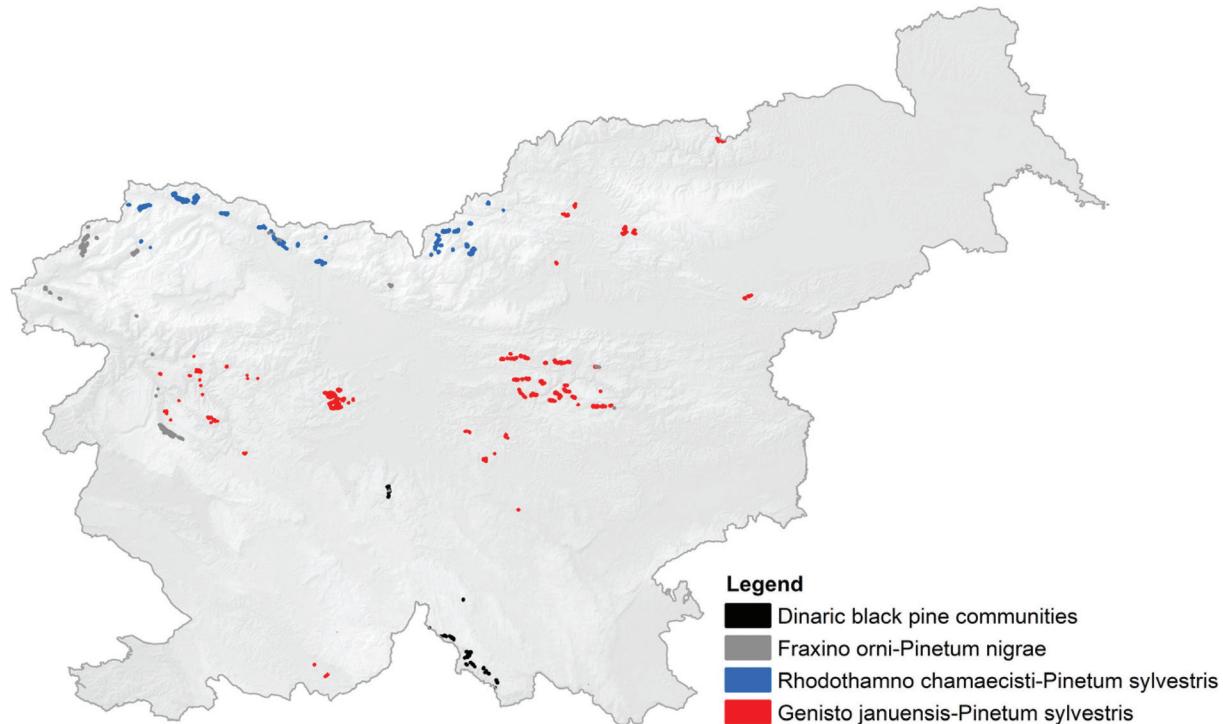


Figure 6: Distribution map of basophilic Scots and black pine communities in Slovenia.

Slika 6: Karta razširjenosti obravnavanih združb rdečega in črnega bora v Sloveniji.

These are mainly protective forests and their commercial value is therefore negligible. In Slovenia, they are a constituent part of the following forest reserves: Kukla, Mala Pišnica, Belca, Matkov kot-Logarska dolina (Mlinšek et al. 1980, Marenč 2003), as well as one of the forest types in the Triglav National Park, the Logarska dolina (Logar Valley) Landscape Park and the Topla Landscape Park. Southeastern-Alpine *Pinus sylvestris* forest species comprise also Red list species (Anon. 2002) *Orobanche teucrii* and several protected species (Anon. 2004): *Arctostaphylos uva-ursi*, *Cephalanthera rubra*, *C. damasonium*, *C. longifolia*, *Convallaria majalis*, *Cyclamen purpurascens*, *Daphne cneorum*, *Dactylorhiza fuchsii*, *Dianthus sylvestris*, *Diphasiastrum complanatum*, *Epipactis atrorubens*, *E. helleborine*, *E. muelleri*, *Gymnadenia conopsea*, *G. odoratissima*, *Helleborus niger*, *Ilex aquifolium*, *Iris graminea*, *Lilium carniolicum*, *L. martagon*, *Listera ovata*, *Neottia nidus-avis*, *Ophrys insectifera*, *Pinguicula alpina*, *Platanthera bifolia*, *Primula auricula*, and *Taxus baccata*.

In the stands of the subassociation *Genisto januensis-Pinetum sylvestris campanuletosum cespitosae* we listed also Natura 2000 plant species *Primula carniolica*, Red List species (Anon. 2002): *Hemerocallis lilioasphodelus*, *Schizoneurus nigricans* and *Veratrum nigrum*, and the following protected species (Anon. 2004): *Cephalanthera rubra*,

C. damasonium, *C. longifolia*, *Convallaria majalis*, *Cyclamen purpurascens*, *Dianthus hyssopifolius* (*D. monspessulanus*), *Epipactis atrorubens*, *E. helleborine*, *E. muelleri*, *Gymnadenia conopsea*, *G. odoratissima*, *Helleborus niger*, *Ilex aquifolium*, *Iris graminea*, *Lilium carniolicum*, *L. martagon*, *Listera ovata*, *Neottia nidus-avis*, *Ophrys insectifera*, *Pinguicula alpina*, *Platanthera bifolia*, and *Taxus baccata*.

Povzetek

Fitocenološka oznaka naravnih bazoljubnih sestojev rdečega bora (*Pinus sylvestris*) v Jugovzhodnih Alpah

S fitocenološko obdelavo obsežnega popisnega gradiva bazoljubnih združb rdečega in črnega bora v Južnih, Jugovzhodnih in Vzhodnih Alpah (spodbudila jih je aplikativna raziskava, Šilc et al. 2017), smo že leli preveriti, ali je smiselno v glavnem čiste sestoje rdečega bora, ki rastejo ponekod v Julijskih in Kamniško-Savinjskih Alpah ter v Karavankah, razlikovati od v glavnem čistih sestojev črnega bora na podobnih rastiščih v Julijskih Alpah in zahodnih Karavankah, zelo redko v Kamniško-Savinjskih Alpah (dolina Kokre). Z analizo zbranega popisnega gradiva smo ugotovili, da združbo rdečega bora na skrajnih rastiščih v Jugovzhodnih Alpah nikakor ne moremo uvrstiti v habitatni tip (Sub)mediteranski gozdovi črnega

bora (9530*), prav tako ni v obstoječi Eunis klasifikaciji habitatnih tipov zanjo noben FFH habitatni tip povsem ustrezен. V seznamu ogroženih habitatov Avstrije (Essl et al. 2002) sestoje asociacije *Erico-Pinetum sylvestris* uvrščajo k združbam rdečega bora na karbonatni podlagi (Karbonat-Rotföhrenwald), vendar ti ne sodijo v noben FFH habitatni tip. Sestoje nove asociacije zato za zdaj uvrščamo v Natura 2000 habitatni tip Jugovzhodnoevropski gozdovi rdečega bora (91R0) in predlagamo poseben habitatni podtip Jugovzhodnoalpski gozdovi rdečega bora.

V fitocenološkem smislu jugovzhodnoalpske sestoje rdečega bora, kljub ekološkim in florističnim podobnostim s sestoji črnega bora zaradi odsotnosti le tega, ni ustrezno uvrščati v asociacijo *Fraxino orni-Pinetum nigrae*. Numerična primerjava velikega števila popisov daje dovolj razlogov, da jih v sintaksonomskem sistemu obravnavamo ločeno. Njihova uvrstitev v alpsko asociacijo *Erico-Pinetum sylvestris* je mogoča. Floristična podobnost s sestoji te asociacije iz Dolomitov je precejšnja, bistveno manjša pa s sestoji te asociacije v Vzhodnih Alpah. Mogoči rang bi bila nova geografska varianta. Tega ranga Kodeks fitocenološke nomenklature ne obravnava. Zato je utemeljen opis nove asociacije *Rhodothamno-Pinetum sylvestris*, v katero lahko uvrstimo tudi ekološko in rastiščno podobne sestoje rdečega bora iz Južnih in Jugovzhodnih Alp v severni in severovzhodni Italiji, ne pa sestojev subasociacije *Erico-Pinetum sylvestris ostryetosum carpinifolia* iz južne Avstrije. Priključitev preučenih sestojev ilirski (severno-dinarski) asociaciji *Genisto-Pinetum sylvestris* je kljub precej skupnim diagnostičnim vrstam in dejству, da je prehod med Alpami in Dinarskim gorstvom zelo zvezen, brez ostrih meja, ni mogoča. Razlike v sestavi po skupinah diagnostičnih vrst so preveč očitne. Razlikovalne so predvsem vrste razreda *Vaccinio-Piceetea*, še posebej macesen (*Larix decidua*) in brusnica (*Vaccinium vitis-idaea*). Sestoje asociacije *Rhodothamno-Pinetum sylvestris* uvrščamo tudi v nov gozdni rastiščni tip Jugovzhodnoalpsko bazoljubno rdečeborovje, medtem ko je obstoječi gozdni rastiščni tip Bazoljubno rdečeborovje treba preimenovati v Predalpsko-dinarsko bazoljubno rdečeborovje (Kutnar et al. 2012: 204).

Jugovzhodnoalpski sestoji rdečega bora (*Rhodothamno-Pinetum sylvestris*) v Sloveniji poraščajo najmanj 496 ha (Šilc et al. 2017), prav tako pa se pojavljajo še na obsežnih površinah zahodnih Julijskih Alp, Karnijskih Alp in v Dolomitih (Del Favero et al. 1998: 100). Večinoma gre za varovalne gozdove z zanemarljivim gozdnogospodarskim pomenom. Ti gozdovi so v Sloveniji sestavni del vegetacije večih gozdnih rezervatov: Kukla, Mala Pišnica, Belca, Matkov kot-Logarska dolina (Mlinšek et al. 1980, Marenč 2003); in naravnih parkov: Triglavski narodni park, krajinski park Logarska dolina, krajinski park Topla.

V Jugovzhodnoalpskih gozdovih rdečega bora raste tudi vrsta z rdečega seznama ogroženih rastlinskih vrst (Anon. 2002) *Orobanche teucrii* in številne druge zavarovane vrste (Anon. 2004): *Arctostaphylos uva-ursi*, *Cephalanthera rubra*, *C. damasonium*, *C. longifolia*, *Convallaria majalis*, *Cyclamen purpurascens*, *Daphne cneorum*, *Dactylorhiza fuchsii*, *Dianthus sylvestris*, *Diphasiastrum complanatum*, *Epipactis atrorubens*, *E. helleborine*, *E. muelleri*, *Gentiana clusii*, *Goodyera repens*, *Gymnadenia odoratissima*, *G. conopsea*, *Helleborus niger*, *Huperzia selago*, *Iris graminea*, *Lilium martagon*, *Listera cordata*, *L. ovata*, *Neottia nidus-avis*, *Ophrys insectifera*, *Pinguicula alpina*, *Platanthera bifolia*, *Primula auricula* in *Taxus baccata*.

V Cerkljanskem in Idrijskem hribovju in deloma v dolini Trebuše (Pršjak) smo opisali novo subasociacijo severno-dinarskega (ilirskega) bazoljubnega rdečega borovja *Genisto januensi-Pinetum sylvestris campanuletosum cespitosae*, kjer so rastišča Natura 2000 vrste *Primula carniolica*, vrst rdečega seznama ogroženih rastlinskih vrst (Anon. 2002): *Hemerocallis lilioasphodelus*, *Schoenus nigricans* in *Veratrum nigrum* in zavarovanih vrst (Anon. 2004): *Cephalanthera rubra*, *C. damasonium*, *C. longifolia*, *Convallaria majalis*, *Cyclamen purpurascens* *Dianthus hyssopifolius* (*D. monspessulanus*), *Epipactis atrorubens*, *E. helleborine*, *E. muelleri*, *Gymnadenia conopsea*, *G. odoratissima*, *Helleborus niger*, *Ilex aquifolium*, *Iris graminea*, *Lilium carniolicum*, *L. martagon*, *Listera ovata*, *Neottia nidus-avis*, *Ophrys insectifera*, *Pinguicula alpina*, *Platanthera bifolia* in *Taxus baccata*.

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Appendix 1: An overview of analytical tables, included in the analysis of pine stands.

Priloga 1: Pregled analitskih tabel, ki smo jih vključili v analizo borovih sestojev.

Sign / Oznaka	No. Rel. / Št. pop.	Association / Asociacija	Author / Avtor	Mountain range / Pogorje
EcPs.Pa.15	20	<i>Erico-Pinetum sylvestris</i>	Pignatti	Dolomites
FoPn.Db.2	4	<i>Fraxino orni-Pinetum nigrae</i>	Dakskobler	Julian Alps
FoPn.Dc.3	22	<i>Fraxino orni-Pinetum nigrae</i>	Dakskobler	Julian Alps
FoPn.Dd.4	30	<i>Fraxino orni-Pinetum nigrae</i>	Dakskobler	Trnovski Gozd
FoPn.Df.6	5	<i>Fraxino orni-Pinetum nigrae</i>	Dakskobler	Julian Alps
FoPn.Gf.Dg.7	10	<i>Fraxino orni-Pinetum nigrae</i>	Dakskobler	Kamnik Alps
FoPn.Ra.9	13	<i>Fraxino orni-Pinetum nigrae</i>	Rozman	W Karavanke
FoPn.pn.Wa.13	12	<i>Fraxino orni-Pinetum nigrae</i>	Wraber	Julian Alps
FoPn.pn.PVa.16	17	<i>Fraxino orni-Pinetum nigrae</i>	Poldini_Vidali	Julian and Carnic Alps
FoPn.ch.MBa.18	28	<i>Fraxino orni-Pinetum nigrae</i>	Martin-Bose	A Carinthia
FoPn.cv.MBb.19	16	<i>Fraxino orni-Pinetum nigrae</i>	Martin-Bose	A Carinthia
FoPn.cv.Pp.MBc.20	9	<i>Fraxino orni-Pinetum nigrae</i>	Martin-Bose	A Carinthia
GjPs.Di.21	55	<i>Genisto-Pinetum</i>	Dakskobler	Cerkljansko Hills
RcPs.ld.Da.1	8	<i>Rhodothamno chamaecistis-Pinetum sylvestris</i>	Dakskobler	Julijske Alpe
RcPs.De.5	4	<i>Rhodothamno chamaecistis-Pinetum sylvestris</i>	Dakskobler	Julian pre-Alps
RcPs.Dh.8	15	<i>Rhodothamno chamaecistis-Pinetum sylvestris</i>	Dakskobler	E Karavanke
RcPs.Rb.10	13	<i>Rhodothamno chamaecistis-Pinetum sylvestris</i>	Rozman	W Karavanke
RcPs.ld.Z.11	4	<i>Rhodothamno chamaecistis-Pinetum sylvestris</i>	Zupančič	Kamnik Alps
RcPs.ch.Z.12	7	<i>Rhodothamno chamaecistis-Pinetum sylvestris</i>	Zupančič	Julian Alps, W Karavanke
RcPs.Wb.14	5	<i>Rhodothamno chamaecistis-Pinetum sylvestris</i>	Wraber	Julian Alps, W Karavanke
RcPs.PVa.17	11	<i>Rhodothamno chamaecistis-Pinetum sylvestris</i>	Poldini_Vidali	Julian and Carnic Alps

Appendix 2: Distribution of researched stands of the subassociation *Genisto januensis-Pinetum sylvestris campanuletosum cespitosae* on the map of Slovenia.

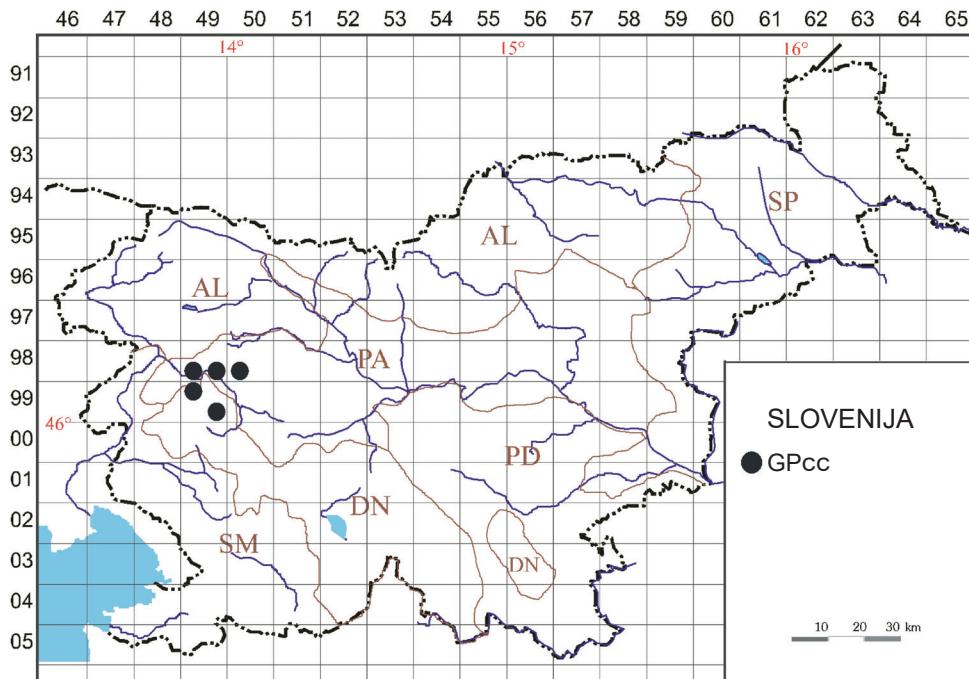
Priloga 2: Razširjenost preučenih sestojev subasociacije *Genisto januensis-Pinetum sylvestris campanuletosum cespitosae* na zemljevidu Slovenije.


Table 1 (Tabela 1): *Rhodothamno chamaecisti-Pinetum sylvestris ass. nov.*

Number of relevé (Zaporedna štev. popisa)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
Database number of relevé (Delovna številka popisa)	16546	16547	16548	16549	16553	16555	16556	16557	16558	1080	1315	1110	1100	690	620	530	970	730	950	1170	
Author of the relevé (Avtor popisa)	MZVŽ	MZVŽ	MZVŽ	MZVŽ	MZVŽ	MZVŽ	MZVŽ	MZVŽ	MZVŽ	MZVŽ	MZVŽ	MZVŽ	MZVŽ	MZVŽ	MZVŽ	MZVŽ	MZVŽ	MZVŽ	MZVŽ		
Elevation in m (Nadmorska višina v m)	1080	1315	1110	1100	690	620	530	970	730	950	1170	1080	1315	1110	1100	690	620	530	970	730	
Aspect (Legă)	W-N	SE	S	S	SW	SW	SW	E	S	SSW	SE	W-N	SE	S	SW	E	SE	SSW	SE	W-N	
Slope in degrees (Nagib v stopinjah)	70	40	45	20	45	40	40	40	45	30	35	70	50	50	40	60	60	60	40	60	
Parent material (Matična podlaga)	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	
Soil (Tla)	Re	Re	Re	Re	Re	Re	Re	Re	Re	Re	Re	Re	Re	Re	Re	Re	Re	Re	Re	Re	
Stoniness in % (Kamnitost v %)	40	10	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	
Cover in % (Zastiranje v %):	E3b	80	60	40	60	50	50	80	70	80	70	50	60	60	40	60	60	60	40	60	
Tree layer (drevesna plast)	E2	40	20	60	10	30	30	40	30	35	20	10	10	20	20	10	20	15	20	5	10
Shrub layer (Grmovna plast)	E1	80	100	100	100	100	100	80	90	80	100	100	95	95	100	100	95	90	90	95	
Herb layer (Zeliščna plast)	E0	.	.	20	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Moss layer (Mahovna plast)	KSA Raduha, Rogovlje	KSA Raduha, Rogovlje	KSA Raduha, Tolsta peč	KSA Raduha, Rogovlje	KSA Raduha, Rogovlje	K Belca	K Belca	K Belca	K Tabre	J A Mala Pšenica	J A Mala Pšenica	K Belca	K Belca	K Belca	K Belca						
Number of species (Število vrst)	m ²	400	400	400	400	400	400	300	200	300	400	400	400	400	400	400	400	400	400	400	
Relevé area (Velikost popisne ploskve)																					

Locality (Nahajališče)

Diagnostic species of the association (Diagnostične vrste asociacijske)

EP	<i>Pinus sylvestris</i>	E3b	+	+	+	1	2	3	4	4	4	5	3	4	4	3	3	4	3	4	
EP	<i>Pinus sylvestris</i>	E3a	.	.	.	.	.	.	.	.	.	.	.	.	.	1	2	.	+	2	2
EP	<i>Pinus sylvestris</i>	E2b	+	.	.	+	1	1	1	+	+	.	+	.	+	+	+	.	+	+	
EP	<i>Pinus sylvestris</i>	E2a	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
EP	<i>Pinus sylvestris</i>	E1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
AF	<i>Cyclamen purpurascens</i>	E1	.	1	+	1	+	+	+	+	1	1	+	+	+	+	.	+	+	1	+
ES	<i>Betonica alopecuroides</i>	E1	.	.	.	.	+	1	2	+	.	2	+	+	+	+	1	.	+	+	.
AF	<i>Helleborus niger</i>	E1	+	1	+	1	+	+	+	+	1	2	2	1	+	2	1	1	1	1	+
ES	<i>Laserpitium peucedanoides</i>	E1	.	.	.	.	.	.	+	.	.	.	.	+	.	.	+	.	.	.	+
EP	<i>Rhodothamnus chamaecistus</i>	E1	1	.	.	+	.	+	.	.	.	.	.	.	.	.	.	+	.	.	.
PC	<i>Valeriana saxatilis</i>	E1	.	.	.	.	.	+	+	.	.	.	.	.	.	+	.	+	.	.	.
PC	<i>Campanula cespitosa</i>	E1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	+	+	+	.
TR	<i>Hieracium porrifolium</i>	E1	.	.	.	.	.	.	.	.	.	.	.	.	.	+	.	+	+	+	.
AF	<i>Anemone trifolia</i>	E1	.	.	.	.	.	.	+	.	1	1	+	.	.	+	+	+	+	.	.
BA	<i>Salix glabra</i>	E2a	+	.	.	.	+	+	+	+	.	.	.	.	.	.	.	.	.	r	.
QP	<i>Fraxinus ornus</i>	E3a	.	.	.	.	.	.	.	.	.	.	.	2	+	.	.	.	.	.	.
QP	<i>Fraxinus ornus</i>	E2b	.	.	+	.	+	1	1	+	2	1	+	+	2	2	.	+	.	.	.
QP	<i>Fraxinus ornus</i>	E2a	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
QP	<i>Fraxinus ornus</i>	E1	.	.	.	.	.	.	.	.	.	.	.	.	+	+	.	.	.	.	.
EP	<i>Chamaecytisus purpureus</i>	E1	.	.	+	1	.	.	.	1	+	+	+	+	+	.	.	.	.	.	.

21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	Pr.	Fr.
20420																
1202	AR															
S	SW															
35	45	40	40	50	50	50	40	40	25	40	45	35	40	45		
D	D	D	D	D	D	D	D	D	D	D	D	D	D	D		
D	D	D	D	D	D	D	D	D	D	D	D	D	D	D		
Re	Re	Re	Re	Re	Re	Re	Re	Re	Re	Re	Re	Re	Re	Re		
Re	Re	Re	Re	Re	Re	Re	Re	Re	Re	Re	Re	Re	Re	Re		
0	10	5	0	20	10	10	20	10	20	20	5	30	20	50	10	0
60	40	50	50	40	40	40	60	60	50	60	60	30	50	50	70	90
10	10	5	5	20	30	25	30	10	10	20	40	50	40	20	50	10
95	90	95	95	80	90	90	70	80	80	80	70	80	90	95	100	100
.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	50	70
400	400	400	400	400	400	200	200	200	200	200	200	200	200	200	400	400

K Belca	K Belca	K Belca	K Belca	K Tabre	K Tabre	K Tabre	K Tabre	J A Trenta-Kukla	J A Trenta-Beli potok	J A Loška Koritnica Kaluder	J A Loška Koritnica Jerebica	KSA Logarska dolina-Palenk	K Topla-Šodri	K Topla-Šodri	K Topla-Mala Peca	K Topla-Šodri	K Topla-Mala Peca	K Topla-Mala Peca	K Topla-Mala Peca	K Topla-Mala Peca	K Topla-Peca	K Topla-Mala Peca	K Topla-Peca	K Topla-Florin	k Črna -Helenski potok	Pr.	Fr.							
4	3	4	4	3	3	3	3	3	3	3	3	2	1	2	3	4	5	3	4	5	3	4	3	3	5	4	3	4	52	100				
1	3	2	+	3	3	3	+	+	.	+	.	.	+	+	.	.	1	1	1	1	1	1	1	1	1	1	1	1	1	30	58			
.	.	.	.	1	2	+	r	r	1	+	+	.	1	.	+	30	58					
.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	+	.	.	.	.	.	.	.	.	4	8
.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	+	.	.	.	.	.	.	.	.	4	8
+	+	+	1	1	1	1	1	1	1	1	1	1	1	1	1	1	+	+	+	+	1	+	+	+	+	+	46	88						
.	+	+	+	+	+	+	+	1	+	+	+	+	+	+	+	1	1	1	1	1	1	1	1	1	1	1	1	40	77					
+	+	2	1	2	2	2	+	+	+	.	1	+	+	1	1	1	1	1	38	73					
1	1	1	1	+	1	+	1	+	1	1	1	1	1	1	1	.	1	1	1	1	2	1	1	1	1	1	1	34	65					
.	2	+	+	+	.	+	+	+	+	1	1	1	1	1	1	.	+	+	+	+	1	+	+	+	1	1	1	33	63					
.	+	.	.	+	+	+	+	+	+	1	1	1	1	1	1	1	+	+	+	1	1	1	1	1	1	28	54							
+	+	+	+	+	1	+	+	+	+	1	+	+	+	+	1	+	+	+	1	1	1	1	1	1	1	27	52							
.	+	+	+	.	+	+	+	+	1	1	1	1	1	1	1	1	+	+	1	1	1	1	1	1	1	25	48							
1	+	.	.	.	+	+	1	+	+	1	+	1	+	1	1	1	+	+	1	1	1	1	1	1	1	21	40							
.	.	.	.	.	.	.	.	+	r	.	+	+	+	+	+	.	+	+	1	1	1	1	1	1	1	18	35
.	+	.	.	1	1	1	1	1	1	1	2	4						
.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	13	25	
.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	2	
.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	+	1	1	1	1	1	1	1	1	3	6	
.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.	1	1	1	1	1	1	1	12	23

	Number of relevé (Zaporedna štev. popisa)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Differential species of lower units (Razlikovalnice nižjih enot)																					
FS	<i>Euphorbia amygdaloides</i>	E1	+	1	+	+	+	.	+	1	.	1	+	+	.	+	+	+	+	+	+
FB	<i>Euphorbia cyparissias</i>	E1	.	+	.	+	+	.	+	.	1	1	1	+	1	1
FB	<i>Teucrium chamaedrys</i>	E1	.	.	+	.	+	+	1	.	1	1	1	+	+	.	+	+	.	.	.
VP	<i>Gentiana asclepiadea</i>	E1	+	+	+	+
TG	<i>Viola hirta</i>	E1	.	.	.	.	+	.	.	1	1	1	1	+	+	.	+	+	+	.
TG	<i>Vincetoxicum hirundinaria</i>	E1	.	.	.	.	+	.	1	+	+	.	+	+	1	1	.	.	.	.
FB	<i>Brachypodium rupestre</i>	E1	.	.	.	.	.	.	+	2	2	.	+	+	1	.	1	+	+	+
EP	<i>Rhododendron hirsutum</i>	E2a	2	.	.	.	.	.	.	.	.	.	.	.	.	.	+	.	.	.
VP	<i>Vaccinium myrtillus</i>	E1	+	.	1	1	.	.	.	.	.	.	.	.	.	.	1	+	.	.
SSC	<i>Sorbus aucuparia</i>	E3a	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
SSC	<i>Sorbus aucuparia</i>	E2b	.	.	.	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.
SSC	<i>Sorbus aucuparia</i>	E2a	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
SSC	<i>Sorbus aucuparia</i>	E1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
RP	<i>Juniperus communis</i>	E2b	.	+	1	.	.	+	.	.	.	.	.	.	.	.	.	.	.	+
RP	<i>Juniperus communis</i>	E2a	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	r	.
RP	<i>Juniperus communis</i>	E1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
EP	Erico-Pinetea																				
	<i>Erica carnea</i>	E1	3	2	3	2	5	3	2	4	3	2	3	4	4	4	5	5	5	5	
	<i>Calamagrostis varia</i>	E1	2	3	3	4	2	3	2	3	3	2	3	2	3	3	2	1	2	3	2
	<i>Polygala chamaebuxus</i>	E1	+	+	1	.	+	+	+	2	2	1	2	1	2	1	+	+	2	2	1
	<i>Amelanchier ovalis</i>	E2b	+	.	1	+	+	+	+	2	2	1	1	1	+	+	.	+	1	.	+
	<i>Amelanchier ovalis</i>	E2a	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<i>Amelanchier ovalis</i>	E1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<i>Epipactis atrorubens</i>	E1	+	1	.	+	+	+	+	1	.	+	+	+	+	+	+	+	+	+	
	<i>Rubus saxatilis</i>	E1	1	+	1	+	+	+	1	.	+	+	+	+	+	1	.	+	.	.	
	<i>Cotoneaster tomentosus</i>	E1	+	.	.	.	.	+	.	+	.	+	+	+	+	+	+	+	+	.
	<i>Leontodon incanus</i>	E1	.	.	.	.	.	1	1	.	+	.	+	.	.	.	+	+	+	.
	<i>Pinus mugo</i>	E2b	.	.	.	+	.	.	.	.	.	.	.	.	.	.	1	.	.	.
	<i>Pinus mugo</i>	E2a	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<i>Euphrasia cuspidata</i>	E1	.	.	.	.	+	+	.	+	.	.	.	.	.	+	.	+	+	.
	<i>Carex alba</i>	E1	1	.	1	1	+	.	+	.	.	1	+	+	+	.	.	.	.	.
	<i>Gymnadenia odoratissima</i>	E1	.	.	+	.	.	1	+	+	+	.	.	.	.	.	.	.	.	.
	<i>Crepis slovenica</i>	E1	.	.	.	.	1	2	.	+	+	.	+	+	.	+	+	.	.	+
	<i>Asperula aristata</i>	E1	.	.	.	.	.	+	.	+	+	.	.	.	+	.	.	.	.	.
	<i>Arctostaphylos uva-ursi</i>	E1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	+
	<i>Galium austriacum</i>	E1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<i>Cephalanthera rubra</i>	E1	.	.	.	.	+	+	+	.	.	.	.	+	.	.	+	+	+	.
	<i>Allium ericetorum</i>	E1	.	.	.	+	.	+	.	.	.	.	.	.	.	.	.	.	.	.
	<i>Galium purpureum</i>	E1	.	.	.	.	.	.	+	2	.	1	.	.	+	.	.	+	+	+
	<i>Aquilegia nigricans</i>	E1	.	.	.	.	+	.	+	.	.	.	.	+	+	.	.	.	.	.
	<i>Genista radiata</i>	E2a	.	.	.	.	.	.	+	.	.	.	.	.	.	.	.	.	.	.
	<i>Molinia caerulea</i> subsp. <i>arundinacea</i>	E1	.	.	.	.	.	.	+	.	.	.	.	.	.	.	.	.	.	.
	<i>Aster amellus</i>	E1	+	.	.	.	.	.	.	+	.	.	.	.	.	.	.	.	.	.
	<i>Carex ornithopoda</i>	E1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<i>Genista januensis</i>	E1	.	.	.	.	+	+	.	.	.	.	.	.	.	.	.	.	.	.
	<i>Pinus nigra</i>	E3b	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<i>Pinus nigra</i>	E2b	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<i>Pinus nigra</i>	E2a	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<i>Polygala nicaeensis</i> subsp. <i>forojulensis</i>	E1	.	.	.	.	.	.	+	.	..	.	.	.	.	.	.	.	.	.
	<i>Rhamnus saxatillis</i>	E1	.	.	.	.	.	.	+	+	.	.	.	.	.	.	.	.	.	.
	<i>Daphne cneorum</i>	E2b	.	.	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<i>Ophrys insectifera</i>	E1	.	.	.	.	.	.	.	+	.	.	.	.	.	.	.	.	.	.
	<i>Euphorbia triflora</i> subsp. <i>kernerii</i> ?	E1	.	.	.	.	.	.	.	+	.	.	.	.	.	.	.	.	.	.

		Number of relevé (Zaporedna štev. popisa)																			
	VP	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
VP Vaccinio-Piceetea																					
Picea abies	E3b	1	3	2	2	+	+	1	1	1	.	.	.	.	1	+	.	.	.	.
Picea abies	E3a	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	+	+	.
Picea abies	E2b	.	1	2	+	1	1	2	.	.	1	+	+	+	1	1	+	1	+	+	
Picea abies	E2a	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Picea abies	E1	.	+	+	.	.	.	.	.	.	.	.	.	+	+	.	.	+	+	.
Hieracium murorum	E1	.	+	+	1	+	.	.	.	.	.	+	+	+	.	+	.	1	+	+
Vaccinium vitis-idaea	E1	.	.	1	1	.	.	.	.	.	.	.	.	.	2	+	2	2	1	1
Larix decidua	E3b	2	2	1	2	.	.	.	.	.	.	.	.	.	.	+	.	.	.	+
Larix decidua	E3a	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	+	.	.	.
Larix decidua	E2b	.	2	.	+	.	.	.	.	.	.	.	.	.	.	+	.	.	+	+
Larix decidua	E2a	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Larix decidua	E1	.	.	.	.	.	.	.	+	.	.	.	.	.	.	.	.	.	.	.
Valeriana tripteris	E1	+	+	+	+	+	.	+	.	.	.	.	.	.	.	+	.	.	.	.
Solidago virgaurea	E1	.	.	+	+	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Aposeris foetida	E1	+	.	+	+	+	.	+	.	.	.	.	.	.	.	.	.	.	.	.
Goodyera repens	E1	.	.	.	.	.	.	+	.	+	.	.	.	.	.	.	.	.	.	.
Luzula sylvatica	E1	.	.	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Melampyrum sylvaticum	E1	.	.	+	.	+	.	.	.	.	.	.	.	.	.	+	+	.	+	.
Pyrola minor	E1	.	.	.	.	.	.	+	.	.	.	.	.	.	.	.	.	.	.	.
Clematis alpina	E2a	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Homogyne sylvestris	E1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Gymnocarpium dryopteris	E1	+	.	.	.	+	.	.	.	.	.	.	.	.	+	.	+	.	.	.
Rosa pendulina	E2a	.	.	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Listera cordata	E1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Pyrola rotundifolia	E1	.	.	.	.	.	+	.	.	.	.	.	.	+	.	.	.	.	.	.
Ajuga pyramidalis	E1	.	.	.	.	.	+	.	.	.	.	.	.	.	.	+	.	.	.	.
Maianthemum bifolium	E1	.	.	+	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Oxalis acetosella	E1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Abies alba	E3b	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Abies alba	E2b	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Veronica urticifolia	E1	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Luzula luzuloides	E1	.	.	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Orthilia secunda	E1	.	.	.	.	.	.	.	.	.	.	.	.	+	.	.	.	.	.	.
Pyrola media	E1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Homogyne alpina	E1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Calamagrostis villosa	E1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Huperzia selago	E1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Diphasiastrum complanatum	E1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Dryopteris dilatata	E1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
AF Aremonio-Fagion																					
Knautia drymeia	E1	+	+	.	.	+	+	+	.	.	.	.	.	+	.	.	.	.	.	.
Rhamnus fallax	E2b	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
FS Fagetalia sylvaticae																					
Acer pseudoplatanus	E3a	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Acer pseudoplatanus	E2b	+	.	+	.	.	.	+	.	.	+	+	.	+	.	.	.	.	.	.
Acer pseudoplatanus	E2a	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Acer pseudoplatanus	E1	.	.	.	.	.	.	.	.	.	.	.	.	+	.	.	r	+	.	.
Daphne mezereum	E2a	+	+	+	+	.	.	+	.	+	.	.	.	.	+	.	.	+	.	.
Fagus sylvatica	E3b	2	+	+	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Fagus sylvatica	E3a	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Fagus sylvatica	E2b	+	.	+	+	+	.	.	+	.	+	+	.	+	.	+	+	.	.		
Fagus sylvatica	E2a	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Fagus sylvatica	E1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Number of relevé (Zaporedna štev. popisa)		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
<i>Mercurialis perennis</i>	E1	1	+	.	+	.	.	.	.	.	.	.	.	r	.	.	.	.	.	.
<i>Melica nutans</i>	E1	.	+	+	.	+	.	+	.	.	1	.	+	.	.	.	.	+	.	.
<i>Neottia nidus-avis</i>	E1	.	.	.	+	+	.	.	.	.	.	+	.	+	.	.	.	.	.	.
<i>Epipactis helleborine</i>	E1	.	.	.	.	.	.	+	.	.	+	.	.	+	.	.	.	1	+	+
<i>Prenanthes purpurea</i>	E1	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Laburnum alpinum</i>	E3a	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Laburnum alpinum</i>	E2b	1	.	.	+	+	.	.	.	.	.	.	.	.	+	.	.	.	.	.
<i>Laburnum alpinum</i>	E2a	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Laburnum alpinum</i>	E1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	+	.	.	.
<i>Luzula nivea</i>	E1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Viola reichenbachiana</i>	E1	.	.	+	.	.	.	+	.	.	+	.	.	.	.	.	.	.	.	.
<i>Galium laevigatum</i>	E1	+	.	+	.	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Lonicera alpigena</i>	E2b	.	+	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Salvia glutinosa</i>	E1	.	+	.	.	.	.	.	.	+	.	.	+	.	.	.	.	.	.	.
<i>Cephalanthera damasonium</i>	E1	+	.	+	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Campanula trachelium</i>	E1	+	.	.	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Lilium martagon</i>	E1	.	.	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Heracleum sphondylium</i>	E1	.	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Mycelis muralis</i>	E1	.	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Sympyton tuberosum</i>	E1	.	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Brachypodium sylvaticum</i>	E1	.	.	.	.	.	.	.	.	.	+	.	.	.	.	.	.	.	.	.
<i>Euphorbia dulcis</i>	E1	.	.	.	.	.	.	.	.	+	.	.	.	.	.	.	.	.	.	.
QP Quercetalia pubescenti-petraeae																					
<i>Sorbus aria</i>	E3	+	.	+	.	.	.	.	.	.	.	.	.	.	.	.	+	.	.	.
<i>Sorbus aria</i>	E2b	+	.	+	+	+	+	+	.	.	+	1	+	+	+	+	+	.	.	.	
<i>Sorbus aria</i>	E2a	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Sorbus aria</i>	E1	.	.	.	.	.	.	.	1	+	+	.	.	+	+	.	+	+	+	+
<i>Convallaria majalis</i>	E1	+	.	+	1	.	.	.	.	+	.	.	.	.	.	.	.	+	.	.
<i>Ostrya carpinifolia</i>	E3a	.	.	.	.	.	.	.	.	.	.	+	.	.	.	.	.	.	.	.
<i>Ostrya carpinifolia</i>	E2b	+	.	1	.	+	.	.	+	.	+	+	+	+	.	.	.	.	.	.
<i>Ostrya carpinifolia</i>	E2a	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Ostrya carpinifolia</i>	E1	.	.	.	.	.	.	.	.	.	.	+	.	.	.	.	.	.	.	.
<i>Hypericum montanum</i>	E1	.	+	.	+	.	+	.	.	+	.	+	.	.	.	.	.	.	.	.
<i>Carex flacca</i>	E1	.	.	.	.	.	.	.	+	.	.	.	.	.	.	.	.	.	.	.
<i>Lathyrus niger</i>	E1	.	1	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Melittis melissophyllum</i>	E1	.	.	.	.	.	.	.	+	.	.	.	.	.	.	.	.	.	.	.
<i>Epipactis muelleri</i>	E1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
QR Quercetalia roboris																					
<i>Pteridium aquilinum</i>	E1	.	+	1	1	.	.	+	1	.	2	+	+	+	.	1	+	+	1	.	
<i>Melampyrum pratense</i>	E1	.	.	.	.	.	.	.	.	+	.	+	.	.	.	.	.	.	.	.
<i>Potentilla erecta</i>	E1	.	+	+	.	.	+	.	.	+	+	+	.	.	+	.	.	.	.	.
<i>Populus tremula</i>	E1	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.
QF Querco-Fagetea																					
<i>Platanthera bifolia</i>	E1	.	.	+	.	.	.	+	+	1	+	+	.	+	+	+	+	+	.		
<i>Carex digitata</i>	E1	.	+	.	.	.	+	.	.	.	+	.	+	+	.	.	.	.	.	.
<i>Hepatica nobilis</i>	E1	+	+	.	.	+	.	+	.	.	+	.	.	.	.	.	.	.	.	.
<i>Cephalanthera longifolia</i>	E1	.	.	.	.	+	.	.	.	.	.	.	.	.	.	+	+	+	.	.
<i>Corylus avellana</i>	E1	.	.	.	.	.	.	+	.	.	.	.	.	.	.	.	.	r	.	.
<i>Cruciata glabra</i>	E1	.	+	.	.	.	.	.	+	.	.	.	.	.	+	.	.	.	.	.
<i>Dactylorhiza fuchsii</i>	E1	.	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Pyrus pyraster</i>	E2b	.	.	.	.	.	+	.	.	.	+	.	+	.	.	.	.	.	.	.
<i>Festuca heterophylla</i>	E1	.	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Frangula alnus</i>	E2b	.	.	.	.	.	+	.	.	.	+	.	+	.	.	.	.	.	.	.
<i>Frangula alnus</i>	E1	.	.	.	.	.	.	.	.	.	+	.	.	.	.	.	.	.	.	.

		Number of relevé (Zaporedna štev. popisa)																			
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	<i>Listera ovata</i>	E1	.	.	.	.	.	.	.	+	.	.	.	.	.	.	.	.	.	.
	<i>Anemone nemorosa</i>	E1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<i>Taxus baccata</i>	E3a	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
SSC	<i>Sambuco-Salicion capreae</i>																				
	<i>Salix caprea</i>	E2b	.	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<i>Juglans regia</i>	E2a	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
RP	<i>Rhamno-Prunetea</i>																				
	<i>Berberis vulgaris</i>	E2b	.	.	.	.	.	.	.	.	.	.	+	+	.	.	.	.	.	.
	<i>Viburnum lantana</i>	E2b	.	.	.	.	.	+	+	.	.	.	.	.	.	.	.	.	.	.
	<i>Rhamnus catharticus</i>	E2b	.	.	.	.	.	.	.	.	+	.	.	.	.	.	.	.	.	.
TG	<i>Trifolio-Geranietea</i>																				
	<i>Laserpitium siler</i>	E1	+	.	.	1	+	+	+	.	.	.	.	.	.	.	.	.	.	.
	<i>Polygonatum odoratum</i>	E1	.	.	.	.	.	.	.	+	.	.	.	.	.	.	.	+	+	+
	<i>Anthericum ramosum</i>	E1	.	.	.	.	+	1	.	.	1	+	.	+	.	.	.	+	.	.
	<i>Digitalis grandiflora</i>	E1	+	.	.	.	.	.	+	.	.	1	+	.	+	.	.	.	.	.
	<i>Clinopodium vulgare</i>	E1	.	.	.	.	+	.	+	.	.	.	+	.	.	.	.	.	.	.
	<i>Laserpitium latifolium</i>	E1	+	.	.	.	+	.	.	.	.	.	.	.	.	.	.	.	.	.
	<i>Origanum vulgare</i>	E1	.	+	.	.	.	+	.	1	.	.	.	.	.	.	.	.	.	.
	<i>Vicia incana</i>	E1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	+	+	.	.
	<i>Astragalus glycyphyllos</i>	E1	.	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<i>Trifolium rubens</i>	E1	.	.	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<i>Thalictrum minus</i>	E1	.	.	.	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<i>Iris graminea</i>	E1	.	.	.	.	.	.	.	.	.	+	.	.	.	.	.	.	.	.
BA	<i>Betulo-Alnetea</i>																				
	<i>Salix appendiculata</i>	E2b	1	.	.	.	.	.	.	.	.	.	.	.	.	+	.	.	.	.
	<i>Salix appendiculata</i>	E2a	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<i>Salix appendiculata</i>	E1	.	.	.	.	.	.	.	.	.	.	+	.	.	.	.	.	.	.
	<i>Salix waldsteiniana</i>	E2a	.	.	.	.	+	.	.	.	.	.	+	.	.	.	.	.	.	.
MuA	<i>Mulgedio-Aconitetea</i>																				
	<i>Silene vulgaris</i> subsp. <i>antelopum</i>	E1	.	.	.	.	+	+	.	.	.	+	+	.	.	.	.	.	.	.
	<i>Phyteuma ovatum</i>	E1	+	.	+	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<i>Polygonatum verticillatum</i>	E1	.	.	.	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<i>Thalictrum aquilegiifolium</i>	E1	+	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<i>Ranunculus platanifolius</i>	E1	.	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
EA	<i>Epilobietea angustifolii</i>																				
	<i>Fragaria vesca</i>	E1	.	.	+	+	.	.	.	.	1	+	+	.	.	.	.	.	.	.
	<i>Chamerion angustifolium</i>	E1	.	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<i>Potentilla recta</i>	E1	.	.	.	.	.	.	.	.	+	.	.	.	.	.	.	.	.	.
ES	<i>Elyno-Seslerietea</i>																				
	<i>Sesleria caerulea</i>	E1	.	.	1	+	1	2	2	.	.	+	.	.	+	.	.	+	.	.	
	<i>Thymus praecox</i> subsp. <i>polytrichus</i>	E1	.	+	.	.	.	.	.	1	.	.	+	.	+	.	+	+	+	+
	<i>Globularia cordifolia</i>	E1	.	.	+	1	.	+	.	+	+	.	+	+	.	.	.	+	+	+	
	<i>Carex mucronata</i>	E1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<i>Scabiosa lucida</i> subsp. <i>lucida</i>	E1	.	.	.	+	+	+	+	.	1	+	+	.	.	+	.	.	.	.
	<i>Phyteuma orbiculare</i>	E1	.	.	.	.	.	+	.	.	.	.	.	.	.	.	.	.	.	.
	<i>Senecio abrotanifolius</i>	E1	+	+	.	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<i>Aster bellidioides</i>	E1	.	.	.	+	.	.	.	.	.	.	.	.	+	.	.	.	.	.
	<i>Euphrasia salisburgensis</i>	E1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<i>Dryas octopetala</i>	E1	.	.	.	.	.	.	+	.	.	.	.	.	.	.	.	.	.	.
	<i>Acinos alpinus</i>	E1	.	.	.	+	+	+	.	+	.	+	.	+	+	.	.	.	.	.
	<i>Carduus crassifolius</i>	E1	.	.	.	.	.	.	.	.	.	+	.	.	.	.	.	.	.	.
	<i>Campanula witasekiana</i>	E1	+	+	+	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<i>Gentiana clusii</i>	E1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<i>Carduus defloratus</i>	E1	.	.	.	.	.	.	.	.	+	1	+	.	.	.	.	.	.	.

21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	Pr.	Fr.
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.	5	10	
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.	1	2	
.	6	12	
.	12	24	
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.	6	12	
.	6	12	
.	4	8	
.	4	8	

		Number of relevé (Zaporedna štev. popisa)																			
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
		<i>Thesium alpinum</i>	E1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		<i>Carex firma</i>	E1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		<i>Juncus monanthos</i>	E1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		<i>Globularia nudicaulis</i>	E1	.	.	.	.	+	1	.	.	.	.	.	.	.	.	.	.	.
		<i>Rhinanthus glacialis</i>	E1	.	.	.	.	+	+	.	.	.	.	.	.	.	.	.	.	.
		<i>Scabiosa lucida</i> subsp. <i>stricta</i>	E1	.	.	.	.	.	.	.	+	.	.	.	.	.	.	.	.	.
		<i>Helianthemum nummularium</i> subsp. <i>grandiflorum</i>	E1	.	.	.	.	.	.	.	.	+	.	.	.	.	.	.	.	.
		<i>Polygala alpestris</i>	E1	.	.	.	.	.	.	.	.	+	.	.	.	.	.	.	.	.
		<i>Linum julicum</i>	E1	.	.	.	.	.	.	.	.	+	.	.	.	.	.	.	.	.
		<i>Helianthemum alpestre</i>	E1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		<i>Galium anisophyllum</i>	E1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
JT	<i>Juncetea trifidae</i>																				
	<i>Juncus trifidus</i>	E1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<i>Campanula scheuchzeri</i>	E1	.	.	.	.	+	.	.	.	.	.	.	.	.	.	.	.	.	.
CD	<i>Caricetalia davallianae</i>																				
	<i>Tofieldia calyculata</i>	E1	.	.	.	.	+	+	.	.	.	.	.	.	.	.	.	.	.	.
CU	<i>Calluno-Ulicetea</i>																				
	<i>Calluna vulgaris</i>	E1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
FB	<i>Festuco-Brometea</i>																				
	<i>Buphthalmum salicifolium</i>	E1	1	1	+	1	+	1	+	+	1	+	+	+	1	1	+	+	+	+	
		<i>Carex humilis</i>	E1	+	.	+	1	1	1	2	2	2	.	+	+	1
		<i>Carlina acaulis</i>	E1	.	.	+	+	.	+	.	+	+	+	+	+	+	.	.	+	+	
		<i>Peucedanum oreoselinum</i>	E1	.	.	.	.	+	+	1	+	1	+	+	+	+	.	1	1	.
		<i>Gentianella ciliata</i>	E1	.	.	.	.	.	.	.	.	.	.	+	+	.	.	+	+	.
		<i>Linum catharticum</i>	E1	.	.	.	.	.	.	+	+	.	.	.	.	.	.	+	+	.
		<i>Cirsium erisithales</i>	E1	+	1	+	+	+	+	.	.	.	.	.	.	+	+	.	.	.
		<i>Teucrium montanum</i>	E1	.	.	.	.	.	.	.	1	+	+	+	+	+	.	.	.	.
		<i>Hippocratea comosa</i>	E1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	+	+
		<i>Gymnadenia conopsea</i>	E1	.	.	.	.	.	.	+	+	+	.	.	.	.	.	.	.	.
		<i>Galium lucidum</i>	E1	.	.	+	.	.	.	1	.	1	+	.	1	.	.	+	.	+	
		<i>Dorycnium germanicum</i>	E1	.	.	.	.	.	.	1	1	1	+	+	+	1	1	+	1	.
		<i>Galium verum</i>	E1	.	.	.	.	.	.	1	.	1	1	+	+	1	1	+	1	.
		<i>Stachys recta</i>	E1	+	1	1	1	.	.	+	.	+	1	1	1	1	1	1	1	1	
		<i>Pimpinella saxifraga</i>	E1	.	.	+	.	+	.	+	.	+	.	+	.	+	.	+	.	.	
		<i>Prunella grandiflora</i>	E1	.	.	.	.	.	.	+	+	+	+	+	+	.	.	.	.	.
		<i>Cirsium pannonicum</i>	E1	.	.	.	.	.	.	.	.	+	1	1	1	1	1	1	1	1
		<i>Coronilla vaginalis</i>	E1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		<i>Genista germanica</i>	E1	.	.	.	.	.	.	.	+	+	.	.	.	.	.	.	.	.
		<i>Plantago media</i>	E1	.	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		<i>Cirsium acaule</i>	E1	.	.	.	+	.	.	.	.	.	.	.	.	.	.	.	.	.
		<i>Asperula cynanchica</i>	E1	.	.	.	.	.	.	.	+	.	.	.	.	.	.	.	.	.
		<i>Carlina vulgaris</i>	E1	.	.	.	.	.	.	+	.	.	.	.	.	.	.	.	.	.
		<i>Genista tinctoria</i>	E1	.	.	.	.	.	.	.	+	.	.	.	.	.	.	.	.	.
		<i>Sanguisorba minor</i>	E1	.	.	.	.	.	.	.	+	.	.	.	.	.	.	.	.	.
		<i>Euphrasia kernerii</i>	E1	.	.	.	.	.	.	.	+	.	.	.	.	.	.	.	.	.
		<i>Orobanche teucrii</i>	E1	.	.	.	.	.	.	.	+	.	.	.	.	.	.	.	.	.
		<i>Bromopsis erecta</i>	E1	.	.	.	.	.	.	.	1	.	1	1	1	1	1	1	1	1
		<i>Thymus praecox</i> subsp. <i>praecox</i>	E1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		<i>Molinio-Arrhenatheretea</i>																			
		<i>Lotus corniculatus</i>	E1	.	.	.	.	1	+	+	1	.	+	+	+	1	+	+	+	+
		<i>Lathyrus pratensis</i>	E1	.	.	.	.	.	1	.	1	+	.	+	+	+	1	+	+	1
		<i>Galium mollugo</i>	E1	.	.	.	.	+	+	+	.	.	.	.	.	+	.	.	.	.

			Number of relevé (Zaporedna štev. popisa)																			
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	<i>Vicia cracca</i>	E1	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.
	<i>Vicia sepium</i>	E1	.	.	.	.	+	.	.	.	.	.	.	+	.	.	.	.	.	.	.
	<i>Leucanthemum ircutianum</i>	E1	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<i>Plantago lanceolata</i>	E1	.	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<i>Galium album</i>	E1	.	.	.	.	.	.	.	.	.	+	.	.	.	.	.	.	.	.	.
	<i>Veronica chamaedrys</i>	E1	.	.	.	.	.	.	.	.	.	.	.	.	.	+	.	.	.	.	.
	<i>Leontodon hispidus</i>	E1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<i>Succisa pratensis</i>	E1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
TR	<i>Iblaspietea rotundifoliae</i>																					
	<i>Biscutella laevigata</i>	E1	.	.	.	.	+	+	.	.	+	+	+	+	+	+	.	.	+	+
	<i>Gymnocarpium robertianum</i>	E1	.	+	.	.	+	.	.	.	+	+	+	+	+	+	+	.	.	.		
	<i>Hieracium bifidum</i>	E1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<i>Heliosperma alpestre</i>	E1	.	.	.	.	.	.	+	.	.	.	.	.	.	.	.	.	.	.	.
	<i>Achnatherum calamagrostis</i>	E1	.	.	.	.	.	.	.	.	.	.	+	.	.	.	.	+	+	.	.
	<i>Adenostyles glabra</i>	E1	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<i>Hieracium glaucum</i>	E1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	+	.	.
	<i>Petasites paradoxus</i>	E1	.	.	.	.	+	+	.	.	.	.	.	.	.	.	.	.	.	.	.
	<i>Rumex scutatus</i>	E1	.	.	.	.	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<i>Silene vulgaris</i> subsp. <i>glareosa</i>	E1	.	.	.	.	.	.	.	.	.	.	.	+	.	.	.	.	.	.	.
	<i>Valeriana montana</i>	E1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<i>Gypsophila repens</i>	E1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<i>Astrantia carniolica</i>	E1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<i>Trisetum argenteum</i>	E1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
PC	<i>Potentilletalia caulescentis, Physoplexido-Saxifragion</i>																					
	<i>Potentilla caulescens</i>	E1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	+	+	+
	<i>Primula auricula</i>	E1	.	.	.	+	.	.	.	.	.	.	.	.	.	.	.	+	+
	<i>Campanula cochleariifolia</i>	E1	+	.	.	.	+	+	.	.	+	+	+	.	.	.	.	.	.	.	.
	<i>Silene hayekiana</i>	E1	.	.	.	.	.	.	.	.	.	.	+	+	.	.	+	+	.	.	.
	<i>Rhamnus pumilus</i>	E1	.	.	.	.	.	.	.	.	.	.	+	+	.	.	+	+	.	.	.
	<i>Saxifraga squarrosa</i>	E1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<i>Silene saxifraga</i>	E1	.	.	.	.	.	.	+	.	.	.	.	.	.	.	.	.	.	.	.
	<i>Paederota lutea</i>	E1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
AT	<i>Asplenietea trichomanis</i>																					
	<i>Asplenium ruta-muraria</i>	E1	.	+	.	.	.	.	.	.	.	.	+	.	.	.	.	+	.	.	.
	<i>Dianthus sylvestris</i>	E1	.	.	+	+	.	.	.	+	.	.	.	+	.	.	.	.	.	.	.
	<i>Kernera saxatilis</i>	E1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<i>Moehringia muscosa</i>	E1	+	.	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<i>Heliosperma pusillum</i>	E1	.	.	.	+	.	+	.	.	.	.	.	.	.	.	.	.	.	.	.
	<i>Asplenium trichomanes</i>	E1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<i>Asplenium viride</i>	E1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
O	Other species (Druge vrste)																					
	<i>Campanula</i> sp.	E1	.	.	.	.	.	.	.	.	.	.	+	+	.	.	+	.	.	.	.
	<i>Euphorbia</i> sp.	E1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<i>Galium</i> sp.	E1	.	.	.	.	.	.	.	.	.	.	+	.	.	.	.	.	.	.	.
	<i>Carex</i> sp.	E1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<i>Viola</i> sp.	E1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<i>Hieracium</i> sp.	E1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
ML	Mosses and lichens (Mahovi in lišaji)																					
	<i>Tortella tortuosa</i>	E0	.	.	+	+	+	+	+	.	.	.	+	+	.	.	+	+	+	+		
	<i>Scleropodium purum</i>	E0	.	.	2	.	+	.	.	.	+	.	+	+	+	.	+	.	+	.	.	
	<i>Rhytidiodelphus triquetrus</i>	E0	.	+	.	.	.	.	.	.	.	.	+	+	+	.	+	+	+	.	.
	<i>Ctenidium molluscum</i>	E0	+	+	+	.	.	.	.	.	.	.	+	+	+	.	+	+	+	.	.
	<i>Dicranum scoparium</i>	E0	.	.	+	.	.	.	.	.	+	.	+	.	.	.	+	.	.	.	.
	<i>Hylocomium splendens</i>	E0	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	Pr.	Fr.
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.	1	+	+	+	+	+	+	+	+	r	.	r	14	27			
.	6	12	
r	5	10	
.	+	+	.	+	4	8	
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.	1	2	
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.	5	10	
.	+	+	+	+	+	+	+	+	+	+	+	+	2	4		
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.	2	4	
.	1	2	
.	+	+	+	+	+	+	+	+	+	+	+	+	1	2		
.	.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	6	12				
.	r	2	4	
.	2	4	
.	2	4	
.	2	4	
.	1	2	
.	1	2	
.	+	+	+	+	+	+	+	+	+	+	+	+	+	1	2	
+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	1	+	1	+	1	+	1	+	1	+	37	71			
+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	1	+	1	+	1	+	1	+	1	+	26	50			
+	1	+	1	3	1	2	1	1	1	1	1	21	40		
.	+	+	+	+	+	+	+	+	+	+	13	25			
.	+	+	+	+	+	+	+	+	+	+	9	17				
.	+	+	+	+	+	+	+	+	+	+	9	17				

	Number of relevé (Zaporedna štev. popisa)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
<i>Neckera crispa</i>	E0	+	.	+	.	.	.	+	.	.	.	.	.	.	.	.	.	.	.	.
<i>Schistidium</i> sp.	E0	+	.	.	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Hypnum cupressiforme</i>	E0	.	+	.	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Pleurozium schreberi</i>	E0	.	.	.	.	+	.	.	.	.	.	+	.	.	.	+	.	.	.	.
<i>Fissidens dubius</i>	E0	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Isothecium alopecuroides</i>	E0	.	+	+	.	.	.	+	.	.	.	.	.	.	.	.	.	.	.	.
<i>Plagiochila poreloides</i>	E0	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Cladonia</i> sp.	E0	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Rhytidium rugosum</i>	E0	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Polytrichum formosum</i>	E0	.	.	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Cladonia pyxidata</i>	E0	.	.	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Musci</i> spp.	E0	.	.	.	.	.	.	.	.	.	.	.	.	.	+	.	.	.	.	.
<i>Conocephalum conicum</i>	E0	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Leucobryum glaucum</i>	E0	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Cladonia rangiferina</i>	E0	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Dicranella heteromalla</i>	E0	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Hookeria lucens</i>	E0	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Marchantia polymorpha</i>	E0	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Solorina saccata</i>	E0	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Legend – Legenda

- ID Igor Dakskobler
 AR Andrej Rozman
 MZ Mitja Zupančič
 TW Tone Wraber
 VŽ Vinko Žagar
 D Dolomite – dolomit
 Re Rendzina – rendzina
 JA Julian Alps – Julijske Alpe
 KSA Kamnik-Savinja Alps – Kamniško-Savinjske Alpe
 K Karavanke – Karavanke
 Pr. Presence (number of relevés in which the species is presented) – število popisov, v katerih se pojavlja vrsta
 Fr. Frequency in % – frekvanca v %
 ? determination is questionable – določitev je vprašljiva

21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	Pr.	Fr.	
.	+	.	.	+	+	.	+	.	+	+	.	9	17
.	+	+	.	+	.	+	.	+	8	15	
.	+	.	+	.	+	.	+	.	+	+	.	+	7	13		
.	+	.	+	+	.	+	7	13		
.	+	.	1	6	12		
.	+	.	+	.	+	.	+	.	+	.	+	.	+	.	+	.	+	3	6			
.	+	+	.	+	3	6			
.	+	2	4				
.	+	.	+	2	4				
.	1	2				
.	1	2				
.	1	2				
.	+	1	2				
.	.	+	1	2				
.	.	.	+	1	2				
.	.	.	.	+	1	2				
.	+	+	1	2				
.	+	+	1	2				
.	+	+	1	2				
.	+	+	1	2				

Table 2 (Tabela 2): *Genisto januensis-Pinetum sylvestris campanuletosum cespitosae* subass. nov.

Author of the table: I. Dakskobler

Number of relevé (Zaporedna številka popisa)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	
Database number of relevé (Delovna številka popisa)	546	269205	570	255853	350	209356	400	255791	430	255792	630	268252	670	238047	510	263133	520	263134	485	263135	321	263140	
Elevation in m (Nadmorska višina v m)	NE	NE	SSW	S	NE	SSW	NE	SE	SE	SE	SW	SW	SW	SE	SE	SE	NW	SE	SE	SE	SE		
Aspect (Lega)	35	40	35	45	45	45	45	45	45	45	45	45	45	45	45	45	30	30	30	30	30		
Slope in degrees (Nagib v stopinjah)	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D		
Parent material (Matična podlaga)	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D		
Soil (Tla)	Re	Re	Re	Re	Re	Re	Re	Re	Re	Re	Re	Re	Re	Re	Re	Re	Re	Re	Re	Re	Re		
Stoniness in % (Kamnitost v %)	10	60	10	40	30	30	5	5	5	5	5	5	5	5	5	10	20	20	20	10	10		
Cover in % (Zastiranje v %):																							
Upper tree layer (Zgornja drevesna plast)	E3b	10	60	60	60	60	60	60	60	60	70	70	70	70	70	70	70	70	70	70	65		
Lower tree layer (Spodnja drevesna plasti)	E3a	40									10	5	10	20	20	10	20	10	20	10	5	10	
Shrub layer (Grmovna plast)	E2	50	30	30	50	40	30	10	10	20	30	20	20	30	30	20	20	20	20	20	20	20	
Herb layer (Zeliščna plast)	E1	80	60	80	60	50	70	80	95	95	90	95	90	80	80	90	95	90	90	90	80	95	90
Moss layer (Mahovna plast)	E0	5	10	5	10	10	5	5	25	20	5	20	5	5	10	5	5	0	5	5	5	10	5
Maximum diameter (Maks.premer dreves)	cm	15	15	30	30	30	20	30	35	35	30	30	40	30	30	30	30	30	30	40	35	25	25
Maximum tree height (Mmaks. višina dreves)	m	6	17	14	12	10	10	18	20	15	18	18	20	12	15	15	14	15	17	20	16	14	12
Number of species (Število vrst)		22	67	77	49	67	47	52	38	55	61	52	46	50	45	48	44	44	32	37	32	38	30
Relevé area (Velikost popisne ploskve)	m ²	200	200	400	400	400	200	200	400	400	400	400	400	400	400	400	400	400	400	400	400	400	
Date of taking relevé (Datum popisa)	4/7/2017	5/25/2000	8/26/1999	8/26/1999	8/26/1999	8/26/1999	9/4/2017	9/4/2017	9/7/2016	9/7/2016	9/7/2016	9/7/2016	9/7/2016	9/7/2016	9/7/2016	9/7/2016	9/12/2016	9/12/2016	9/12/2016	9/12/2016	9/12/2016		
Locality (Nahajališče)																							
Quadrant (Kvadrant)																							
Coordinate GK Y (D-48)	m	5111185	417716	9849/4	PA Orehovska grapa																		
		5101391	410408	9949/1	DN Pršjak																		
		5101888	409959	9949/1	DN Pršjak																		
		5101838	410276	9949/1	DN Pršjak																		
		5101868	410379	9949/1	DN Pršjak																		
		5113119	421516	9849/2	PA Zapoška grapa																		
		5105643	418515	9949/2	DN Jagršče-Kopa																		
		5110930	417156	9849/4	PA Bukovo-Žabje																		
		5110933	417112	9849/4	PA Bukovo-Žabje																		
		5110821	417055	9849/4	PA Bukovo-Žabje																		
		5108992	417882	9849/4	PA Orehovska grapa																		
		5111281	417145	9849/4	PA Bukovo-Kočja																		
		5111157	417603	9849/4	PA Bukovo-Nemci																		
		5110831	418201	9849/4	PA Orehovska grapa																		
		5110829	418152	9849/4	PA Orehovska grapa																		
		5110784	418204	9849/4	PA Orehovska grapa																		
		5111223	417751	9849/4	PA Orehovska grapa																		
		5110810	418104	9849/4	PA Orehovska grapa																		
		5111169	418191	9849/4	PA Orehovska grapa																		
		5110777	418121	9849/4	PA Orehovska grapa																		
		5110915	418137	9849/4	PA Orehovska grapa																		
		5111180	417947	9849/4	PA Orehovska grapa																		
Diagnostic species of the association (Diagnostične vrste asociacije)																							
EP <i>Pinus sylvestris</i>	E3b	+	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	4	4	4	4	4	
EP <i>Pinus sylvestris</i>	E3a	.	.	.	.	.	.	.	+	.	.	+	+	+	.	1	1	+	+	.	.	+	
EP <i>Pinus sylvestris</i>	E2b	4	+	+	1	+	2	+	.	+	.	.	.	+	.	.	.	+	.	+	.	+	
EP <i>Pinus sylvestris</i>	E2a	.	.	+	1	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
EP <i>Pinus sylvestris</i>	E1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
EP <i>Chamaecytisus purpureus</i>	E1	.	.	.	.	.	.	.	1	1	+	.	.	.	+	.	.	.	+	+	+	+	
TR <i>Hieracium porrifolium</i>	E1	.	.	.	.	+	.	.	+	.	.	.	.	+	.	.	+	.	+	.	.	.
PC <i>Phyteuma scheuchzeri</i> subsp. <i>columnae</i>	E1	.	1	.	1	1	+	.	.	.	.	.	.	+	+	+	.	.	.	+	.	.

	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	Pr.	Fr.
	SSW	510	269810																	
23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	Pr.	Fr.	
D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	SSW	510	
D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	SSW	510	
D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	SSW	510	
D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	SSW	510	
D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	SSW	510	
D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	SSW	510	
Re	Re	Re	Re	Re	Re	Re	Re	Re	Re	Re	Re	Re	Re	Re	Re	Re	Re	Pr.	Fr.	
Re	Re	Re	Re	Re	Re	Re	Re	Re	Re	Re	Re	Re	Re	Re	Re	Re	Re	Pr.	Fr.	
Re	Re	Re	Re	Re	Re	Re	Re	Re	Re	Re	Re	Re	Re	Re	Re	Re	Re	Pr.	Fr.	
Re	Re	Re	Re	Re	Re	Re	Re	Re	Re	Re	Re	Re	Re	Re	Re	Re	Re	Pr.	Fr.	
Re	Re	Re	Re	Re	Re	Re	Re	Re	Re	Re	Re	Re	Re	Re	Re	Re	Re	Pr.	Fr.	
Re	Re	Re	Re	Re	Re	Re	Re	Re	Re	Re	Re	Re	Re	Re	Re	Re	Re	Pr.	Fr.	
10	20	20	20	20	10	10	0	0	0	10	10	10	20	20	20	20	20	Pr.	Fr.	
																		Pr.	Fr.	
70	70	70	70	70	70	60	80	80	80	70	70	70	70	70	70	70	70	Pr.	Fr.	
10	20	10	10	10	10	20	20	20	20	20	20	20	20	20	20	20	20	Pr.	Fr.	
20	20	20	20	20	10	10	20	20	20	20	20	20	20	20	20	20	20	Pr.	Fr.	
90	70	70	75	80	90	95	70	90	90	100	90	80	80	60	70	60	50	Pr.	Fr.	
5	5	5	5	25	30	10	5	5	5	10	10	5	5	10	5	5	5	Pr.	Fr.	
30	45	30	40	40	30	25	30	30	35	35	30	20	25	15	15	25	30	Pr.	Fr.	
20	19	17	20	18	16	12	16	12	17	12	12	20	10	15	7	7	8	Pr.	Fr.	
32	40	38	38	45	33	51	49	51	55	46	56	40	40	40	40	40	40	Pr.	Fr.	
400	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	Pr.	Fr.	
9/22/2017																		Pr.	Fr.	
																		Pr.	Fr.	
5111106	418140	9849/4	PA Orechovska grapa																Pr.	Fr.
5111111	418060	9849/4	PA Orechovska grapa																Pr.	Fr.
5111210	418081	9849/4	PA Orechovska grapa																Pr.	Fr.
5111168	418239	9849/4	PA Orechovska grapa																Pr.	Fr.
5111138	418218	9849/4	PA Orechovska grapa																Pr.	Fr.
5110779	418151	9849/4	PA Orechovska grapa																Pr.	Fr.
5111176	417749	9849/4	PA Orechovska grapa																Pr.	Fr.
5109970	415578	9849/3	PA Police-Krnice																Pr.	Fr.
5109982	415684	9849/3	PA Police																Pr.	Fr.
5109900	415787	9849/3	PA Police																Pr.	Fr.
5111401	417239	9849/4	PA Bulkovo-Nemci																Pr.	Fr.
5101790	410438	9949/1	DN Pršjak																Pr.	Fr.
5111060	417992	9849/4	PA Orechovska grapa																Pr.	Fr.
5111201	418229	9849/4	PA Orechovska grapa																Pr.	Fr.
5111141	418238	9849/4	PA Orechovska grapa																Pr.	Fr.
5111240	418098	9849/4	PA Orechovska grapa																Pr.	Fr.
5111949	423977	9850/3	PA Drnova																Pr.	Fr.
5111950	424005	9850/3	PA Drnova																Pr.	Fr.
5111986	424036	9850/3	PA Drnova																Pr.	Fr.
5111986	423937	9850/3	PA Drnova																Pr.	Fr.
5112009	423957	9850/3	PA Drnova																Pr.	Fr.
5111945	423917	9850/3	PA Drnova																Pr.	Fr.
5101880	409945	9949/1	DN Pršjak																Pr.	Fr.
5101898	409981	9949/1	DN Pršjak																Pr.	Fr.
5099684	421667	9949/4	DN Kanonlja-Govška grapa																Pr.	Fr.
5099773	421386	9949/4	DN Kanonlja-Govška grapa																Pr.	Fr.
5100073	420922	9949/4	DN Kanonlja-Govška grapa																Pr.	Fr.
5100587	419752	9949/4	DN Kanonlja-Ranske robe																Pr.	Fr.
5099946	421321	9949/4	DN Kanonlja-Govška grapa																Pr.	Fr.
5099893	421342	9949/4	DN Kanonlja-Govška grapa																Pr.	Fr.
5099970	421262	9949/4	DN Kanonlja-Govška grapa																Pr.	Fr.
5100111	420901	9949/4	DN Kanonlja-Govška grapa																Pr.	Fr.
5099947	421190	9949/4	DN Kanonlja-Govška grapa																Pr.	Fr.

	Number of relevé (Zaporedna številka popisa)																						
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	
TG <i>Salvia pratensis</i> subsp. <i>saccardiana</i>	E1	.	.	+	+	+	.	+	.	.	.	.	.	+	1	+	+	.	.	.	.	.
QP <i>Mercurialis ovata</i>	E1	.	.	.	.	.	.	.	.	.	1	.	+	+	+	1	1	.	.	.	+	.
EP <i>Genista januensis</i>	E1	.	.	.	+	.	+	+	+	r	.	.	+	+	.	+	.	.	.	.	.	.
FB <i>Satureja montana</i> subsp. <i>variegata</i>	E1	.	+	+	+	1	.	.	.	.	.	.	.	+	.	+	.	.	.	.	+	.
FB <i>Scabiosa hladnikiana</i>	E1	.	.	.	.	.	+	.	+	+	.	1	.	.	.	.	.	.	.	.	.	.
PC <i>Primula carniolica</i>	E1	3	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Differential species of the subassociation (Razlikovalnice subasociacije)																							
PC <i>Campanula cespitosa</i>	E1	.	.	+	+	1	1	+	+	+	.	.	.	+	+	+	+	+	+	+	+	.	
EP <i>Allium ericetorum</i>	E1	.	.	.	.	.	+	+	+	1	+	+	1	1	1	1	1	1	1	+	1	1
EP Erico-Pinetea																							
<i>Erica carnea</i>	E1	4	3	4	3	3	3	4	5	4	4	4	5	1	4	4	4	4	3	4	4	4	4
<i>Polygala chamaebuxus</i>	E1	1	1	+	+	+	1	1	+	1	1	1	+	1	1	1	1	+	1	1	1	1	
<i>Calamagrostis varia</i>	E1	.	1	1	1	+	1	+	+	.	+	1	.	+	+	.	+	+	+	+	+	+	
<i>Leontodon incanus</i>	E1	.	+	+	1	1	1	1	+	+	.	.	.	+	+	+	+	+	.	1	.	+	
<i>Epipactis atrorubens</i>	E1	.	.	+	.	.	+	+	+	+	+	+	.	+	.	+	.	+	.	+	.	+	
<i>Molinia arundinacea</i>	E1	3	.	.	+	.	1	.	.	.	.	.	2	.	+	2	3	2	1	.	.	1
<i>Chamaecytisus hirsutus</i>	E1	.	.	.	+	+	+	+	+	+	+	+	.	+	+	+	+	.	+	.	+	.	
<i>Amelanchier ovalis</i>	E2b	.	+	.	.	.	.	1	.	.	.	.	+	.	+	+	+	+	.	.	.	.
<i>Amelanchier ovalis</i>	E2a	+	.	.	.	.	+	.	.	.	.	.	+	.	+	+	+	+	.	.	.	.
<i>Amelanchier ovalis</i>	E1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Asperula aristata</i>	E1	.	.	.	.	.	.	.	.	.	.	.	.	.	+	+	.	+	+	+	+	+
<i>Carex alba</i>	E1	.	1	1	+	+	.	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Galium purpureum</i>	E1	.	.	.	.	.	+	.	.	+	+	+	.	.	.	.	.	.	+	.	.	.
<i>Pinus nigra</i>	E3b	r	.	.	.	.	.	1	1	.	.	.	+	+	.	.	.	.	.	r	.	.
<i>Pinus nigra</i>	E3a	.	.	.	.	.	.	.	r	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Pinus nigra</i>	E2b	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	r	.
<i>Pinus nigra</i>	E2a	.	.	.	.	.	.	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Rhamnus saxatilis</i>	E2a	.	.	.	.	.	.	.	+	+	+	+	.	.	.	.	.	.	.	.	.	.
<i>Rhamnus saxatilis</i>	E1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Aster amellus</i>	E1	.	.	+	.	+	.	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Crepis slovenica</i>	E1	.	.	+	.	+	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Genista radiata</i>	E2a	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Peucedanum austriacum</i>	E1	.	.	+	.	.	.	.	.	+	.	.	.	.	.	.	.	.	.	.	.	.
<i>Cephalanthera rubra</i>	E1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Cotoneaster tomentosus</i>	E2b	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Cotoneaster tomentosus</i>	E2a	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Ophrys insectifera</i>	E1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Rhododendron hirsutum</i>	E2a	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Rhodorthamnus chamaecistus</i>	E1	2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Aquilegia nigricans</i>	E1	.	.	.	.	.	.	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Rubus saxatilis</i>	E1	.	.	.	.	.	.	.	.	.	+	.	.	.	.	.	.	.	.	.	.	.
<i>Pinus mugo</i>	E2b	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Carex ornithopoda</i>	E1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Gymnadenia odoratissima</i>	E1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Euphrasia cuspidata</i>	E1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
VP Vaccinio-Piceetea																							
<i>Picea abies</i>	E3b	.	.	.	.	.	.	+	+	.	1	.	.	.	+	+	.	+	1	+	.	.
<i>Picea abies</i>	E3a	.	.	.	.	.	.	.	.	+	.	+	.	.	+	.	+	.	+	.	r	.
<i>Picea abies</i>	E2b	.	.	.	.	.	+	.	.	.	+	+	.	+	+	.	+	.	+	.	+	.
<i>Picea abies</i>	E2a	1	.	.	.	.	+	.	+	+	.	+	.	+	.	+	.	+	.	+	.	.
<i>Picea abies</i>	E1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Hieracium murorum</i>	E1	.	+	+	+	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Homogyne sylvestris</i>	E1	.	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Solidago virgaurea</i>	E1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Pyrola minor</i>	E1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	Pr.	Fr.
.	+	.	.	+	.	+	+	.	.	.	+	.	.	r	.	+	15	27
.	+	+	.	.	+	+	.	.	+	+	+	14	25	
.	+	+	+	.	r	.	.	12	22		
.	+	+	.	+	10	18	
.	+	+	.	+	+	.	r	.	+	10	18		
.	+	.	+	.	+	+	+	+	+	+	+	+	+	+	+	.	.	6	11		
+ + 1 + 1 . + + . . + . + + 1 1 1 1 + + + + + + . + . + . + . +	41		75																															
+ 1 + + 1 + 1 + 1 . + . 1 1 1 1 . . 1 1 	32		58																															
4 4 4 4 4 4 4 3 5 4 5 4 4 4 3 4 1 3 4 4 3 4 4 4 4 4 4 4 4 4 5 5 5 4 5 55 100																																		
1 1 1 1 2 + 1 1 1 + + 1 1 1 1 1 1 1 1 1 1 1 1 1 1 2 2 1 1 1 1 1 1 + 1 1 1	54		98																															
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. + 1 + + . . . + . + + + . . 1 1 + 1 1 + + + + . + + + 1 . + . +	37		67																															
+ + + . . . + + + + + . + . + 1 1 + + + + + + r . +	33		60																															
+ 1 1 2 1 3 3 + + . . 2 1 1 . . + . . + + 1 	26		47																															
. + . . . + + + + 	22		40																															
. . + + . . . + + + + . 1 + + + . r . + + . . .	21		38																															
. + . . . + + . 1 + . . + 	9		16																															
. + 	2		4																															
. + . + + . + + 1 + + + + 	18		33																															
. + + + . + . .	13		24																															
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. r 	3		5																															
. + . . .	1		2																															
. + . . .	2		4																															
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. 	20		36																															
+ . . . + + 1 + + . + . . .	18		33																															
+ + . . . + + . . + r 1 . + + . . .	23		42																															
+ + . . . + + . + 1 + + + + 1 + + + 1 + . . + + + + +	33		60																															
. + + . . . + . . + 	8		15																															
. + + 1 	7		13																															
. + . . .	2		4																															
. + . . .	2		4																															
. + . . .	2		4																															

	Number of relevé (Zaporedna številka popisa)																							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22		
<i>Larix decidua</i>	E3b	.	.	.	.	.	.	.	.	.	.	r	.	.	.	.	.	.	.	.	.	.
<i>Larix decidua</i>	E2a	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Rosa pendulina</i>	E2a	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Valeriana tripteris</i>	E1	.	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
AF <i>Arenonio-Fagion</i>																								
<i>Cyclamen purpurascens</i>	E1	1	1	+	+	+	.	+	.	+	+	+	.	1	+	+	+	+	1	+	+	+		
<i>Helleborus niger</i>	E1	.	1	+	+	+	.	+	+	+	+	+	.	+	+	1	1	1	+	+	1	.		
<i>Knautia drymeia</i>	E1	.	.	+	+	.	.	.	.	.	.	.	.	+	.	+	.	.	.	.	.	.
<i>Omphalodes verna</i>	E1	.	+	.	.	.	.	.	.	.	.	.	.	+	.	.	.	.	.	.	.	.
<i>Anemone trifolia</i>	E1	.	1	.	.	.	.	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Euphorbia carniolica</i>	E1	.	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Primula vulgaris</i>	E1	.	+	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Rhamnus fallax</i>	E2b	.	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Daphne laureola</i>	E2a	.	.	.	.	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Hemerocallis lilioasphodelus</i>	E1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
TA <i>Tilio-Acerion</i>																								
<i>Acer pseudoplatanus</i>	E2b	.	.	.	.	.	.	.	.	.	.	.	.	.	.	+	.	.	.	.	.	.
<i>Acer pseudoplatanus</i>	E2a	.	.	r	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	+	.	.
<i>Acer pseudoplatanus</i>	E1	.	+	.	.	.	.	.	+	.	.	+	.	.	+	.	.	+	+	+	+	.
<i>Juglans regia</i>	E2b	.	.	.	.	.	.	.	.	.	.	+	.	.	.	.	.	.	.	.	.	.
<i>Juglans regia</i>	E2a	.	+	.	.	.	.	.	+	+	1	.	1	.	1	.	+	.	+	+	+	.
<i>Juglans regia</i>	E1	.	.	.	.	.	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Acer platanoides</i>	E2a	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Acer platanoides</i>	E1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Tilia platyphyllos</i>	E1	.	.	.	.	.	.	.	.	.	.	.	.	.	+	.	.	.	.	.	.	.
<i>Euonymus latifolia</i>	E2a	.	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Polystichum aculeatum</i>	E1	.	r	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Aruncus dioicus</i>	E1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
AI <i>Alnion incanae, Salicetea purpureae</i>																								
<i>Frangula alnus</i>	E2b	
<i>Frangula alnus</i>	E2a	.	+	.	+	+	.	+	.	+	+	.	+	.	+	.	+	.	+	+	+	.		
<i>Frangula alnus</i>	E1	
<i>Salix eleagnos</i>	E2b	1	
<i>Salix eleagnos</i>	E2a	
<i>Salix purpurea</i>	E2b	
<i>Salix purpurea</i>	E2a	
FS <i>Fagetalia sylvaticae</i>																								
<i>Fagus sylvatica</i>	E3b	.	.	+	r	r	
<i>Fagus sylvatica</i>	E3a	.	+	
<i>Fagus sylvatica</i>	E2b	r	.	.	+	
<i>Fagus sylvatica</i>	E2a	r	
<i>Fagus sylvatica</i>	E1	.	+	.	+	
<i>Epipactis helleborine</i>	E1	.	.	+	+	1	+	
<i>Neottia nidus-avis</i>	E1	+	+	+	
<i>Salvia glutinosa</i>	E1	.	.	+	+	
<i>Cephalanthera damasonium</i>	E1	+	+	r	
<i>Laburnum alpinum</i>	E3a	.	+
<i>Laburnum alpinum</i>	E2b	.	+
<i>Laburnum alpinum</i>	E2a
<i>Daphne mezereum</i>	E2a	.	+
<i>Galium laevigatum</i>	E1	.	+	.	+	+
<i>Melica nutans</i>	E1	.	+
<i>Prunus avium</i>	E3a
<i>Prunus avium</i>	E2b
<i>Prunus avium</i>	E1	+

23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	Pr.	Fr.
.	1	2
.	r	1	2	
.	1	2		
.	1	2		
1	+	+	1	+	1	1	+	+	+	+	+	+	1	1	+	+	+	+	+	+	+	+	+	+	+	+	+	+	45	82				
.	.	.	1	+	1	+	+	+	+	1	.	+	+	1	.	+	+	1	+	+	1	1	1	+	+	39	71							
.	.	.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	10	18						
.	8	15				
.	1	1	1	1	1	4	7				
.	r	2	4				
.	+	2	4				
.	1	2				
.	1	2				
.	+	1	2				
.	r	1	2				
.	+	5	9				
+	+	r	.	.	+	24	44				
.	.	.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	2	4						
+	+	+	+	+	+	+	+	+	+	+	+	+	18	33						
.	+	+	.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	8	15							
.	+	+	.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	1	2							
.	+	+	.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	3	5							
.	+	+	.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	3	5							
.	+	+	.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	2	4							
.	+	+	.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	1	2							
.	+	+	.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	1	2							
.	+	+	.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	5	9							
.	+	+	.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	13	24							
.	+	+	.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	r	+	1	2					
.	+	+	.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	6	11							
.	+	+	.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	3	5							
.	+	+	.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	1	2							
.	+	+	.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	1	2							
.	+	+	.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	4	7							
.	+	+	.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	6	11							
.	+	+	.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	5	9							
.	+	+	.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	4	7							
.	+	+	.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	4	7							
.	+	+	.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	3	5							
.	+	+	.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	3	5							
.	+	+	.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	1	2							
.	+	+	.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	1	2							
.	+	+	.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	3	5							

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
<i>Prenanthes purpurea</i>	E1	.	+
<i>Viola reichenbachiana</i>	E1	.	.	+
<i>Lilium martagon</i>	E1	.	+
<i>Lonicera alpigena</i>	E2a	.	+
<i>Mercurialis perennis</i>	E1	.	+
<i>Tilia cordata</i>	E2a	+
<i>Mycelis muralis</i>	E1
QP <i>Quercetalia pubescenti-petraeae</i>																						
<i>Fraxinus ornus</i>	E3b	.	.	2	1	+	1	+
<i>Fraxinus ornus</i>	E3a	.	1	+	+	+	1	1	1	1	1	1	1	1	1	1	.	+
<i>Fraxinus ornus</i>	E2b	.	1	1	1	1	1	+	1	1	2	1	1	1	1	1	1	1	1	1	1	1
<i>Fraxinus ornus</i>	E2a	.	1	1	1	1	.	1	.	1	2	1	1	.	1	1	1	1	.	1	1	+
<i>Fraxinus ornus</i>	E1	.	.	.	1	+	.	1	1	1	1	1	.	.	.	.	1	.	+	+	+
<i>Ostrya carpinifolia</i>	E3b	.	1	1	1	+	1	.	.	+	+	.	+	.	+	+	.	+	2	.	.	
<i>Ostrya carpinifolia</i>	E3a	.	1	1	1	+	+	1	.	2	2	1	1	.	1	1	+	+
<i>Ostrya carpinifolia</i>	E2b	+	.	1	1	2	2	+	.	1	+	.	+	1	.	1	+	+	.	1	1	2
<i>Ostrya carpinifolia</i>	E2a	.	+	+	1	1	.	.	+	.	+	.	.	.	.	.	.	+	+	1	.
<i>Sorbus aria</i>	E1	.	.	.	.	+	.	+	.	.	+	.	.	+	.	.	.	.	.	.	.
<i>Sorbus aria</i>	E3b	.	1	+	+	+
<i>Sorbus aria</i>	E3a	.	1	.	.	.	.	.	.	+	+	+	1	.	.	.	.	+	+	.	.
<i>Sorbus aria</i>	E2b	.	1	.	.	+	1	+	.	+	1	+	.	+	.	.	+	+	.	.	.	
<i>Sorbus aria</i>	E2a	.	.	.	.	.	+	.	+	.	+	.	+	.	.	.	.	+	+	.	.
<i>Sorbus aria</i>	E1	.	.	.	.	.	+	.	+	.	+	.	+	.	.	.	.	.	.	.	.
<i>Quercus pubescens</i>	E3b	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	+	.	.	.	.
<i>Quercus pubescens</i>	E3a	.	.	.	.	.	.	.	.	.	.	+	.	.	.	.	+	.	.	.	.
<i>Quercus pubescens</i>	E2b	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	+	.	.	.	.
<i>Quercus pubescens</i>	E2a	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	+	.	.	.	.
<i>Quercus pubescens</i>	E1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	r	+	r	+	+	.
<i>Coronilla emerus</i>	E2a	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Convallaria majalis</i>	E1	.	+	.	.	.	+	.	.	+	.	.	+	.	.	.	.	.	.	.	.
<i>Melittis melissophyllum</i>	E1	.	+	.	.	+	.	.	.	+	.	.	+	.	.	.	.	.	.	.	.
<i>Euonymus verrucosa</i>	E2a	.	1	.	.	.	.	.	.	+	.	.	.	.	.	.	.	.	.	.	.
<i>Cornus mas</i>	E2b	.	+	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Epipactis muelleri</i>	E1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Sesleria autumnalis</i>	E1	.	.	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Carex flacca</i>	E1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Cotinus coggygria</i>	E2a	.	.	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Hypericum montanum</i>	E1	.	.	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Peucedanum schotti</i>	E1	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Asparagus tenuifolius</i>	E1	.	.	.	.	.	.	.	.	+	.	.	.	.	.	.	.	.	.	.	.
<i>Cornus mas</i>	E2a	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
QR <i>Quercetalia roboris-petraeae</i>																						
<i>Quercus petraea</i>	E1	.	.	.	.	.	.	+	.	+	+	.	+	.	.	.	.	.	.	+	.
<i>Potentilla erecta</i>	E1	.	.	.	.	.	.	.	.	+	.	.	.	.	+	.	+	+	.	.	.
<i>Pteridium aquilinum</i>	E1	.	.	+	.	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Quercus robur</i>	E2b	.	.	.	.	.	.	.	.	.	.	.	.	.	.	+	.	.	.	.	.
<i>Quercus robur</i>	E2a	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Quercus robur</i>	E1	.	.	.	.	.	.	.	.	+	+	.	.	+	.	.	.	.	.	.	.
<i>Populus tremula</i>	E3b	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Populus tremula</i>	E3a	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Populus tremula</i>	E2b	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Populus tremula</i>	E2a	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Betula pendula</i>	E3a	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Betula pendula</i>	E2b	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Betonica officinalis</i>	E1	.	.	.	.	.	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.

23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	Pr.	Fr.
.	2	4	
.	2	4		
.	1	2		
.	1	2		
.	1	2		
.	1	2		
.	1	2		
.	7	13		
+	1	+	.	+	.	1	1	.	+	+	+	+	.	+	1	+	.	.	1	.	.	+	.	30	55		
1	1	1	1	.	+	1	1	1	+	+	2	.	.	1	+	1	1	1	1	+	.	1	2	2	+	1	1	1	.	2	48	87		
1	1	+	.	+	.	1	1	1	1	1	1	.	.	1	.	+	+	1	1	1	1	1	.	.	.	+	1	.	+	39	71			
.	+	.	1	.	.	1	1	1	.	.	.	+	.	.	1	.	1	.	1	.	1	.	+	.	.	+	1	.	+	26	47			
.	.	.	.	.	.	1	.	1	1	.	.	+	2	1	.	.	.	+	.	.	.	.	.	.	.	.	.	.	19	35
1	1	1	1	1	+	1	1	.	1	1	+	+	.	.	2	1	+	2	1	1	1	+	+	37	67			
1	1	.	+	1	1	.	+	1	1	1	1	1	2	+	+	1	1	+	1	1	1	1	1	2	2	1	1	1	48	87				
+	1	.	.	.	.	.	+	+	.	+	1	1	+	1	r	+	1	1	+	+	+	+	+	+	+	+	+	32	58	
.	.	.	.	.	.	.	.	.	.	.	.	+	.	.	+	.	+	r	.	.	.	.	.	.	.	.	.	7	13	
.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	5	9
.	+	+	+	1	+	+	+	.	.	.	+	.	15	27		
.	+	+	.	+	+	+	+	.	+	+	.	.	.	.	.	.	.	+	+	+	1	.	+	+	.	+	+	+	28	51
.	+	.	.	.	.	.	+	+	+	+	+	.	.	.	.	.	.	+	+	+	+	.	+	+	+	.	+	16	29	
.	.	.	.	.	.	.	+	+	+	+	+	.	.	.	.	.	+	+	+	+	.	+	+	+	.	+	.	8	15	
.	.	.	.	.	.	.	.	.	.	.	.	+	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	2
.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	2	4
.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	2
.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	2
.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	7	13
.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	6	11
.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	5	9
.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	5	9
.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	4	7
.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.	3	5
.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	+	.	.	.	.	.	.	.	3	5
.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	+	+	.	.	.	.	.	.	.	3	5
.	.	.	.	.	.	.	.	.	+	.	.	.	.	.	.	.	.	.	+	+	.	.	.	.	.	.	.	.	2	4
.	.	.	.	.	.	.	.	.	+	.	.	.	.	.	.	.	.	.	+	.	.	.	.	.	.	.	.	.	1	2
.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	2
.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	2
.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	2
.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	2
+	+	+	+	+	.	.	.	.	.	.	.	+	r	.	+	r	.	+	r	+	+	r	.	.	.	.	.	.	20	36
.	.	.	+	.	1	+	.	.	.	.	.	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	8	15	
.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	8	15
.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	2
.	.	.	.	.	.	.	.	.	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	2
.	.	.	.	.	.	.	.	.	+	.	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	6	11
.	.	.	.	.	.	.	.	.	+	.	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	2
.	.	.	.	.	.	.	.	.	+	.	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	2	4
.	.	.	.	.	.	.	.	.	+	.	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	3	5
.	.	.	.	.	.	.	.	.	+	.	1	.	+	.	.	.	.	+	.	.	.	.	.	.	.	.	.	4	7	
.	.	.	.	.	.	.	.	.	+	.	+	.	.	.	.	.	+	.	.	.	.	.	.	.	.	.	.	2	4	
.	.	.	.	.	.	.	.	.	+	.	+	.	.	.	.	.	+	.	.	.	.	.	.	.	.	.	.	3	5	
.	.	.	.	.	.	.	.	.	+	.	+	.	.	.	.	.	+	.	.	.	.	.	.	.	.	.	.	2	4	

	Number of relevé (Zaporedna številka popisa)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
<i>Castanea sativa</i>	E1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Hieracium sabaudum</i>	E1	.	.	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Hieracium racemosum</i>	E1	.	.	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Alnus glutinosa</i>	E3a	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
QF <i>Querco-Fagetea</i>																							
<i>Hedera helix</i>	E1	.	+	.	.	+	.	.	.	+	.	.	.	.	.	.	.	.	+	+	+	.	.
<i>Corylus avellana</i>	E1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	+	.
<i>Corylus avellana</i>	E2a	.	r	.	.	.	.	+	+	+	+	+	+	.	.	.	.	.	.	.	.	.	.
<i>Listera ovata</i>	E1	.	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Carex digitata</i>	E1	.	+	+	+	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Clematis vitalba</i>	E2b	.	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Clematis vitalba</i>	E2a	.	+	.	.	+	.	.	.	.	+	.	.	.	.	+	.	.	.	.	.	.	.
<i>Cephalanthera longifolia</i>	E1	.	.	.	.	.	.	+	+	+	.	.	.	.	.	.	.	r	.	.	.	.	.
<i>Platanthera bifolia</i>	E1	.	.	.	.	.	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Rosa arvensis</i>	E2a	.	.	+	.	.	.	.	.	+	.	.	.	.	.	.	.	+	.	.	.	.	.
<i>Viscum album</i> subsp. <i>album</i>	E3a	.	+	r	.	.	.	.	.	+	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Cruciata glabra</i>	E1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Veratrum nigrum</i>	E1	.	+	.	.	.	.	.	.	.	.	+	.	.	.	.	.	.	.	.	.	.	.
<i>Vinca minor</i>	E1	.	.	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Taxus baccata</i>	E3a	.	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Taxus baccata</i>	E2b	.	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Hepatica nobilis</i>	E1	.	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Acer campestre</i>	E1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Ilex aquifolium</i>	E2a	.	.	.	.	r	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Malus sylvestris</i>	E2b	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Malus sylvestris</i>	E2a	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Pyrus pyaster</i>	E3a	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Pyrus pyaster</i>	E2a	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Pyrus pyaster</i>	E1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Lonicera xylosteum</i>	E2a	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
SSC <i>Sambuco-Salicion capreae</i>																							
<i>Salix caprea</i>	E2b	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Sorbus aucuparia</i>	E2a	.	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
RP <i>Rhamno-Prunetea</i>																							
<i>Juniperus communis</i>	E2b	.	.	1	1	1	1	.	+	2	+	+	+	.	1	+	1	+	.	1	+	+	.
<i>Juniperus communis</i>	E2a	+	+	.	1	.	.	+	+	1	+	1	+	.	+	+	.	+	2	1	1	1	.
<i>Berberis vulgaris</i>	E2b	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	+	1	.	.	.	.
<i>Berberis vulgaris</i>	E2a	.	+	.	.	+	.	.	+	+	+	+	+	.	+	+	.	+	1	+	+	.	.
<i>Berberis vulgaris</i>	E1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Viburnum lantana</i>	E2b	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	+	.	.	.	.	.
<i>Viburnum lantana</i>	E2a	.	+	.	+	+	.	.	+	+	+	+	+	.	+	+	.	+	.	.	.	.	.
<i>Viburnum lantana</i>	E1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Rhamnus catharticus</i>	E2b	.	.	+	.	+	.	.	+	.	.	.	.	.	+	+	.	+	.	+	.	.	.
<i>Rhamnus catharticus</i>	E2a	.	.	+	.	.	+	.	+	+	+	+	+	.	+	+	.	+	.	.	.	.	.
<i>Rhamnus catharticus</i>	E1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Ligustrum vulgare</i>	E1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Ligustrum vulgare</i>	E2a	.	.	1	.	+	.	.	+	+	+	+	+	.	+	+	.	+	.	.	.	.	.
<i>Cornus sanguinea</i>	E2b	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Cornus sanguinea</i>	E2a	.	.	+	.	.	.	.	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Rosa canina</i>	E2a	.	.	.	.	.	.	.	.	+	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Crataegus monogyna</i>	E3a	.	.	.	.	.	.	.	.	+	.	r	.	.	.	.	.	.	.	.	.	.	.
<i>Crataegus monogyna</i>	E2b	.	.	+	.	.	.	.	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Crataegus monogyna</i>	E2a	.	+	.	.	.	.	.	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Rubus fruticosus</i> agg.	E2a	.	.	.	.	r	.	.	.	.	.	.	.	.	.	.	.	+	.	.	.	.	.
<i>Euonymus europaea</i>	E2a	.	.	+	.	.	.	.	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.

23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	Pr.	Fr.
.	+	r	2	4	
.	+	2	4	
.	1	2		
.	r	1	2		
+	+	.	+	.	+	.	+	.	+	.	+	.	+	.	+	.	+	+	+	+	+	+	+	+	+	+	+	+	+	11	20			
.	+	+	3	5		
.	r	.	+	10	18		
.	+	+	1	+	+	1	10	18	
.	+	+	.	+	+	+	+	+	+	+	+	9	16				
.	1	2				
+	+	.	+	.	+	.	+	.	+	.	+	.	+	.	+	.	+	r	+	.	.	.	.	.	.	.	.	.	9	16
.	+	5	9				
.	+	4	7				
.	3	5				
.	+	3	5				
.	+	2	4				
.	+	2	4				
.	+	2	4				
.	1	2				
.	1	2				
.	r	.	.	.	.	.	.	.	1	2				
.	1	2				
.	.	r	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	2
.	+	1	2				
.	r	.	.	.	.	.	.	.	.	1	2				
.	r	.	.	.	.	.	.	.	.	1	2				
.	+	1	2				
.	+	1	2				
.	r	.	.	.	.	.	.	.	1	2				
.	+	1	2				
.	+	2	4				
.	1	2				
1	1	.	1	1	+	.	+	1	1	+	1	.	+	27	49			
+	.	2	.	1	.	+	.	+	+	+	.	1	+	+	1	1	1	+	1	+	+	1	+	.	1	1	1	1	1	1	43	78		
.	+	3	5				
.	.	.	.	+	.	+	+	.	.	+	+	r	.	+	.	.	r	+	.	.	.	.	.	.	22	40				
.	+	1	2				
.	+	.	.	.	r	.	.	.	.	.	.	.	.	3	5				
.	+	.	.	.	r	.	.	.	.	.	.	.	.	3	5				
.	+	.	.	r	.	.	+	.	+	+	+	+	.	18	33				
.	+	+	.	.	.	+	3	5					
.	+	+	.	+	7	13					
.	+	.	.	.	+	10	18					
.	+	1	2				
.	+	1	2				
.	+	8	15				
.	+	.	.	.	r	.	.	r	.	.	.	.	.	.	2	4				
.	+	.	.	.	r	+	.	.	.	.	.	.	.	5	9					
.	+	.	.	.	r	.	.	r	.	.	.	.	.	.	4	7				
.	+	.	.	.	r	.	.	r	.	.	.	.	.	.	1	2				
.	+	.	.	.	+	2	4					
.	+	.	.	.	+	3	5					
.	+	.	.	.	+	2	4					
.	+	.	.	.	+	1	2					

	Number of relevé (Zaporedna številka popisa)																						
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	
<i>Rubus montanus</i>	E2a	.	.	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
TG <i>Trifolio-Geranietea</i>																							
<i>Vincetoxicum hirundinaria</i>	E1	.	.	1	+	+	+	.	.	+	+	.	+	+	+	+	+	.	+	.	+	+	
<i>Anthericum ramosum</i>	E1	.	.	.	+	+	1	.	.	+	1	1	+	+	+	.	+	.	+	.	+	+	
<i>Viola hirta</i>	E1	.	.	+	+	+	.	.	.	+	.	.	+	.	+	+	.	+	.	+	.	+	
<i>Thalictrum minus</i>	E1	.	.	.	.	.	+	.	+	1	.	1	+	+	+	+	+	.	+	.	+	.
<i>Origanum vulgare</i>	E1	.	.	1	+	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Polygonatum odoratum</i>	E1	.	.	.	.	.	+	.	+	+	.	+	.	.	.	.	+	.	.	.	.	.
<i>Laserpitium siler</i>	E1	.	.	.	.	.	+	.	.	.	.	.	.	+	.	.	.	.	.	.	.	.
<i>Thesium bavarum</i>	E1	.	.	.	.	.	+	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Geranium sanguineum</i>	E1	.	.	.	.	.	+	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Verbascum austriacum</i>	E1	.	.	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Calamintha einseleana</i>	E1	.	.	+	.	.	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Digitalis grandiflora</i>	E1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Graffia golaka</i>	E1	.	.	.	.	.	.	.	.	.	.	2	.	.	.	.	.	.	.	.	.	.
<i>Clinopodium vulgare</i>	E1	.	.	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Peucedanum cervaria</i>	E1	.	.	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Iris graminea</i>	E1	.	.	.	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Lilium carniolicum</i>	E1	.	.	.	.	.	.	.	.	.	+	.	.	.	.	.	.	.	.	.	.	.
<i>Silene nutans</i>	E1																						
BA <i>Betulo-Alnetea</i>																							
<i>Salix appendiculata</i>	E2b	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Salix appendiculata</i>	E2a	.	.	.	.	.	.	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Salix glabra</i>	E2b	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Salix glabra</i>	E2a	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
EA <i>Epilobietea angustifolii</i>																							
<i>Picris hieracioides</i>	E1	.	.	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Atropa bella-donna</i>	E1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Verbascum thapsus</i>	E1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
ES <i>Elyno-Seslerietea</i>																							
<i>Sesleria caerulea</i>	E1	3	+	.	1	2	2	3	3	4	4	3	4	3	3	3	4	3	4	4	3	3	
<i>Globularia cordifolia</i>	E1	+	.	.	.	.	.	+	.	+	.	.	.	+	.	+	+	.	+	+	.	.
<i>Betonica alopecuroides</i>	E1	.	1	.	.	.	+	1	.	.	.	.	1	+	+	+	+	+	+	.	.	.
<i>Carex mucronata</i>	E1	.	.	.	.	+	.	.	.	.	.	.	+	+	+	+	+	.	+	.	+	.
<i>Euphrasia salisburgensis</i>	E1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Phyteuma orbiculare</i>	E1	+	.	.	.	.	.	.	.	.	.	+	.	+	+	.	+	.	.	.	.	.
<i>Aster bellidioides</i>	E1	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
CD <i>Caricetalia davallianae</i>																							
<i>Tofieldia calyculata</i>	E1	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Pinguicula alpina</i>	E1	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Parnassia palustris</i>	E1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Schoenus nigricans</i>	E1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	+
FB <i>Festuco-Brometea</i>																							
<i>Carex humilis</i>	E1	+	.	.	2	2	.	1	1	1	1	.	1	1	1	2	1	2	2	1	1	2	
<i>Buphthalmum salicifolium</i>	E1	.	+	1	1	1	1	+	+	.	1	.	1	+	+	+	+	1	+	+	.	+	
<i>Teucrium chamaedrys</i>	E1	.	+	1	1	1	+	1	1	2	1	1	1	+	.	+	+	.	+	.	+	.	
<i>Galium lucidum</i>	E1	.	.	.	.	.	1	+	+	.	.	.	+	1	+	+	+	+	+	.	+	+
<i>Brachypodium rupestre</i>	E1	.	+	1	+	1	.	+	+	+	2	1	2	1	+	1	1	.	+	.	1	+	.
<i>Euphorbia cyparissias</i>	E1	.	.	.	.	+	+	.	+	+	+	+	+	+	+	+	+	+	+	.	+	.
<i>Teucrium montanum</i>	E1	.	.	+	1	+	1	.	.	.	.	+	1	.	1	+	+	.	+	.	.	1
<i>Thymus praecox</i>	E1	.	.	+	+	+	+	.	+	+	.	+	.	+	.	+	.	+	.	.	.	+	
<i>Peucedanum oreoselinum</i>	E1	.	.	.	1	1	+	1	1	+	1	1	+	.	+	.	1	.	1	.	.	.	
<i>Cirsium erisithales</i>	E1	.	+	.	+	.	.	.	.	+	.	+	+	+	+	+	+	+	.	.	.	.
<i>Galium verum</i>	E1	.	.	.	.	.	.	.	+	+	.	+	.	+	.	+	.	.	+	.	.	.
<i>Centaurea bracteata</i>	E1	.	.	+	.	.	.	+	.	1	+	.	.	+	.	+	.	.	+	.	.	.	

23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	Pr.	Fr.
.	1	2
+	.	+	.	.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	1	+	+	+	+	+	+	28	51				
+	+	.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	22	40					
.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	18	33					
.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	10	18					
.	1	+	.	.	.	.	8	15					
.	8	15					
.	5	9					
.	5	9					
.	3	5					
.	2	4					
.	2	4					
.	2	4					
.	2	4					
.	1	2					
.	1	2					
.	1	2					
.	1	2					
.	1	2					
+																																		
.	3	5				
.	10	18					
.	1	2					
.	8	15					
.	1	2					
.	1	2					
.	1	2					
.	1	2					
4	3	3	3	2	3	3	4	3	3	3	2	.	4	3	4	3	1	2	+ 2	1	1	1	2	.	.	.	1	46	84	
.	+	+	+	.	.	+	.	+	+	.	.	+	+	+	+	+	+	+	+	+	r	.	.	.	1	.	+	.	.	.	24	44		
.	.	1	.	+	+	+	+	.	.	+	.	1	+	+	.	+	21	38		
+	1	1	1	.	+	+	1	1	1	18	33			
.	.	.	.	+	.	+	+	.	1	+	+	5	9				
.	+	5	9					
.	+	1	2					
.	+	5	9					
.	+	4	7					
.	+	3	5					
.	+	1	2					
1	2	1	2	1	+	2	3	+	.	+	1	2	2	1	2	2	+	.	.	1	1	1	1	1	1	1	44	80		
+	1	1	1	1	+	.	+	.	+	+	.	+	+	+	1	.	1	1	1	1	1	+	+	.	.	1	1	1	1	1	1	41	75	
+	+	+	.	+	.	+	1	.	.	+	+	+	+	+	1	1	+	1	2	1	1	1	1	1	35	64		
.	1	.	+	+	+	+	1	+	+	+	.	+	+	+	+	.	.	+	+	+	+	1	1	1	1	1	1	1	1	34	62			
.	.	.	+	+	1	1	1	2	1	.	1	1	1	1	1	1	1	28	51			
.	1	+	+	+	+	+	+	+	+	+	21	38				
+	+	+	+	.	+	+	+	1	1	1	1	1	+	+	21	38				
+	.	+	+	+	+	+	1	1	1	1	1	1	1	1	19	35				
.	+	1	1	1	1	1	1	1	1	1	1	1	1	1	17	31			
.	+	+	13	24					
.	+	+	13	24					
.	+	11	20					

Number of relevé (Zaporedna številka popisa)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
<i>Carlina acaulis</i>	E1	.	.	.	.	+	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	+
<i>Bromopsis erecta</i>	E1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	+	+	+	.	.	.	+
<i>Dianthus hyssopifolius (D. monspessulanus)</i>	E1	.	.	.	.	.	+	.	.	r	.	.	.	.	.	.	.	.	.	.	.	.
<i>Asperula cynanchica</i>	E1	.	.	1	1	+	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Cirsium pannonicum</i>	E1	.	.	+	.	.	.	.	.	.	+	.	.	.	+	.	+	.	.	.	.	.
<i>Gentianella ciliata</i>	E1	.	.	.	.	.	r	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Stachys recta</i>	E1	.	.	.	.	.	+	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Thesium linophyllum</i>	E1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	+
<i>Allium carinatum subsp. pulchellum</i>	E1	.	.	.	.	.	.	.	+	+	+	.	1	.	.	.	.	.	.	.	.	.
<i>Betonica serotina</i>	E1	.	.	.	.	.	.	+	.	+	+	+	+	.	.	.	.	.	.	.	.	.
<i>Campanula glomerata</i>	E1	.	.	.	.	.	.	.	+	.	.	.	.	.	+	.	.	.	.	.	.	.
<i>Hippocratea comosa</i>	E1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Ranunculus polyanthemophyllus</i>	E1	.	.	.	.	.	r	.	.	+	.	.	.	.	.	.	.	.	.	.	.	.
<i>Carlina vulgaris</i>	E1	.	.	+	.	.	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Dorycnium germanicum</i>	E1	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Helianthemum nummularium subsp. obscurum</i>	E1	.	.	.	.	.	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Koeleria pyramidata</i>	E1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Linum catharticum</i>	E1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Scabiosa triandra</i>	E1	.	.	+	.	.	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Silene vulgaris subsp. vulgaris</i>	E1	.	.	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Carduus nutans</i>	E1	.	.	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Dorycnium herbaceum</i>	E1	.	.	+	.	.	.	.	.	.	.	.	.	.	+	.	.	.	.	.	.	.
<i>Genista tinctoria</i>	E1	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Hieracium pilosella</i>	E1	.	.	.	.	+	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Prunella grandiflora</i>	E1	.	.	.	.	.	.	.	.	.	+	.	.	.	.	.	.	.	.	.	.	.
<i>Veronica barrelieri</i>	E1	.	.	.	.	.	.	.	.	+	+	.	.	.	.	.	.	.	.	.	.	.
<i>Hieracium baumhüni</i>	E1	.	.	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Globularia punctata</i>	E1	.	.	.	.	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Allium carinatum subsp. carinatum</i>	E1	.	.	.	.	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Inula hirta</i>	E1	.	.	.	.	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Centaurea fritschii</i>	E1	.	.	.	.	.	.	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Cirsium x linkianum</i>	E1	.	.	.	.	.	.	.	.	+	.	.	.	.	.	.	.	.	.	.	.	.
<i>Pimpinella saxifraga</i>	E1	.	.	.	.	.	.	.	.	.	+	.	.	.	.	.	.	.	.	.	.	.
<i>Centaureum erythraea</i>	E1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	+
<i>Genista ovata</i>	E1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Gymnadenia conopsea</i>	E1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Dianthus barbatus</i>	E1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Potentilla pusilla</i>	E1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
MA Molinio-Arrhenetheretea																						
<i>Lotus corniculatus</i>	E1	.	.	.	.	.	.	1	.	.	+	.	.	.	.	.	+	.	+	.	.	.
<i>Dactylis glomerata</i>	E1	.	.	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Achillea millefolium</i>	E1	.	.	.	.	.	.	.	.	+	.	.	.	.	.	.	.	.	.	.	.	.
<i>Taraxacum officinale</i>	E1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
TR Thlaspietea rotundifolii																						
<i>Biscutella laevigata</i>	E1	.	.	.	.	.	.	.	+	r	+	.	.	.	+	+	.	+	+	.	.	
<i>Hieracium glaucum</i>	E1	.	.	.	.	+	1	.	+	+	.	.	.	.	+	.	+	.	+	.	.
<i>Achnatherum calamagrostis</i>	E1	.	.	+	1	+	+	.	.	.	.	.	.	.	.	.	.	.	.	.	+
<i>Hieracium bifidum</i>	E1	.	.	.	.	.	+	.	+	+	.	.	.	.	.	.	.	.	.	.	.
<i>Petasites paradoxus</i>	E1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Peucedanum verticillare</i>	E1	.	.	.	.	.	+	.	.	.	+	.	.	.	.	.	.	.	.	.	.	.
<i>Chamaenerion palustre</i>	E1	.	.	.	.	.	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Silene vulgaris subsp. glareosa</i>	E1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Hieracium dollineri</i>	E1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Hieracium schmidtii</i>	E1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Petrorhagia saxifraga</i>	E1	.	.	.	.	.	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	Pr.	Fr.
.	.	.	+	+	+	.	+	+	.	+	10	18		
.	+	+	+	+	8	15	
.	1	.	.	+	7	13		
.	r	+	6	11		
.	+	.	.	+	6	11		
.	+	+	+	+	+	.	+	6	11			
.	+	+	.	+	+	.	.	+	6	11			
.	+	r	.	r	+	5	9			
.	r	.	r	+	4	7			
.	4	7		
.	+	+	+	+	+	.	+	+	+	+	+	+	+	+	+	+	4	7				
.	+	+	.	+	+	+	.	+	+	+	+	+	+	+	+	+	3	6					
.	+	.	.	+	.	.	+	3	5				
.	+	.	.	+	.	+	3	5				
.	+	.	+	.	+	+	.	+	+	+	+	+	+	+	+	3	5				
.	+	+	+	.	+	+	+	.	+	+	+	+	+	+	+	+	+	3	5					
.	+	+	.	+	+	+	.	+	+	+	+	+	+	+	+	+	3	5					
.	+	+	.	+	+	+	.	+	+	+	+	+	+	+	+	+	3	5					
.	+	+	.	+	+	+	.	+	+	+	+	+	+	+	+	+	3	5					
.	+	+	.	+	+	+	.	+	+	+	+	+	+	+	+	+	3	5					
.	+	+	.	+	+	+	.	+	+	+	+	+	+	+	+	+	2	4					
.	2	4					
.	+	.	+	+	+	.	+	+	+	+	+	+	+	+	+	2	4					
.	+	.	+	+	.	+	+	+	+	+	+	+	+	+	2	4					
.	+	.	+	+	+	.	+	+	+	+	+	+	+	+	+	1	2					
.	1	2					
.	1	2					
.	1	2					
.	1	2					
.	+	.	+	+	+	.	+	+	+	+	+	+	+	+	+	1	2					
.	+	.	+	+	+	.	+	+	+	+	+	+	+	+	+	1	2					
.	+	.	+	+	+	.	+	+	+	+	+	+	+	+	+	1	2					
.	+	.	+	+	+	.	+	+	+	+	+	+	+	+	+	1	2					
.	+	.	+	+	+	.	+	+	+	+	+	+	+	+	+	1	2					
.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	2	4					
.	+	.	+	+	+	.	+	+	+	+	+	+	+	+	+	2	4					
.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	2					

	Number of relevé (Zaporedna številka popisa)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
	<i>Scrophularia juratensis</i>	E1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<i>Hieracium caesium</i>	E1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<i>Gymnocarpium robertianum</i>	E1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
PC	<i>Potentilletalia caulescentis, Physoplexido-Saxifragion petraeae</i>																						
	<i>Paederota lutea</i>	E1	.	1	.	+	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<i>Silene hayekiana</i>	E1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<i>Valeriana saxatilis</i>	E1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<i>Potentilla caulescens</i>	E1	.	.	.	.	.	.	.	.	.	.	.	+	.	.	.	.	.	.	.	.	.
	<i>Athamanta turbith</i>	E1	.	.	.	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<i>Hieracium pospischalii</i>	E1	.	.	.	.	.	.	.	.	+	.	.	.	.	.	.	.	.	.	.	.	.
AT	<i>Asplenietea trichomanis</i>																						
	<i>Asplenium ruta-muraria</i>	E1	.	+	+	+	+	.	.	+	+	+	.	+	+	.	+	.	.	.	.	.
	<i>Sedum album</i>	E1	.	.	.	.	.	.	.	.	.	.	.	+	.	.	.	.	.	.	.	.	.
	<i>Asplenium trichomanes</i>	E1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<i>Carex brachystachys</i>	E1	.	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<i>Kernera saxatilis</i>	E1	.	.	.	.	.	.	.	+	.	.	.	.	.	.	.	.	.	.	.	.	.
	<i>Erysimum sylvestre</i>	E1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<i>Polypodium vulgare</i>	E1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
O	Other species (Druge vrste)																						
	<i>Festuca</i> sp.	E1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<i>Hieracium</i> sp.	E1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
ML	Mosses and lichens (Mahovi in lišaji)																						
	<i>Scleropodium purum</i>	E0	1	.	+	+	+	.	1	+	2	+	.	1	.	+	+	.	+	1	+	2	+
	<i>Tortella tortuosa</i>	E0	.	+	+	+	+	+	.	+	+	.	.	+	.	+	.	.	+	+	.	.	.
	<i>Ctenidium molluscum</i>	E0	.	+	.	.	+	.	.	.	+	.	.	+	.	.	.	.	.	.	.	.	.
	<i>Neckera crispa</i>	E0	+	+	+	+	+	.	.	.	.	.	.	+	+	+	+	.	+	.	+	.	.
	<i>Hypnum cupressiforme</i>	E0	.	.	+	.	.	.	.	+	.	+	.	.	+	.	.	.	.	.	.	.	.
	<i>Rhytidiodelphus triquetrus</i>	E0	.	.	.	.	.	.	+	.	.	+	.	+	.	.	+	.	.	.	.	.	.
	<i>Hylocomium splendens</i>	E0	.	.	.	.	.	.	.	.	.	.	.	+	.	.	+	.	.	.	.	.	.
	<i>Fissidens dubius</i>	E0	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<i>Homalothecium lutescens</i>	E0	.	.	.	.	.	.	.	+	.	.	+	+	.	.	.	.	.	.	.	.	.
	<i>Schistidium apocarpum</i>	E0	.	.	+	.	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<i>Thuidium tamariscinum</i>	E0	.	.	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<i>Dicranum scoparium</i>	E0	.	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<i>Homalothecium sericeum</i>	E0	.	.	.	+	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<i>Pleurozium schreberi</i>	E0	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<i>Rhytidium rugosum</i>	E0	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<i>Thuidium abietinum</i>	E0	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<i>Plagiochila poreloides</i>	E0	.	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<i>Isothecium alopecuroides</i>	E0	.	.	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<i>Neckera complanata</i>	E0	.	.	.	.	.	.	.	.	.	+	.	.	.	.	.	.	.	.	.	.	.
	<i>Loeskebryum brevirostre</i>	E0	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<i>Leucobryum glaucum</i>	E0	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<i>Hypnum jutlandicum</i>	E0	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<i>Campylium stellatum</i>	E0	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<i>Encalypta streptocarpa</i>	E0	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<i>Thuidium delicatulum</i>	E0	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<i>Eurhynchium striatum</i>	E0	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Legend – Legenda

- D Dolomite – dolomit
 Re Rendzina – rendzina
 PA Pre-Alpine phytogeographical region – predalpsko fitogeografsko območje

- DN Dinaric phytogeographical region – dinarsko fitogeografsko območje
 Pr. Presence (number of relevés in which the species is presented) – število popisov, v katerih se pojavlja vrsta
 Fr. Frequency in % – frekvenca v %

23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	Pr.	Fr.
.	1	2
.	1	2	
.	1	2		
.	5	9		
.	5	9		
.	5	9		
.	3	5		
.	1	2		
.	1	2		
.	1	2		
+	+	+	+	+	+	.	.	.	+	+	+	.	+	+	+	+	.	+	+	+	+	+	+	+	+	+	+	+	32	58				
.	+	+	3	5		
.	3	5		
.	1	2		
.	1	2		
.	+	+	1	2		
.	+	+	1	2		
.	+	+	1	2		
.	+	+	1	2		
.	+	+	1	2		
.	+	+	1	2		
+	1	1	+	2	+	.	.	1	2	2	+	.	1	+	.	+	.	+	+	+	1	3	3	+	+	+	.	2	+	+	+	43	78	
.	1	+	1	1	.	.	+	.	+	+	.	+	.	+	+	+	+	+	+	+	.	1	1	+	+	+	+	.	.	+	33	60		
.	+	.	1	1	.	+	+	+	.	1	+	+	+	+	+	.	+	.	+	+	.	1	.	.	.	.	+	.	+	21	38
.	+	+	+	.	.	+	+	+	.	1	.	.	.	.	.	.	.	18	33			
.	+	+	10	19			
.	+	+	9	16			
.	+	+	8	15			
.	+	+	+	+	6	11			
.	+	+	+	6	11			
.	+	.	.	1	.	.	.	.	.	.	.	.	6	11			
.	+	.	.	1	.	.	.	.	.	.	.	.	3	5			
.	+	2	4			
.	+	2	4			
.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	2			
.	1	.	.	.	.	.	.	.	.	.	+	.	.	.	.	.	.	.	.	.	.	.	2	4			
.	+	.	.	1	.	.	.	.	.	.	.	.	1	2			
.	+	1	2			
.	+	1	2			
.	+	1	2			
.	+	1	2			
.	+	1	2			
.	+	1	2			
.	+	1	2			

Table 3: Synoptyc table of syntaxa *Rhodothamno chamaecisti-Pinetum sylvestris*, *Fraxino orni-Pinetum nigrae pinetosum sylvestris*, *Genisto januensis-Pinetum sylvestris* and *Erico-Pinetum sylvestris*.

Tabela 3: Sintezna tabela sintaksonov *Rhodothamno chamaecisti-Pinetum sylvestris*, *Fraxino orni-Pinetum nigrae pinetosum sylvestris*, *Genisto januensis-Pinetum sylvestris* and *Erico-Pinetum sylvestris*.

Successive number (Zaporedna številka)	1	2	3	4	5	6	7	8
Sign for syntaxa (Oznaka sintaksonov)	RcPs-Si	FPnps	EPs-Do	GPs-CIH	EPsoc-K	EPsoc-A	EPspm	EPsch
Authors (Avtorji)	ARIDTWMZ	LPMV	PP	ID	WF	CEPHSG	CEPHSG	CEPHSG
Number of relevés (Število popisov)	52	11	20	55	19	27	18	36
Erico-Pinetea								
<i>Calamagrostis varia</i>	E1	100	91	60	78	79	59	89
<i>Erica carnea</i>	E1	100	100	100	100	95	96	100
<i>Pinus sylvestris</i>	E3	100	100	100	100	74	100	100
<i>Pinus sylvestris</i>	E2	58	18	35	62	16	19	67
<i>Polygala chamaebuxus</i>	E1	88	82	30	98	58	82	83
<i>Amelanchier ovalis</i>	E2	96	91	75	45	53	59	78
<i>Epipactis atrorubens</i>	E1	71	73	50	60	.	30	83
<i>Rhodothamnus chamaecistus</i>	E1	63	.	5	4	.	.	.
<i>Rubus saxatilis</i>	E1	60	82	45	2	68	33	67
<i>Rhododendron hirsutum</i>	E2a	56	27	45	4	26	7	94
<i>Cotoneaster tomentosus</i>	E1	50	55	5	4	26	7	39
<i>Leontodon incanus</i>	E1	42	18	5	67	.	.	39
<i>Pinus mugo</i>	E2b	46	27	50	2	5	.	94
<i>Euphrasia cuspidata</i>	E1	37	18	35	2	.	.	.
<i>Carex alba</i>	E1	29	64	40	24	21	59	28
<i>Gymnadenia odoratissima</i>	E1	27	9	35	2	.	4	6
<i>Crepis froelichiana</i> subsp. <i>dinarica</i> (<i>C. slovenica</i>)	E1	25	27	.	13	.	.	.
<i>Asperula aristata</i>	E1	23	9	.	33	5	.	.
<i>Chamaecytisus purpureus</i>	E1	23	64	50	42	.	19	.
<i>Arctostaphylos uva-ursi</i>	E1	21	18	40	.	.	.	.
<i>Galium austriacum</i>	E1	19	.	.	.	.	.	.
<i>Cephalanthera rubra</i>	E1	17	9	.	5	.	.	.
<i>Allium ericetorum</i>	E1	13	9	.	58	.	.	.
<i>Galium purpureum</i>	E1	13	.	5	20	.	19	.
<i>Aquilegia nigricans</i>	E1	8	.	.	2	16	.	.
<i>Genista radiata</i>	E2a	8	9	.	9	.	.	.
<i>Molinia caerulea</i> subsp. <i>arundinacea</i>	E1	6	36	35	47	.	4	6
<i>Aster amellus</i>	E1	4	18	.	15	.	.	.
<i>Rhamnus saxatillis</i>	E1	4	27	25	16	5	7	.
<i>Polygala nicaeensis</i> subsp. <i>forojulensis</i>	E1	4	27	15	.	.	.	.
<i>Carex ornithopoda</i>	E1	4	.	60	2	.	.	22
<i>Genista januensis</i>	E1	4	.	.	22	.	.	.
<i>Pinus nigra</i>	E3	4	.	.	18	.	.	.
<i>Pinus nigra</i>	E2	2	.	.	6	.	.	.
<i>Daphne cneorum</i>	E2	2	18	5	.	.	22	.
<i>Euphorbia triflora</i> subsp. <i>kernerii</i>	E1	2	64	.	.	.	.	.
<i>Thesium rostratum</i>	E1	.	36	.	.	.	.	6
<i>Chamaecytisus hirsutus</i>	E1	.	27	5	40	5	.	.
<i>Bupleurum ranunculoides</i>	E1	.	27	.	.	.	.	.
<i>Knautia resmanii</i>	E1	.	18	.	.	.	.	.
<i>Crepis froelichiana</i> subsp. <i>froelichiana</i>	E1	.	.	35	.	.	.	.
<i>Peucedanum austriacum</i>	E1	.	.	.	7	11	.	.

Successive number (Zaporedna številka)		1	2	3	4	5	6	7	8
<i>Ophrys insectifera</i>	E1	.	.	.	4	.	.	.	.
<i>Viola collina</i>	E1	.	.	.	.	16	.	6	47
<i>Pyrola chlorantha</i>	E1	.	.	.	.	.	7	.	.
<i>Aquilegia atrata</i>	E1	.	.	.	.	.	.	6	.
<i>Pinus uncinata</i>	E3	.	.	.	.	.	.	.	25
<i>Pinus uncinata</i>	E2	.	.	.	.	.	.	.	6
Vaccinio-Piceetea									
<i>Picea abies</i>	E3	62	82	60	56	58	89	44	31
<i>Picea abies</i>	E2	88	45	.	76	42	56	56	53
<i>Picea abies</i>	E1	38	.	.	15	.	.	.	.
<i>Hieracium murorum</i>	E1	62	45	50	13	16	37	89	11
<i>Vaccinium vitis-idaea</i>	E1	58	36	45	.	37	22	89	3
<i>Larix decidua</i>	E3	48	27	.	2	.	19	11	11
<i>Larix decidua</i>	E2	21	9	35	2	32	4	.	6
<i>Vaccinium myrtillus</i>	E1	44	18	15	.	37	26	22	.
<i>Valeriana tripteris</i>	E1	33	18	5	2	47	26	11	58
<i>Solidago virgaurea</i>	E1	21	18	.	4	26	26	33	11
<i>Goodyera repens</i>	E1	12	36	35	.	.	15	11	.
<i>Melampyrum sylvaticum</i>	E1	12	9	15	.	.	4	33	4
<i>Aposeris foetida</i>	E1	12	18	.	.	.	.	.	.
<i>Gentiana asclepiadea</i>	E1	12	.	5	.	5	.	.	.
<i>Luzula sylvatica</i>	E1	12	.	.	.	5	.	.	.
<i>Pyrola minor</i>	E1	12	.	.	4	.	.	.	.
<i>Clematis alpina</i>	E2a	10	18	15	.	5	.	.	.
<i>Homogyne sylvestris</i>	E1	10	.	.	4	37	.	.	.
<i>Rosa pendulina</i>	E2a	8	.	5	2	11	.	89	3
<i>Gymnocarpium dryopteris</i>	E1	8	.	.	.	.	.	.	.
<i>Pyrola rotundifolia</i>	E1	6	9	.	.	11	.	.	.
<i>Listera cordata</i>	E1	6	.	.	.	.	.	.	.
<i>Maianthemum bifolium</i>	E1	4	9	5	.	.	.	.	.
<i>Oxalis acetosella</i>	E1	4	.	5	.	.	.	.	.
<i>Ajuga pyramidalis</i>	E1	4	.	.	.	.	.	.	.
<i>Veronica urticifolia</i>	E1	2	9	5	.	5	.	.	.
<i>Calamagrostis villosa</i>	E1	2	.	10	.	.	.	.	.
<i>Abies alba</i>	E3	2	.	5	.	.	.	.	.
<i>Abies alba</i>	E2	2	.	.	.	5	.	.	.
<i>Orthilia secunda</i>	E1	2	.	5	.	.	15	6	.
<i>Homogyne alpina</i>	E1	2	.	5	.	.	.	33	.
<i>Luzula luzuloides</i>	E1	2	.	5	.	.	.	.	.
<i>Huperzia selago</i>	E1	2	.	.	.	.	.	22	.
<i>Diphasiastrum complanatum</i>	E1	2	.	.	.	.	.	.	.
<i>Dryopteris dilatata</i>	E1	2	.	.	.	.	.	.	.
<i>Pyrola media</i>	E1	2	.	.	.	.	.	.	.
<i>Lonicera nigra</i>	E2	.	18	.	.	.	.	.	.
<i>Lycopodium annotinum</i>	E1	.	9	.	.	.	.	.	.
<i>Calamagrostis arundinacea</i>	E1	.	9	.	.	.	.	.	.
<i>Pinus cembra</i>	E3	.	.	5	.	.	.	.	.
<i>Avenella flexuosa</i>	E1	.	.	5	.	.	.	.	.
<i>Luzula sieberi</i>	E1	.	.	5	.	.	.	.	.
<i>Phegopteris connectilis</i>	E1	.	.	.	.	5	.	.	.

Successive number (Zaporedna številka)		1	2	3	4	5	6	7	8
<i>Aremonio-Fagion</i>									
<i>Cyclamen purpurascens</i>	E1	88	73	10	82	68	59	.	3
<i>Helleborus niger</i>	E1	73	27	.	71	26	33	6	.
<i>Anemone trifolia</i>	E1	40	64	5	7	63	48	.	.
<i>Knautia drymeia</i>	E1	13	.	.	2	.	.	.	.
<i>Rhamnus fallax</i>	E2b	2	.	.	2	16	.	.	.
<i>Euphorbia carniolica</i>	E1	.	.	15	4	.	.	.	.
<i>Omphalodes verna</i>	E1	.	.	.	15	.	.	.	.
<i>Primula vulgaris</i>	E1	.	.	.	4	.	.	.	.
<i>Daphne laureola</i>	E2	.	.	.	2	.	.	.	.
<i>Hemerocallis lilioasphodelus</i>	E1	.	.	.	2	.	.	.	.
<i>Tilio-Acerion</i>									
<i>Acer pseudoplatanus</i>	E3	2	.	.	.	11	.	.	.
<i>Acer pseudoplatanus</i>	E2b	13	9	5	11	16	19	6	19
<i>Acer pseudoplatanus</i>	E1	33	.	.	44	42	.	.	.
<i>Juglans regia</i>	E2a	2	9	.	44	.	.	.	.
<i>Acer platanoides</i>	E1	.	.	.	7	.	.	.	.
<i>Tilia platyphyllos</i>	E1	.	.	.	5	.	.	.	.
<i>Euonymus latifolia</i>	E2	.	.	.	4	11	.	.	.
<i>Aruncus dioicus</i>	E1	.	.	.	2	.	.	.	.
<i>Polytrichum aculeatum</i>	E1	.	.	.	2	.	.	.	.
<i>Alnion incanae, Salicetea purpureae</i>									
<i>Frangula alnus</i>	E2b	4	27	15	29	5	22	11	.
<i>Alnus incana</i>	E2	.	.	5	.	5	.	.	.
<i>Salix eleagnos</i>	E2	.	.	.	15	.	.	.	.
<i>Salix purpurea</i>	E2	.	.	.	4	.	.	.	.
<i>Fagetalia sylvaticae</i>									
<i>Euphorbia amygdaloidea</i>	E1	48	9	.	.	32	22	6	.
<i>Daphne mezereum</i>	E2a	25	9	10	5	63	19	11	8
<i>Fagus sylvatica</i>	E3b	17	45	.	18	63	33	.	3
<i>Fagus sylvatica</i>	E2	33	27	10	27	.	11	.	6
<i>Fagus sylvatica</i>	E1	.	.	.	22	.	.	.	.
<i>Mercurialis perennis</i>	E1	23	9	.	2	37	4	6	19
<i>Melica nutans</i>	E1	17	36	5	5	42	37	22	28
<i>Neottia nidus-avis</i>	E1	17	9	.	15	5	.	.	.
<i>Epipactis helleborine</i>	E1	15	9	50	16	5	.	17	.
<i>Prenanthes purpurea</i>	E1	13	9	5	4	16	.	.	.
<i>Laburnum alpinum</i>	E3	4	.	.	9	.	.	.	.
<i>Laburnum alpinum</i>	E2	17	.	.	11	16	.	.	.
<i>Luzula nivea</i>	E1	12	18	15	.	.	.	.	.
<i>Viola reichenbachiana</i>	E1	10	9	.	4	21	.	.	.
<i>Galium laevigatum</i>	E1	8	.	.	5	16	.	.	.
<i>Lonicera alpigena</i>	E2b	8	27	5	2	36	.	.	.
<i>Salvia glutinosa</i>	E1	8	9	.	15	37	15	.	.
<i>Cephalanthera damasonium</i>	E1	6	.	.	9	.	.	.	.
<i>Campanula trachelium</i>	E1	4	.	.	.	.	.	.	.
<i>Lilium martagon</i>	E1	4	9	10	2	5	.	.	.
<i>Brachypodium sylvaticum</i>	E1	2	.	.	.	5	.	.	.
<i>Euphorbia dulcis</i>	E1	2	.	.	.	.	.	.	.
<i>Heracleum sphondylium</i>	E1	2	.	.	.	.	.	.	.

Successive number (Zaporedna številka)		1	2	3	4	5	6	7	8
<i>Mycelis muralis</i>	E1	2	.	.	2	.	.	.	.
<i>Sympyton tuberosum</i>	E1	2	.	.	.	.	.	.	.
<i>Carex sylvatica</i>	E1	.	9	10	.	.	.	.	.
<i>Cypripedium calceolus</i>	E1	.	.	20	.	5	.	.	.
<i>Prunus avium</i>	E3	.	.	.	2	.	.	.	.
<i>Prunus avium</i>	E2	.	.	.	2	.	.	.	.
<i>Tilia cordata</i>	E2	.	.	.	2	.	.	.	.
<i>Asarum europaeum</i> subsp. <i>caucasicum</i>	E1	.	.	.	.	5	.	.	.
<i>Cardamine pentaphyllos</i>	E1	.	.	.	.	5	.	.	.
<i>Lathyrus vernus</i>	E1	.	.	.	.	5	.	.	.
<i>Fraxinus excelsior</i>	E3	.	.	.	.	.	4	.	.
<i>Fraxinus excelsior</i>	E2	.	.	.	.	.	.	.	3
<i>Quercetalia pubescenti-petraeae</i>									
<i>Sorbus aria</i>	E3	23	.	.	33	79	52	.	6
<i>Sorbus aria</i>	E2	96	45	25	58	26	37	11	58
<i>Sorbus aria</i>	E1	.	.	.	15	.	.	.	.
<i>Fraxinus ornus</i>	E3	4	36	.	65	58	.	30	.
<i>Fraxinus ornus</i>	E2	29	10	15	93	47	.	41	.
<i>Fraxinus ornus</i>	E1	.	.	.	47	.	.	.	.
<i>Convallaria majalis</i>	E1	21	9	10	9	47	26	6	22
<i>Ostrya carpinifolia</i>	E3	2	18	.	84	84	26	.	.
<i>Ostrya carpinifolia</i>	E2	21	18	20	91	47	30	.	.
<i>Ostrya carpinifolia</i>	E1	.	.	.	13	.	.	.	.
<i>Hypericum montanum</i>	E1	8	.	.	2	.	.	.	.
<i>Carex flacca</i>	E1	4	.	10	4	16	15	22	6
<i>Lathyrus niger</i>	E1	4	.	.	.	.	.	.	.
<i>Melittis melissophyllum</i>	E1	2	9	.	9	5	.	.	.
<i>Epipactis muelleri</i>	E1	2	.	.	5	.	.	.	.
<i>Coronilla emeroides</i>	E2	.	18	.	.	.	.	.	.
<i>Mercurialis ovata</i>	E1	.	18	.	25	.	.	.	.
<i>Prunus mahaleb</i>	E2	.	9	.	.	.	.	.	.
<i>Coronilla emerus</i>	E2	.	.	5	11	.	.	.	.
<i>Tamus communis</i>	E1	.	.	5	.	.	.	.	.
<i>Cornus mas</i>	E2	.	.	.	7	.	.	.	.
<i>Euonymus verrucosa</i>	E2	.	.	.	7	.	.	.	.
<i>Quercus pubescens</i>	E3	.	.	.	6	.	.	.	.
<i>Sesleria autumnalis</i>	E1	.	.	.	5	.	.	.	.
<i>Asparagus tenuifolius</i>	E1	.	.	.	2	.	.	.	.
<i>Cotinus coggygria</i>	E2	.	.	.	2	.	.	.	.
<i>Peucedanum schottii</i>	E2	.	.	.	2	.	.	.	.
<i>Quercus pubescens</i>	E2	.	.	.	2	.	.	.	.
<i>Clematis recta</i>	E2	.	.	.	.	5	.	.	.
<i>Quercetalia roboris-petraeae</i>									
<i>Pteridium aquilinum</i>	E1	42	45	10	15	26	41	6	.
<i>Melampyrum pratense</i>	E1	23	18	5	.	26	30	89	.
<i>Potentilla erecta</i>	E1	21	82	30	15	.	11	22	19
<i>Populus tremula</i>	E1	2	.	.	.	.	.	.	.
<i>Lembotropis nigricans</i>	E2	.	36	10	.	5	.	.	.
<i>Betula pubescens</i>	E2	.	9	.	.	16	.	.	.
<i>Quercus petraea</i>	E2	.	9	.	36	11	.	.	.

Successive number (Zaporedna številka)		1	2	3	4	5	6	7	8
<i>Betula pendula</i>	E3	.	.	.	4	.	.	.	.
<i>Betula pendula</i>	E2	.	9	.	5	5	.	.	.
<i>Betonica officinalis</i>	E1	.	.	5	4	.	.	.	.
<i>Quercus robur</i>	E3	.	.	.	.	.	4	.	.
<i>Quercus robur</i>	E2	.	.	.	13	5	15	.	.
<i>Populus tremula</i>	E3	.	.	.	4	.	.	.	.
<i>Populus tremula</i>	E2	.	.	.	7	.	.	.	.
<i>Hieracium sabaudum</i>	E1	.	.	.	4	.	.	.	.
<i>Alnus glutinosa</i>	E3	.	.	.	2	.	.	.	.
<i>Castanea sativa</i>	E1	.	.	.	4	.	.	.	.
<i>Hieracium racemosum</i>	E1	.	.	.	2	.	.	.	.
<i>Chamaecytisus supinus</i>	E2	.	.	.	.	11	.	.	.
<i>Chamaespartium sagittale</i>	E1	.	.	.	.	5	.	.	.
Querco-Fagetea									
<i>Platanthera bifolia</i>	E1	42	45	20	7	16	56	6	.
<i>Carex digitata</i>	E1	13	18	.	16	.	.	.	.
<i>Hepatica nobilis</i>	E1	10	18	15	2	32	.	.	.
<i>Cephalanthera longifolia</i>	E1	8	.	.	7	.	.	.	.
<i>Corylus avellana</i>	E1	6	18	15	24	.	4	6	.
<i>Cruciata glabra</i>	E1	6	27	5	4	.	.	.	.
<i>Dactylorhiza fuchsii</i>	E1	4	.	10	.	16	.	.	.
<i>Pyrus pyraster</i>	E3	.	.	.	2	.	.	.	.
<i>Pyrus pyraster</i>	E2	4	.	5	2	.	.	.	.
<i>Anemone nemorosa</i>	E1	2	.	5	.	.	.	.	.
<i>Festuca heterophylla</i>	E1	2	.	.	.	.	.	.	.
<i>Listera ovata</i>	E1	2	.	35	18	.	.	.	.
<i>Taxus baccata</i>	E3a	2	.	.	2	.	.	.	.
<i>Taxus baccata</i>	E2	.	.	.	2	.	.	.	.
<i>Lonicera xylosteum</i>	E2	.	9	15	2	32	15	.	.
<i>Carex montana</i>	E1	.	9	.	.	.	.	11	8
<i>Viola mirabilis</i>	E1	.	9	.	.	.	.	.	.
<i>Hedera helix</i>	E1	.	.	.	20	.	.	.	.
<i>Clematis vitalba</i>	E2	.	.	.	16	16	.	.	.
<i>Rosa arvensis</i>	E2	.	.	.	5	.	.	.	.
<i>Viscum album</i> subsp. <i>album</i>	E3	.	.	.	5	.	.	.	.
<i>Malus sylvestris</i>	E2	.	.	.	4	.	.	.	.
<i>Veratrum nigrum</i>	E1	.	.	.	4	.	.	.	.
<i>Vinca minor</i>	E1	.	.	.	4	.	.	.	.
<i>Acer campestre</i>	E1	.	.	.	2	.	.	.	.
<i>Ilex aquifolium</i>	E2	.	.	.	2	.	.	.	.
Sambuco-Salicion capreae									
<i>Sorbus aucuparia</i>	E3	10	45	.	.	11	.	.	.
<i>Sorbus aucuparia</i>	E2	40	18	10	2	32	15	11	39
<i>Salix caprea</i>	E2b	2	9	10	4	.	.	.	.
Rhamno-Prunetea									
<i>Juniperus communis</i>	E2b	50	73	75	93	5	37	83	8
<i>Berberis vulgaris</i>	E2b	8	18	20	40	32	63	28	14
<i>Viburnum lantana</i>	E2b	6	36	10	42	32	33	.	.
<i>Rhamnus catharticus</i>	E2b	2	.	.	31	.	15	.	3
<i>Cotoneaster integerrimus</i>	E2	.	.	15	.	.	.	.	.

Successive number (Zaporedna številka)		1	2	3	4	5	6	7	8
<i>Ligustrum vulgare</i>	E2	.	.	.	16	5	15	.	.
<i>Crataegus monogyna</i>	E2	.	.	.	9	.	30	.	.
<i>Cornus sanguinea</i>	E2	.	.	.	9	.	.	.	.
<i>Rosa canina</i>	E2	.	.	.	7	.	.	.	.
<i>Rubus fruticosus</i> agg.	E2	.	.	.	4	.	.	.	.
<i>Euonymus europaea</i>	E2	.	.	.	2	.	.	.	.
<i>Rubus montanus</i>	E2	.	.	.	2	.	.	.	.
<i>Trifolio-Geranietea</i>									
<i>Viola hirta</i>	E1	35	36	25	33	.	.	.	11
<i>Vincetoxicum hirundinaria</i>	E1	27	36	5	51	16	30	11	56
<i>Laserpitium siler</i>	E1	17	9	30	9	.	.	.	.
<i>Polygonatum odoratum</i>	E1	17	18	25	15	16	15	6	39
<i>Anthericum ramosum</i>	E1	15	36	15	40	.	7	11	56
<i>Digitalis grandiflora</i>	E1	10	.	10	4	5	.	.	.
<i>Laserpitium latifolium</i>	E1	6	9	15	.	5	.	11	28
<i>Clinopodium vulgare</i>	E1	6	9	.	2	.	.	.	.
<i>Origanum vulgare</i>	E1	6	.	.	15	.	.	.	.
<i>Vicia incana</i>	E1	4	.	.	.	.	.	.	.
<i>Thalictrum minus</i> s. lat.	E1	2	.	5	18	.	.	.	.
<i>Astragalus glycyphyllos</i>	E1	2	.	.	.	.	.	.	.
<i>Iris graminea</i>	E1	2	.	.	2	.	.	.	.
<i>Trifolium rubens</i>	E1	2	.	.	.	.	.	.	.
<i>Melampyrum nemorosum</i>	E1	.	.	5	.	.	.	.	.
<i>Salvia pratensis</i> subsp. <i>saccardiana</i>	E1	.	.	.	27	.	.	.	.
<i>Thesium bavarum</i>	E1	.	.	.	9	.	11	.	.
<i>Geranium sanguineum</i>	E1	.	.	.	5	5	.	.	.
<i>Calamintha einseleana</i>	E1	.	.	.	4	.	.	.	.
<i>Graffia golaka</i>	E1	.	.	.	4	.	.	.	.
<i>Verbascum austriacum</i>	E1	.	.	.	4	.	.	.	.
<i>Silene nutans</i>	E1	.	.	.	2	5	.	.	.
<i>Lilium carniolicum</i>	E1	.	.	.	2	.	.	.	.
<i>Peucedanum cervaria</i>	E1	.	.	.	2	.	.	.	.
<i>Betulo-Alnetea</i>									
<i>Salix glabra</i>	E2a	35	27	45	15	5	.	.	.
<i>Salix appendiculata</i>	E2	12	9	5	24	.	.	.	.
<i>Salix waldsteiniana</i>	E2a	4	.	5	.	.	.	.	.
<i>Sorbus chamaemespilus</i>	E2	.	27	20	.	.	.	83	.
<i>Salix hastata</i>	E2	.	.	35	.	.	.	.	.
<i>Juniperus sibirica</i>	E2	.	.	5	.	.	.	.	.
<i>Mulgedio-Aconitetea</i>									
<i>Silene vulgaris</i> subsp. <i>antelopum</i>	E1	8	.	.	.	.	.	.	.
<i>Phyteuma ovatum</i>	E1	6	.	.	.	.	.	.	.
<i>Polygonatum verticillatum</i>	E1	4	.	.	.	.	.	.	.
<i>Thalictrum aquilegiifolium</i>	E1	4	.	.	.	.	.	.	.
<i>Ranunculus platanifolius</i>	E1	2	.	.	.	.	.	.	.
<i>Lathyrus laevigatus</i>	E1	.	.	5	.	.	.	.	.
<i>Aconitum lycoctonum</i> subsp. <i>ranunculifolium</i>	E1	.	.	.	.	5	.	.	.
<i>Knautia dipsacifolia</i> (<i>K. maxima</i>)	E1	.	.	.	.	.	.	6	8
<i>Epilobietea angustifolii</i>									
<i>Fragaria vesca</i>	E1	12	18	10	.	.	15	6	25

Successive number (Zaporedna številka)		1	2	3	4	5	6	7	8
<i>Potentilla recta</i>	E1	2	.	.	.	5	.	.	.
<i>Chamerion angustifolium</i>	E1	2	.	.	.	.	.	.	.
<i>Lysimachia vulgaris</i>	E1	.	.	5	.	.	.	.	.
<i>Bromus ramosus</i>	E1	.	.	5	.	.	.	.	.
<i>Silene alba</i>	E1	.	.	5	.	.	.	.	.
<i>Atropa belladonna</i>	E1	.	.	.	2	.	.	.	.
<i>Picris hieracioides</i>	E1	.	.	.	2	.	.	.	.
<i>Vrebascum thapsus</i>	E2	.	.	.	2	.	.	.	.
<i>Elyno-Seslerietea</i>									
<i>Betonica alopecuroides</i>	E1	77	82	55	38	16	.	.	.
<i>Sesleria caerulea</i>	E1	67	64	80	84	16	26	89	72
<i>Laserpitium peucedanoides</i>	E1	65	.	30	.	11	.	.	.
<i>Thymus praecox</i> subsp. <i>polytrichus</i>	E1	52	.	20	.	.	.	.	.
<i>Globularia cordifolia</i>	E1	50	27	60	44	.	11	22	47
<i>Carex mucronata</i>	E1	37	.	.	33	.	.	.	50
<i>Scabiosa lucida</i> subsp. <i>lucida</i>	E1	35	.	20	.	.	.	.	36
<i>Phyteuma orbiculare</i>	E1	29	.	15	9	.	.	33	17
<i>Senecio abrotanifolius</i>	E1	21	9	.	.	.	.	.	.
<i>Aster bellidiastrium</i>	E1	19	.	5	2	.	.	22	.
<i>Euphrasia salisburgensis</i>	E1	17	.	5	9	.	.	83	22
<i>Dryas octopetala</i>	E1	15	.	35	.	.	.	.	3
<i>Acinos alpinus</i>	E1	13	27	5	.	.	.	.	8
<i>Carduus crassifolius</i>	E1	13	.	.	.	.	.	.	.
<i>Campanula witasekiana</i>	E1	12	.	.	.	.	.	.	.
<i>Gentiana clusii</i>	E1	12	.	15	.	.	.	.	.
<i>Carduus defloratus</i>	E1	8	18	30	.	.	.	61	92
<i>Thesium alpinum</i>	E1	8	.	10	.	.	.	28	33
<i>Carex firma</i>	E1	6	.	.	.	.	.	.	.
<i>Juncus monanthos</i>	E1	6	.	.	.	.	.	.	.
<i>Rhinanthus glacialis</i>	E1	4	.	15	.	.	.	.	.
<i>Globularia nudicaulis</i>	E1	4	.	.	.	.	.	6	.
<i>Helianthemum nummularium</i> subsp. <i>grandiflorum</i>	E1	2	.	20	.	.	.	.	.
<i>Galium anisophyllum</i>	E1	2	.	10	.	.	.	61	75
<i>Helianthemum alpestre</i>	E1	2	.	.	.	.	.	.	.
<i>Linum julicum</i>	E1	2	.	.	.	.	.	.	.
<i>Polygala alpestris</i>	E1	2	.	.	.	.	.	.	.
<i>Scabiosa lucida</i> subsp. <i>stricta</i>	E1	2	.	.	.	.	.	.	.
<i>Leucanthemum maximum</i> (<i>L. heterophyllum</i>)	E1	.	9	30	.	.	.	.	.
<i>Anthyllis vulneraria</i> subsp. <i>alpestris</i>	E1	.	.	20	.	.	.	.	.
<i>Carex sempervirens</i>	E1	.	.	15	.	.	.	.	22
<i>Lotus alpinus</i>	E1	.	.	15	.	.	.	.	.
<i>Gentianella anisodonta</i>	E1	.	.	10	.	.	.	.	.
<i>Horminum pyrenaicum</i>	E1	.	.	10	.	.	.	.	.
<i>Pulsatilla alpina</i>	E1	.	.	10	.	.	.	.	.
<i>Daphne striata</i>	E1	.	.	5	.	.	.	78	14
<i>Carex ferruginea</i>	E1	.	.	5	.	.	.	44	.
<i>Selaginella selaginoides</i>	E1	.	.	5	.	.	.	39	.
<i>Oxytropis jacquinii</i>	E1	.	.	5	.	.	.	.	.
<i>Astragalus alpinus</i>	E1	.	.	5	.	.	.	.	.
<i>Aster alpinus</i>	E1	.	.	5	.	.	.	.	.

Successive number (Zaporedna številka)		1	2	3	4	5	6	7	8
<i>Gentiana nivalis</i>	E1	.	.	5	.	.	.	.	.
<i>Knautia longifolia</i>	E1	.	.	5	.	.	.	.	.
<i>Festuca alpestris</i>	E1	.	.	5	.	.	.	.	.
<i>Pedicularis elongata</i>	E1	.	.	5	.	.	.	.	.
<i>Traunsteinera globosa</i>	E1	.	.	5	.	.	.	.	.
<i>Juncetea trifidi</i>									
<i>Juncus trifidus</i>	E1	2	.	.	.	.	.	.	.
<i>Campanula scheuchzeri</i>	E1	2	.	.	.	.	.	.	.
<i>Solidago virgaurea</i> subsp. <i>minuta</i>	E1	.	.	.	.	11	.	.	.
<i>Caricetalia davallianae</i>									
<i>Tofieldia calyculata</i>	E1	10	9	20	9	5	.	.	.
<i>Pinguicula alpina</i>	E1	8	.	.	7	.	.	.	.
<i>Parnassia palustris</i>	E1	.	9	20	5	.	.	.	.
<i>Malaxis monophyllos</i>	E1	.	.	5	.	.	.	.	.
<i>Schoenus nigricans</i>	E1	.	.	.	2	.	.	.	.
<i>Calluno-Ulicetea</i>									
<i>Calluna vulgaris</i>	E1	6	18	5	.	5	.	6	3
<i>Antennaria dioica</i>	E1	2	9	10	.	.	.	.	.
<i>Danthonia decumbens</i>	E1	.	.	.	.	.	4	.	.
<i>Euphrasia officinalis</i>	E1	.	.	.	.	.	.	.	3
<i>Festuco-Brometea</i>									
<i>Buphtalmum salicifolium</i>	E1	79	73	55	75	58	59	39	97
<i>Carex humilis</i>	E1	58	36	65	80	.	4	78	94
<i>Carlina acaulis</i>	E1	46	9	20	18	.	15	56	33
<i>Peucedanum oreoselinum</i>	E1	44	45	35	31	21	37	.	.
<i>Gentianella ciliata</i>	E1	35	.	.	11	5	.	.	.
<i>Brachypodium rupestre</i> (incl. <i>B. caespitosum</i>)	E1	33	82	20	51	21	52	44	.
<i>Linum catharticum</i>	E1	33	9	5	5	.	.	.	17
<i>Cirsium erisithales</i>	E1	29	9	10	24	37	15	.	.
<i>Euphorbia cyparissias</i>	E1	25	9	5	38	.	41	11	.
<i>Teucrium chamaedrys</i>	E1	25	36	5	64	5	15	6	3
<i>Teucrium montanum</i>	E1	25	36	45	38	.	7	17	67
<i>Hippocrepis comosa</i>	E1	21	45	25	7	.	15	50	36
<i>Gymnadenia conopsea</i>	E1	19	45	5	2	.	.	17	3
<i>Galium lucidum</i>	E1	17	27	15	62	5	7	28	.
<i>Dorycnium germanicum</i>	E1	15	.	5	5	.	.	.	.
<i>Galium verum</i>	E1	15	55	35	24	.	30	6	8
<i>Stachys recta</i> (incl. <i>S. labiosa</i>)	E1	13	.	20	11	5	.	.	.
<i>Prunella grandiflora</i>	E1	10	45	35	4	.	7	17	25
<i>Pimpinella saxifraga</i>	E1	10	18	5	2	.	19	.	19
<i>Cirsium pannonicum</i>	E1	8	.	.	11	.	.	.	.
<i>Coronilla vaginalis</i>	E1	4	9	35	.	.	19	11	17
<i>Genista germanica</i>	E1	4	27	.	.	.	.	.	.
<i>Genista tinctoria</i>	E1	2	18	.	4	5	.	.	.
<i>Asperula cynanchica</i>	E1	2	9	.	11	.	.	.	.
<i>Cirsium acaule</i>	E1	2	.	5	.	.	4	6	.
<i>Thymus praecox</i> subsp. <i>praecox</i>	E1	2	.	.	35	.	.	72	81
<i>Bromopsis erecta</i>	E1	2	.	.	15	.	.	.	.
<i>Carlina vulgaris</i>	E1	2	.	.	5	.	.	.	.
<i>Euphrasia kernerii</i>	E1	2	.	.	.	.	.	.	.

Successive number (Zaporedna številka)		1	2	3	4	5	6	7	8
<i>Ophrys sphegodes</i>	E1	2	.	.	.	.	.	.	.
<i>Orobanche teucrii</i>	E1	2	.	.	.	.	.	.	.
<i>Plantago media</i>	E1	2	.	.	.	.	.	.	.
<i>Sanguisorba minor</i>	E1	2	.	.	.	.	.	.	.
<i>Thymus longicaulis</i>	E1	.	36	.	.	.	.	.	.
<i>Trifolium montanum</i>	E1	.	9	5	.	.	.	.	.
<i>Helianthemum ovatum</i>	E1	.	9	.	5	.	4	.	6
<i>Centaurea bracteata</i>	E1	.	9	.	20	.	.	.	.
<i>Scabiosa graminifolia</i>	E1	.	9	.	.	.	.	.	.
<i>Allium carinatum</i> subsp. <i>carinatum</i>	E1	.	9	.	2	.	.	.	.
<i>Betonica serotina</i>	E1	.	9	.	7	.	.	.	.
<i>Galium pumilum</i>	E1	.	.	25	.	.	.	.	.
<i>Hierochloe australis</i>	E1	.	.	25	.	.	.	.	.
<i>Kaeleria pyramidata</i>	E1	.	.	15	5	.	.	.	.
<i>Thymus pulegioides</i> s. lat.	E1	.	.	10	.	.	.	.	.
<i>Centaurea scabiosa</i> (incl. subsp. <i>fritschii</i>)	E1	.	.	5	2	.	4	11	.
<i>Festuca amethystina</i>	E1	.	.	5	.	.	.	.	6
<i>Ophrys aranifera</i> (<i>O. araneola</i>)	E1	.	.	5	.	.	.	.	.
<i>Puucedanum cervaria</i>	E1	.	.	5	.	.	.	.	.
<i>Campanula spicata</i>	E1	.	.	5	.	.	.	.	.
<i>Ononis spinosa</i>	E1	.	.	5	.	.	.	.	.
<i>Gentianella germanica</i>	E1	.	.	5	.	.	.	.	.
<i>Acinos arvensis</i>	E1	.	.	5	.	.	.	.	.
<i>Campanula rotundifolia</i> agg.	E1	.	.	.	.	.	4	28	.
<i>Satureja montana</i> subsp. <i>variegata</i>	E1	.	.	.	18	.	.	.	.
<i>Scabiosa bladnikiana</i>	E1	.	.	.	18	.	.	.	.
<i>Dianthus hyssopifolius</i>	E1	.	.	.	13	.	.	.	.
<i>Thesium linophyllum</i>	E1	.	.	.	9	.	.	.	.
<i>Allium carinatum</i> subsp. <i>pulchellum</i>	E1	.	.	.	7	.	.	.	.
<i>Campanula glomerata</i>	E1	.	.	.	7	.	.	.	.
<i>Silene vulgaris</i> subsp. <i>vulgaris</i>	E1	.	.	.	6	.	.	.	.
<i>Scabiosa triandra</i>	E1	.	.	.	5	.	.	.	.
<i>Carduus nutans</i>	E1	.	.	.	4	.	.	.	.
<i>Dorycnium herbaceum</i>	E1	.	.	.	4	.	.	.	.
<i>Hieracium pilosella</i>	E1	.	.	.	4	.	.	.	.
<i>Veronica barrelieri</i>	E1	.	.	.	4	.	.	.	.
<i>Centaureum erythraea</i>	E1	.	.	.	2	.	.	.	.
<i>Cirsium x linkianum</i>	E1	.	.	.	2	.	.	.	.
<i>Danthonia alpina</i>	E1	.	.	.	2	.	.	.	.
<i>Genista ovata</i>	E1	.	.	.	2	.	.	.	.
<i>Globularia punctata</i>	E1	.	.	.	2	.	.	.	.
<i>Hieracium bauhinii</i>	E1	.	.	.	2	.	.	.	.
<i>Inula hirta</i>	E1	.	.	.	2	.	.	.	.
<i>Potentilla pusilla</i>	E1	.	.	.	2	.	.	.	.
<i>Poo alpinae-Trisetetalia</i>									
<i>Paradisea liliastrum</i>	E1	.	.	5	.	.	.	.	.
<i>Ranunculus nemorosus</i> agg.	E1	.	.	.	6	.	.	11	11
<i>Molinio-Arrhenatheretea, Molinion</i>									
<i>Lotus corniculatus</i>	E1	67	45	60	24	.	19	72	33
<i>Lathyrus pratensis</i>	E1	23	27	5	.	5	19	.	.

Successive number (Zaporedna številka)		1	2	3	4	5	6	7	8
<i>Galium mollugo</i>	E1	8	9	.	.	.	7	.	22
<i>Vicia cracca</i>	E1	6	.	.	.	.	.	.	.
<i>Vicia sepium</i>	E1	4	.	.	.	.	.	.	.
<i>Galium album</i>	E1	2	18	.	.	.	.	.	.
<i>Leontodon hispidus</i>	E1	2	.	5	.	.	19	17	25
<i>Veronica chamaedrys</i>	E1	2	.	.	.	5	.	.	.
<i>Succisa pratensis</i>	E1	2	.	.	.	.	.	.	.
<i>Leucanthemum ircutianum</i>	E1	2	.	.	.	.	.	.	.
<i>Plantago lanceolata</i>	E1	2	.	.	.	.	.	.	.
<i>Centaurea nigrescens</i>	E1	.	.	5	.	11	.	.	.
<i>Dactylis glomerata</i>	E1	.	.	5	5	.	.	.	.
<i>Pimpinella major</i>	E1	.	.	5	.	.	.	.	.
<i>Festuca rubra</i>	E1	.	.	5	.	.	.	.	.
<i>Pastinaca sativa</i>	E1	.	.	5	.	.	.	.	.
<i>Achillea millefolium</i>	E1	.	.	.	2	.	.	.	.
<i>Taraxacum officinale</i> agg.	E1	.	.	.	2	.	.	.	.
<i>Centaurea jacea</i>	E1	.	.	.	.	.	4	.	.
<i>Galium boreale</i>	E1	.	.	.	.	.	.	.	6
<i>Iblaspietea rotundifolii</i>									
<i>Biscutella laevigata</i>	E1	48	27	30	42	.	4	11	3
<i>Hieracium porrifolium</i>	E1	48	18	.	38	.	.	.	.
<i>Gymnocarpium robertianum</i>	E1	37	.	15	2	26	.	.	.
<i>Hieracium bifidum</i>	E1	25	.	10	22	16	4	11	6
<i>Heliosperma alpestre</i>	E1	13	.	.	.	.	.	.	.
<i>Achnatherum calamagrostis</i>	E1	12	9	10	33	.	7	.	.
<i>Petasites paradoxus</i>	E1	4	.	25	9	47	22	17	3
<i>Rumex scutatus</i>	E1	4	.	10	.	.	.	.	.
<i>Hieracium glaucum</i>	E1	4	.	5	36	.	.	22	44
<i>Adenostyles glabra</i>	E1	4	.	.	.	5	.	.	.
<i>Silene vulgaris</i> subsp. <i>glareosa</i>	E1	2	9	5	5	.	.	.	.
<i>Valeriana montana</i>	E1	2	.	25	.	.	.	39	.
<i>Gypsophila repens</i>	E1	2	.	5	.	.	.	.	.
<i>Astrantia carniolica</i>	E1	2	.	.	.	.	.	.	.
<i>Trisetum argenteum</i>	E1	2	.	.	.	.	.	.	.
<i>Aquilegia einseleana</i>	E1	.	27	25	.	.	.	.	.
<i>Hieracium bupleuroides</i>	E1	.	.	30	.	.	.	.	.
<i>Trisetum argenteum</i>	E1	.	.	20	.	.	.	.	.
<i>Athamantha cretensis</i>	E1	.	.	15	.	.	.	.	.
<i>Dianthus stenbergsii</i>	E1	.	.	15	.	.	.	.	.
<i>Festuca spectabilis</i>	E1	.	.	10	.	.	.	.	.
<i>Galium margaritaceum</i>	E1	.	.	10	.	.	.	.	.
<i>Saxifraga caesia</i>	E1	.	.	5	.	.	.	.	.
<i>Hieracium piloselloides</i>	E1	.	.	5	.	.	.	.	.
<i>Peucedanum verticillare</i>	E1	.	.	.	7	16	.	.	.
<i>Chamaenerion palustre</i>	E1	.	.	.	5	.	.	.	.
<i>Hieracium dollineri</i>	E1	.	.	.	4	.	.	.	.
<i>Hieracium schmidtii</i>	E1	.	.	.	4	.	.	.	.
<i>Hieracium caesium</i>	E1	.	.	.	2	.	.	.	.
<i>Petrorhagia saxifraga</i>	E1	.	.	.	2	.	.	.	.
<i>Scrophularia juratensis</i>	E1	.	.	.	2	.	.	.	.

Successive number (Zaporedna številka)		1	2	3	4	5	6	7	8
<i>Orobanche flava</i>	E1	.	.	.	.	5	.	.	.
Potentilletalia caulescentis, Physoplexido-Saxifragion									
<i>Valeriana saxatilis</i>	E1	54	9	15	9	11	.	.	.
<i>Campanula cespitosa</i>	E1	52	55	25	75	5	.	.	.
<i>Potentilla caulescens</i>	E1	31	.	.	5	.	.	.	47
<i>Primula auricula</i>	E1	27	.	5	.	.	.	6	78
<i>Campanula cochleariifolia</i>	E1	12	.	5	.	.	.	28	72
<i>Silene hayekiana</i>	E1	10	.	.	9	.	.	.	.
<i>Rhamnus pumilus</i>	E1	8	.	.	.	.	.	28	53
<i>Saxifraga squarrosa</i>	E1	4	.	5	.	.	.	.	.
<i>Silene saxifraga</i>	E1	2	.	.	9	.	.	.	.
<i>Paederota lutea</i>	E1	2	.	.	.	.	.	.	.
<i>Spireae decumbens</i>	E1	.	9	.	.	.	.	.	.
<i>Seseli gouanii</i>	E1	.		10	.	.	.	.	.
<i>Phyteuma scheuchzeri</i> subsp. <i>columnae</i>	E1	.	.	.	33	.	.	.	.
<i>Primula carniolica</i>	E1	.	.	.	11	.	.	.	.
<i>Athamantha turbith</i>	E1	.	.	.	2	.	.	.	.
<i>Hieracium pospischalii</i>	E1	.	.	.	2	.	.	.	.
<i>Heliosperma pusillum</i>	E1	.	.	.	.	5	.	.	.
Asplenietea trichomanis									
<i>Asplenium ruta-muraria</i>	E1	17	.	.	55	11	.	.	31
<i>Dianthus sylvestris</i>	E1	10	9	.	.	.	.	.	.
<i>Kernera saxatilis</i>	E1	4	.	.	2	.	.	11	31
<i>Moehringia muscosa</i>	E1	4	.	.	.	.	.	.	.
<i>Heliosperma pusillum</i>	E1	4	.	.	.	.	.	.	.
<i>Asplenium viride</i>	E1	2	.	.	5	11	.	.	.
<i>Asplenium trichomanes</i>	E1	2	.	.	.	5	.	.	.
<i>Sedum album</i>	E1	.	.	.	5	5	.	.	.
<i>Carex brachystachys</i>	E1	.	.	.	2	.	.	.	.
<i>Erysimum sylvestre</i>	E1	.	.	.	2	.	.	.	.
<i>Polypodium vulgare</i>	E1	.	.	.	2	.	.	.	.
Other species (Druge vrste)									
<i>Campanula</i> sp.	E1	12	.	.	.	.	.	.	.
<i>Euphorbia</i> sp.	E1	4	.	.	.	.	.	.	.
<i>Galium</i> sp.	E1	4	.	.	.	.	.	.	.
<i>Hieracium</i> sp.	E1	2		10	2	.	.	.	.
<i>Carex</i> sp.	E1	2	.	.	.	.	.	.	.
<i>Viola</i> sp.	E1	2	.	.	.	.	.	.	.
<i>Festuca</i> sp.	E1	.	.	.	2	.	.	.	.
<i>Vicia angustifolia</i>	E1	.	.	.	.	5	.	.	.
Mosses and lichens (Mahovi in lišaji)									
<i>Tortella tortuosa</i>	E0	71,154	.	20	60	.	.	61	83
<i>Scleropodium purum</i>	E0	50	9	5	78	.	26	17	.
<i>Rhytidiodelphus triquetrus</i>	E0	40	.	30	16	16	15	39	.
<i>Ctenidium molluscum</i>	E0	25	9	5	38	.	4	17	14
<i>Hylocomium splendens</i>	E0	17	.	25	15	26	22	61	.
<i>Dicranum scoparium</i>	E0	17	.	10	4	.	19	28	.
<i>Neckera crispa</i>	E0	17	.	.	33	5	.	.	.
<i>Schistidium</i> sp.	E0	15	.	.	11	.	.	.	78
<i>Pleurozium schreberi</i>	E0	13	.	.	4	26	52	61	.

Successive number (Zaporedna številka)		1	2	3	4	5	6	7	8
<i>Hypnum cupressiforme</i>	E0	13	.	.	18	5	.	.	.
<i>Fissidens dubius</i>	E0	12	.	.	11	.	.	6	28
<i>Isothecium alopecuroides</i>	E0	6	.	.	2	.	.	.	.
<i>Plagiochila porelloides</i>	E0	6	.	.	2	.	.	.	.
<i>Cladonia</i> sp.	E0	4	.	15	.	.	.	.	.
<i>Rhytidium rugosum</i>	E0	4	.	.	4	.	.	39	8
<i>Musci</i> spp.	E0	2	.	.	.	.	.	.	.
<i>Conocephalum conicum</i>	E0	2	.	.	.	.	.	.	.
<i>Leucobryum glaucum</i>	E0	2	.	.	2	.	.	.	.
<i>Cladonia rangiferina</i>	E0	2	.	.	.	.	.	.	.
<i>Dicranella heteromalla</i>	E0	2	.	.	.	.	.	.	.
<i>Hookeria lucens</i>	E0	2	.	.	.	.	.	.	.
<i>Marchantia polymorpha</i>	E0	2	.	.	.	.	.	.	.
<i>Solorina saccata</i>	E0	2	.	.	.	.	.	.	.
<i>Polytrichum formosum</i>	E0	2	.	.	.	.	.	.	.
<i>Cladonia pyxidata</i>	E0	2	.	.	.	.	.	.	.
<i>Pedinophyllum interruptum</i>	E0	.	9	.	.	.	.	.	.
<i>Cetraria islandica</i>	E0	.	.	10	.	.	.	.	.
<i>Thamnolia vermicularis</i>	E0	.	.	5	.	.	.	.	.
<i>Cladonia pyxidata</i>	E0	.	.	5	.	.	.	.	.
<i>Sphagnum rubellum</i>	E0	.	.	5	.	.	.	.	.
<i>Homalothecium lutescens</i>	E0	.	.	.	11	.	7	.	22
<i>Thuidium tamariscinum</i>	E0	.	.	.	5	.	.	.	.
<i>Homalothecium sericeum</i>	E0	.	.	.	4	.	.	.	.
<i>Thuidium abietinum</i>	E0	.	.	.	4	.	.	.	.
<i>Campylium stellatum</i>	E0	.	.	.	2	.	.	.	.
<i>Encalypta streptocarpa</i>	E0	.	.	.	2	.	.	.	.
<i>Euryhynchium striatum</i>	E0	.	.	.	2	.	.	.	.
<i>Hypnum jutlandicum</i>	E0	.	.	.	2	.	.	.	.
<i>Leoskebryum brevirostre</i>	E0	.	.	.	2	.	.	.	.
<i>Neckera complanata</i>	E0	.	.	.	2	.	.	.	.
<i>Thuidium delicatulum</i>	E0	.	.	.	2	.	.	.	.
<i>Dicranum polysetum</i>	E0	.	.	.	.	.	.	50	.

Legend – Legenda

- RcPs-Si *Rhodothamno-Pinetum sylvestris*, this article, Table 1
 FPnps *Fraxino orni-Pinetum nigrae pinetosum sylvestris*, NW Italy, Poldini & Vidali 1999, Table 2, relevés 18–28;
 EPs-Do *Erico-Pinetum sylvestris*, Dolomites, E. & S. Pignatti 2016, Association Table 5.2;
 EPsoc-K *Erico-Pinetum sylvestris ostryetosum carpinifoliae*, Carinthia, Austra, Franz 2002, Table 34;
 EPspm *Erico-Pinetum sylvestris pinetosum mugo*, Austria, Eichberger et al. 2007 b, Table 29, Column 4;
 EPsch *Erico-Pinetum sylvestris caricetosum humilis*, Austria, Eichberger et al. 2007 b, Table 29, Column 2;
 EPsoc-A *Erico-Pinetum sylvestris ostryetosum carpinifoliae*, Austria, Eichberger et al. 2007 b, Table 29, Column 7.

Table 4: Phytosociological groups in the syntaxa *Rhodothamno-Pinetum sylvestris*, *Fraxino orni-Pinetum nigrae pinetosum sylvestris*, *Erico-Pinetum sylvestris* and *Genisto-Pinetum sylvestris* (relative frequencies).

Tabela 4: Skupine diagnostičnih vrst v sintaksonih *Rhodothamno-Pinetum sylvestris*, *Fraxino orni-Pinetum nigrae pinestosum sylvestris*, *Erico-Pinetum sylvestris* in *Genisto-Pinetum sylvestris* (relativne frekvence).

Successive number (Zaporedna številka)	1	2	3	4	5	6	7	8
Sign for syntaxa (Oznaka sintaksonov)	RcPs-Si	Fpmps	Ep-Do	Grs-CH	EpSoc-K	EpSoc-A	EpSpm	EpS-ch
Authors (Avtorji)	ARD-TWMZ	LPMW	PP	ID	WF	CEPH-SG	CEPH-SG	CEPH-SG
Number of relevés	53	11	20	55	19	27	18	36
<i>Erico-Pinetea</i>	23.18	28.9	24.5	20.3	19.5	24.4	26	26.5
<i>Vaccinio-Piceetea</i>	11.74	9.85	8.55	3.6	13	13.1	14.2	5.87
<i>Aremonio-Fagion</i>	4.1	3.66	0.74	3.82	5.84	5.39	0.16	0.09
<i>Tilio-Acerion</i>	0.93	0.4	0.12	2.38	2.7	0.73	0.16	0.58
<i>Alnion incanae, Salicetea purpureae</i>	0.08	0.6	0.5	0.96	0.34	0.85	0.28	0
<i>Fagetalia sylvatica</i>	5.61	5.42	3.47	3.58	14.1	5.59	1.6	2.06
<i>Quercetalia pubescenti-petraeae</i>	4.06	4.23	2.23	11.9	14	7.17	2.84	2.83
<i>Quercetalia roboris-petraeae</i>	1.67	4.64	1.49	2.3	3.71	3.89	3.02	0.58
<i>Querco-Fagetea</i>	1.89	3.41	3.1	3	3.78	2.89	0.59	0.25
<i>Sambuco-Salicetum capreae</i>	0.97	1.6	0.5	0.12	1.45	0.58	0.28	1.2
<i>Rhamno-Prunetea</i>	1.23	2.83	2.97	5.1	2.5	7.44	2.87	0.77
<i>Trifolio-Geranietea</i>	2.83	3.41	3.35	4.96	1.75	2.43	1.01	5.84
<i>Betulo-Alnetea, Mulgedio-Aconitetea</i>	1.39	1.4	2.97	0.78	0.34	0	2.3	0.25
<i>Epilobietea angustifoliae</i>	0.29	0.4	0.62	0.12	0.17	0.58	0.16	0.77
<i>Elyno-Seslerietea</i>	11	5.26	14.7	4.38	1.45	1.43	14.6	15.1
<i>Caricetalia davallianae</i>	0.33	0.4	1.12	0.46	0.17	0	0	0
<i>Calluno-Ulicetea, Juncetea trifidae</i>	0.22	0.6	0.37	0	0.54	0.15	0.16	0.18
<i>Festuco-Brometea</i>	11.1	16.3	14.1	15.8	5.47	13.8	12.8	15.7
<i>Molinio-Arrhenatheretea</i>	2.25	2.21	2.48	0.78	0.71	2.62	2.59	2.98
<i>Thlaspietea rotundifoliae</i>	3.92	2.01	6.82	4.26	3.88	1.43	2.59	1.72
<i>Potentilletalia caulescentis, Physoplexido-Saxifragion</i>	3.77	1.63	1.61	3.1	0.71	0	1.6	7.68
<i>Asplenietea trichomanis</i>	0.8	0.2	0	1.46	1.08	0	0.28	1.91
Other species (Druge vrste)	0.47	0	0.25	0.08	0.17	0	0	0
Mosses and lichens (Mahovi in lišaji)	6.23	0.6	3.35	6.72	2.63	5.59	9.8	7.16
Total (Skupaj)	100	100	100	100	100	100	100	100

Legend – Legenda – see Table 3 – glej Preglednico 3

Table 5: The number of indicator species by phytosociological groups in both subassociations of the association *Rhodothamno-Pinetum sylvestris*.

Tabela 5: Število indikatorskih vrst v fitosocioloških skupinah v obeh subasociacijah asociacije *Rhodothamno-Pinetum sylvestris*.

IndVal analysis, p-val < 0.05	euphorbiетosum sorbetosum	IndVal analysis, p-val < 0.05	euphorbiетosum sorbetosum
<i>Aremonio-Fagion</i>	1	<i>Quercetalia pubescenti-petraeae</i>	1
<i>Asplenietea trichomanis</i>	1	<i>Quercetalia roboris-petraeae</i>	1
<i>Elyno-Seslerietea</i>	6	<i>Querco-Fagetea</i>	1
<i>Erico-Pinetea</i>	7	<i>Rhamno-Prunetea</i>	1
<i>Fagetalia sylvatica</i>	2	<i>Sambuco-Salicetum capreae</i>	2
<i>Festuco-Brometea</i>	8	<i>Thlaspietea rotundifoliae</i>	2
<i>Molinio-Arrhenatheretea, Molinion</i>	1	<i>Tilio-Acerion</i>	1
<i>Potentilletalia caulescentis, Physoplexido-Saxifragion</i>	2	<i>Trifolio-Geranietea</i>	3
	1	<i>Vaccinio-Piceetea</i>	4