

# Phytosociological analysis of noble hardwood forests (*Ostryo-Tilienion platyphylli*) in the Karst and its neighbouring regions (SW Slovenia)

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**Key words:** phytosociology, synsystematics, *Tilio-Acerion*, *Ostryo-Tilienion platyphylli*, Natura 2000, Karst, Slovenia.

**Ključne besede:** fitocenologija, sinsistematička, *Tilio-Acerion*, *Ostryo-Tilienion platyphylli*, Natura 2000, Kras, Slovenija.

## Abstract

In SW Slovenia, at Gora under Železna Vrata and Petnik gorge near Branik – both on the northern edge of the Karst, in the collapse doline Orleška Draga at Sežana and under Brkinski Rob at the contact of the Karst and Brkini Hills, we conducted a phytosociological analysis of the stands whose tree layer is dominated by *Tilia platyphyllos*, *T. cordata*, *Acer pseudoplatanus*, *Ulmus glabra*, in places also *Carpinus betulus* and *Ostrya carpinifolia*, and classified them into three associations, *Corydalido ochroleucae-Aceretum pseudoplatani*, *Paeonio officinalis-Tilietum platyphylli* and *Fraxino orni-Aceretum pseudoplatani*. The latter was described as a new. Also new is a secondary large-leaved lime association *Lamio orvalae-Tilietum platyphylli* on the sites of montane beech forests (*Lamio orvalae-Fagetum*) in the Čepovan valley, at the contact of the Dinaric and sub-Mediterranean phytogeographical regions of Slovenia.

## Izvleček

V jugozahodni Sloveniji: Gora pod Železnimi vrati in grapa Petnik pri Braniku, oboje na severnem robu Krasa, v udornici Orleška draga pri Sežani in pod Brkinskim robom na stiku Krasa in Brkinov smo fitocenološko analizirali sestoje, v katerih v drevesni plasti prevladujejo vrste *Tilia platyphyllos*, *T. cordata*, *Acer pseudoplatanus*, *Ulmus glabra*, ponekod tudi *Carpinus betulus* in *Ostrya carpinifolia* in jih uvrstili v tri asociacije *Corydalido ochroleucae-Aceretum pseudoplatani*, *Paeonio officinalis-Tilietum platyphylli* in *Fraxino orni-Aceretum pseudoplatani*. Slednjo smo opisali kot novo. Prav tako je nova drugotna lipova asociacija *Lamio orvalae-Tilietum platyphylli* na rastiščih gorskih bukovih gozdov (*Lamio orvalae-Fagetum*) v Čepovanski dolini, na stiku dinarskega in submediteranskega fitogeografskega območja Slovenije.

**Received:** 26. 9. 2020

**Revision received:** 23. 3. 2021

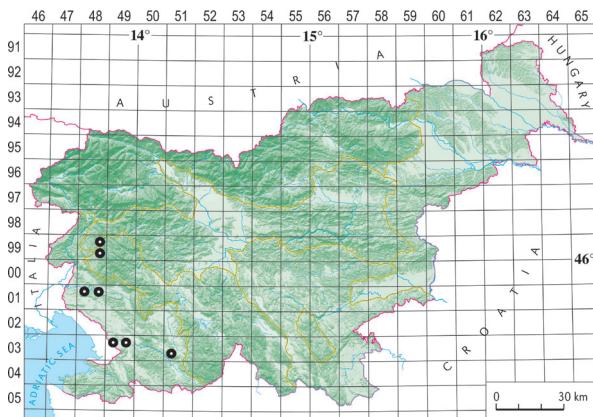
**Accepted:** 27. 4. 2021

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## Introduction

Noble hardwood forests (sycamore and Norway maple, wych elm, large-leaved and small-leaved lime) with admixture of thermophilic deciduous trees (hop hornbeam, flowering ash) that are classified into the alliance *Tilio-Acerion* and suballiance *Ostryo-Tilienion platyphylli* (Košir et al. 2008) have until now only been known on very small areas in the Karst (Dakskobler 2006, Dakskobler & Reščič 2015). They cover slightly bigger areas in contact regions in Čičarija and Vremščica (and were researched by Accetto 1991, Košir 2004, Košir & Surina 2005). In our research in recent years we identified such stands also on the northern edge of the Karst (Gora under Železna Vrata, Petnik gorge at Branik), in Orleška Draga and under Brkinski Rob (under the ridge between Knežak and Ratečevo Brdo). Pioneer large-leaved lime stands were recorded also in the Čepovan Valley, slightly more to the north – Figure 1. Some of these areas were mapped in the framework of a target research project (Šilc et al. 2017), but until now they have not been subject to a detailed phytosociological analysis or classified into a syn-taxonomic system. This was the aim of the present study.



**Figure 1:** Localities of the researched *Tilia platyphyllos* and *Acer pseudoplatanus* stands in western and southwestern Slovenia.

**Slika 1:** Nahajališča raziskanih lipovih in javorovih sestojev v zahodni in jugozahodni Sloveniji.

## Methods

Forest stands of noble hardwoods in the Karst and neighbouring regions were researched using the standard Central-European method (Braun-Blanquet 1964). The relevés were made in the spring of 2009, 2014, 2016, 2018 and 2019 and are stored in the FloVegSi database (Seliškar et al. 2003). We started with a table into which we arranged 46 relevés from five research areas, namely Gora under Železna Vrata, Petnik gorge, Orleška Draga,

Risnik and Brkinski Rob, and included also several relevés that were not dominated by noble hardwoods, but were made at the contact with their stands. These relevés were mutually compared using unweighted average linkage (UPGMA) hierarchical clustering method and Wishart's similarity ratio. Combined cover-abundance values were converted into the ordinal scale 1 to 9 (van der Maarel 1979). We used the programme package SYN-TAX 2000 (Podani 2001). Based on the resulting clusters of relevés we made four analytical tables followed by a synthetic table, in which we took into account only the relevés that grouped into clusters and were identified as belonging to the alliance *Tilio-Acerion* and suballiance *Ostryo-Tilienion*. The stands in the Čepovan valley were analysed separately. In describing the two new associations we considered not only the entire species composition, but also the structure of the upper stand layer, i.e. the dominant tree species. The nomenclatural source for the names of vascular plants is Martinčič et al. (2007). Some new findings, for example taxon *Helleborus dumetorum* Waldst. & Kit. ex Willd. subsp. *illyricus* Starmühler (Rottensteiner 2016) which is similar to taxon *H. multifidus* subsp. *istriacus* and *Crocus beuflelianus* Herb. (Peruzzi 2016) instead of taxon *Crocus vernus* subsp. *vernus* are in our tables not considered, but mentioned only as a note in the end of them. Martinčič (2003, 2011) is the nomenclatural source for the names of mosses, and Suppan et al. (2000) for the names of lichens. The source for the nomenclature of soil types was Urbančič et al. (2005). The nomenclatural source for the names of syntaxa are Šilc & Čarni (2012), except for the name of the class *Querco-Fagetea* Braun-Blanquet et Vlieger in Vlieger 1937. The sources of climate data for the study area are Ogrin (1996), B. Zupančič (1998) and Cegnar (1998), whereas Buser (2009) served as the source for geological data.

## Ecological description of the study area

All five study areas in the Karst and its fringes have hinterland sub-Mediterranean climate and the stands in the Čepovan valley are in the region of the temperate continental climate of western and southern Slovenia. The difference is in the annual precipitation volume, which is slightly higher (1600 to 1800 mm) in the northern edge of the Karst above the Vipava Valley, whereas other study areas receive between 1400 and 1500 mm. The differences in mean annual air temperature are less obvious, because Risnik and Orleška Draga are collapse dolines with persistent cold air pools, where mean air temperature is

different from the average in the surroundings of Sežana (which is 10–12 °C). The same average (10–12 °C) is on the Karst slopes above the Vipava Valley, but the local climate there is colder because of northern aspects and gorges (Petnik). Ratečevo Brdo or Brkinski Rob, however, is in the region with mean annual temperature between 8 °C and 10 °C. The Čepovan valley has a lower mean annual temperature (6–8 °C) than other areas and higher mean annual precipitation volume (about 2000 mm). The parent material in Risnik and Orleška Draga is limestone and its talus slopes, under Gora at Železna Vrata it is limestone and marlstone with their scree, in Petnik gorge rockfall, talus cones, limestone and marlstone rubble, and under Brkinski Rob limestone and its rubble, with insignificant admixture of marlstone. Limestone and dolomite are the predominant parent material in the Čepovan valley.

## Results and discussion

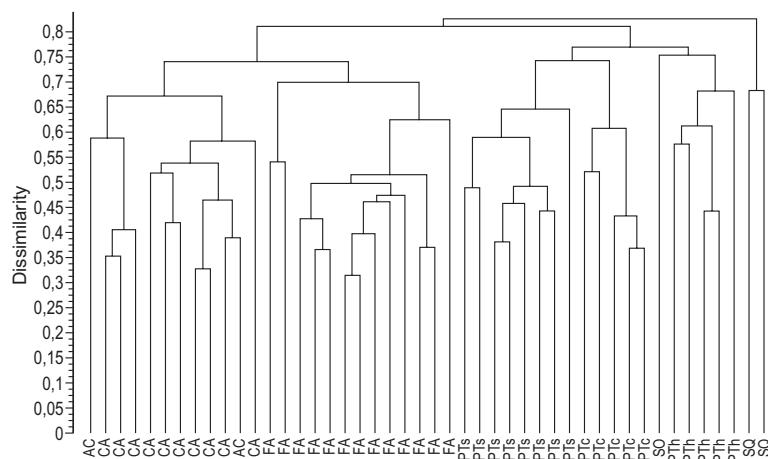
### Hierarchical classification of relevés and their comparison

In hierarchical clustering, 46 relevés from five study areas were grouped into two large clusters, each with two subclusters. A few of the relevés stood out from the rest (Figure 2).

Based on the results of this classification the relevés were arranged into a single table, which was further divided into four tables, one for each of the four groups.

### *Corydalido ochroleucae-Aceretum pseudoplatani*

Table 1 comprises 12 relevés of the first cluster (left side of the dendrogram in Figure 2), that were made in Orleška Draga and Risnik. Based on the soil conditions and floristic composition relevés 11 and 12 from this table cannot be classified into the alliance *Tilio-Acerion*. Relevé 11 (Risnik) correspond to the subassociations *Asaro-Carpinetum betuli dentarietosum enneaphylli* (Poldini 1985), but relevé 12 (Orleška Draga) is, because of high abundance of *Lamium orvala*, classified as a new subassociation *Asaro-Carpinetum betuli lamietosum orvalae* subass. nov. hoc loco. Although the relevés from Orleška Draga grouped separately from the Risnik relevés and did not comprise *Pseudofumaria alba*, the results of hierarchical classification indicate that they can be classified into the same subassociation, i.e. *Corydalido ochroleucae-Aceretum pseudoplatani* Acetto 1991 *veratretosum nigri* Dakskobler et Reščić 2015, but we revised the differential species of the subassociation. *Fraxinus excelsior* is not a differential species of the subassociation, but a differential species of the new variant (var. *Fraxinus excelsior*), into which we classify the Risnik relevés. The differential species of this variant include *Aconitum lycoctonum* and *Hacquetia epipactis*, whereas *Campanula rapunculoides* can be considered a differential species of the subassociation. The stands from Orleška Draga are classified into the new variant with *Isopyrum thalictroides*. Its differential species are also *Viola reichenbachiana*, *Acer campestre*, *Mercurialis ovata* and *Melica uniflora*.



**Figure 2:** Dendrogram of relevés of communities with dominant *Tilia platyphyllos* and *Acer pseudoplatanus* in the Karst and neighbouring regions (UPGMA, 1 – similarity ratio).

**Slika 2:** Dendrogram popisov združb plemenitih listavcev na Krasu in sosednjih območjih (UPGMA, komplement Wishartovega koeficiente podobnosti).

#### Legend / Legenda

- AC *Asaro-Carpinetum betuli*
- CA *Corydalido ochroleucae-Aceretum pseudoplatani*
- FA *Fraxino orni-Aceretum pseudoplatani*
- PTs *Paeonio officinalis-Tilietum platyphylli saxifragetosum rotundifoliae*

- PTc *Paeonio officinalis-Tilietum platyphylli castaneetosum sativae*
- PTH *Paeonio officinalis-Tilietum platyphylli hierochloetosum australis*
- SO *Seslerio autumnalis-Ostryetum*
- SQ *Seslerio autumnalis-Quercetum cerridis /Asaro-Carpinetum betuli*

These stands are distinguished from the Risnik relevés also by a smaller proportion of sycamore and large-leaved lime, a higher proportion of small-leaved lime and higher mean cover of common hornbeam in the tree layer. Prof. Andrej Rozman found a copy of the table of the association *Carpinetum orientalis* in Prof. Dušan Robič's legacy. The table is from the original manuscript of Prof. Gabrijel Tomažič, who lent the table to D. Robič in April 1968 as a teaching aid for students of phytosociology. This manuscript table includes six relevés from Orleška Draga, where oriental hornbeam (*Carpinus orientalis*) is recorded with a cover value 1 to 3 in the tree layer. Sessile oak (*Quercus petraea*) has a similar value and common hornbeam (*Carpinus betulus*) occurs only sporadically, with a cover value +. *Fraxinus ornus* and *Acer campestre* are more frequent, but sycamore (*Acer pseudoplatanus*) is very rare. Large and small-leaved lime and wych elm are completely absent in these relevés. At present, the forest in Orleška Draga is completely different. Oriental hornbeam was recorded only on two sites. It was not reported for this area in detailed mapping of the flora of the Gorizia-Trieste Karst region (Poldini 2009). Similarly, the entire species composition of our relevés is also completely different from Prof. Tomažič's relevés. The reason could be that our relevés were not made on the same localities – with the state border running across this collapse doline the area probably was not easily accessible after World War II and Tomažič may have made his relevés somewhere in the vicinity.

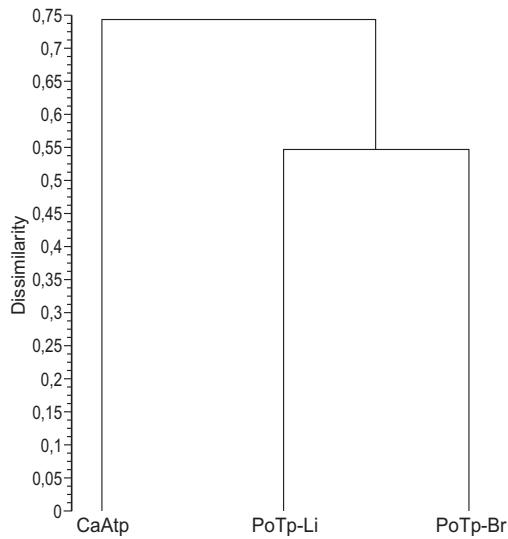
### *Fraxino orni-Aceretum pseudoplatani*

Relevés in the second cluster (13 relevés on the left side of the dendrogram in Figure 1) were made in Petnik gorge near Branik. Based on their entire species composition these relevés cannot be classified into the same association as the stands from Risnik and Orleška Draga, i.e. into the association *Corydalido ochroleucae-Aceretum pseudoplatani*, nor into the large-leaved lime community *Paeonio-Tiletum platyphylli*. They are the most similar to the stands of the association *Veratro nigri-Fraxinetum excelsioris*, whose fragments have been reported also at Škocjan Caves in the Karst (Dakskobler 2006), and with higher frequency in the Central Soča Valley (Dakskobler 2007). Two stands in the Škocjan Caves are dominated by large-leaved lime (*Tilia platyphyllos*) in the tree layer, where ash (*Fraxinus excelsior*) also occurs in one relevé, whereas sycamore (*Acer pseudoplatanus*) occurs only in the shrub layer. In terms of their entire species composition these two stands could also be classified into the subassociation *Corydalido ochroleucae-Aceretum pseudoplatani veratreto-nigri*. However, we did not record *Fraxinus excelsior* in our stands, and *Veratrum nigrum* was recorded only

in one relevé. Based on the species dominating the herb layer (*Lamium orvala*) and the tree layer (*Acer pseudoplatanus*) they should be classified into the association *Lamio orvalae-Aceretum pseudoplatani*, but this name already designates an altimontane maple community from the Slovenian and the Dinaric Alps (Košir 2005) which does not belong to the suballiance *Ostryo-Tilienion*, but to the *Lunario-Aceretum pseudoplatani*. Similarly, *Rusco aculeati-Aceretum pseudoplatani* would be an appropriate name for these stands, if it had not already been used for ecologically and phytogeographically entirely different stands in the Channel Islands along the coast of Normandy, France (Gehú 1997). They are therefore classified into the new association *Fraxino orni-Aceretum pseudoplatani* ass. nov. hoc loco. Its diagnostic species are *Acer pseudoplatanus*, *Ulmus glabra*, *Fraxinus ornus*, *Lamium orvala*, *Ruscus aculeatus* and *Asparagus acutifolius*. They characterise mixed colline (elevations between 150 m and 235 m) sycamore (*Acer pseudoplatanus*) and wych elm (*Ulmus glabra*) forest with occasional admixture of field maple (*Acer campestre*), European hop-hornbeam (*Ostrya carpinifolia*), manna ash (*Fraxinus ornus*), common hornbeam (*Carpinus betulus*), large-leaved lime (*Tilia platyphyllos*), black locust (*Robinia pseudoacacia*), and very rarely also chestnut (*Castanea sativa*), small-leaved lime (*Tilia cordata*) and beech (*Fagus sylvatica*), frequently with the climber *Hedera helix* in the deep gorge, mainly on rockfall and slope scree with colluvial soils and rendzina. The lower shrub layer and the herb layer are dominated by *Ruscus aculeatus*, *Lamium orvala*, *Polystichum setiferum*, *Phyllitis scolopendrium*, *Isopyrum thalictroides*, *Lunaria rediviva*, *Galanthus nivalis*, *Cardamine enneaphyllos*, *C. bulbifera*, *Mercurialis perennis* and *Corydalis cava*, and the moss layer by *Thamnobryum alopecurum* and *Isothecium alopecuroides*. This is a special forest community on mixed, limestone-marl (flysch) bedrock in a colder local variant of the warm sub-Mediterranean climate. The nomenclatural type of the new association, *holotypus*, is relevé 2 in Table 2. Relevé 13 in Table 2 is ecologically and floristically slightly different and shows certain similarity with the riparian forest from the association *Lamio orvalae-Alnetum glutinosae* (comp. Dakskobler 2016).

### *Paeonio officinalis-Tiletum platyphylli*

Relevés in the third cluster in the dendrogram in Figure 1 are arranged in Table 3. We compared them with the stands of the subassociation *Corydalido ochroleucae-Aceretum pseudoplatani tilietosum platyphylli* (Košir 2004, 8 relevés) and the stands of the association *Paeonio officinalis-Tiletum platyphylli* (Košir & Surina 2005, 19 relevés). Based on the dendrogram in Figure 3 they can be



**Figure 3:** Dendrogram of the stands of the syntaxa *Corydalido ochroleucae-Aceretum pseudoplatani* *tilietosum platyphylli* (CaAtp), *Paeonio officinalis-Tilietum platyphylli* – Lipnik in Čičarija (PoTp-Li), and *Paeonio officinalis-Tilietum platyphylli* – Brkinski Rob and Gora under Železna Vrata (PoTp-Br) – UPGMA, 1-similarity ratio.

**Slika 3:** Dendrogram sestojev sintaksonov *Corydalido ochroleucae-Aceretum pseudoplatani* *tilietosum platyphylli* (CaAtp), *Paeonio officinalis-Tilietum platyphylli* – Lipnik v Čičariji (PoTp-Li) in *Paeonio officinalis-Tilietum platyphylli* – Brkinski rob v Gora pod Železnimi vrati (PoTp-Br) – UPGMA, 1-similarity ratio

classified into the latter, although the character species of this association, namely *Aristolochia lutea*, *Ornithogalum umbellatum* and *Smyrnium perfoliatum*, were not recorded and *Paeonia officinalis* occurs in only one relevé. The only more frequent character species is *Helleborus multifidus* subsp. *istriacus* (*H. odorus* subsp. *istriacus*, *H. istriacus*) – but this species is also frequent in the stands of the subassociation *Corydalido ochroleucae-Aceretum pseudoplatani veratretosum nigri*. Differential species of researched community against the stands of this subassociation should be also *Sorbus aria* (*Aira edulis*) and *Euonymus verrucosa*. Nevertheless, total floristic similarity between our stands and the stands of the association *Paeonio officinalis-Tilietum platyphylli* according to Sørensen (1948) is around 55% and both have the large-leaved lime dominating in the tree layer, which allows us to classify them into the same association. We also identified another character species of the association – *Cnidium silaifolium*. We cannot, however, classify these stands into any of previously described subassociations *tilietosum platyphylli* or *fraxinetosum excelsioris*.

Relevés 1–8 are classified into the new subassociation *Paeonio officinalis-Tilietum platyphylli saxifragetosum rotundifoliae* subass. nov. hoc loco. Its nomenclatural type, *holotypus*, is relevé 2 in Table 3. Differential species of the subassociation include *Pseudofumaria alba*, *Galeobdolon montanum* and *Euonymus verrucosa*, and the stands

indicate certain similarity also with the stands of the association *Corydalido ochroleucae-Aceretum pseudoplatani*. They are differentiated from the latter by thermophilic species like *Cnidium silaifolium*, *Tanacetum corymbosum*, *Helleborus istriacus*, *Mercurialis ovata* and *Melittis melissophyllum*. Relevés 9–13 in Table 3 are classified into the subassociation *Paeonio officinalis-Tilietum platyphylli castaneetosum sativae*. Its nomenclatural type, *holotypus*, is relevé 11 in Table 3. Differential species of the subassociation are *Castanea sativa*, *Cornus mas*, *Ruscus aculeatus* and *Hedera helix*. They characterise a more thermophilic, colline-submontane form of this association, which was found on the slopes of Gora under Železna Vrata at the elevation of only 310 m to 340 m. Typically, the stands of this subassociation have a larger admixture of *Ulmus glabra*, which occasionally even dominates the tree layer.

Stands in the extreme left cluster in the dendrogram in Figure 2 were arranged in Table 4. Three relevés stand out with the tree layer that is dominated either by hop hornbeam (*Seslerio autumnalis-Ostyretum*), downy oak and Turkey oak (*Seslerio autumnalis-Quercetum cerridis* / *Aristolochio luteae-Quercetum pubescens?*) or common hornbeam (*Asaro-Carpinetum betuli*). The first five relevés in this table can still be classified into the association *Paeonio-Tilietum platyphylli*, but into the new subassociation *hierochloetosum australis*. Its nomenclatural type, *holotypus*, is relevé 3 in Table 4. The differential species of the subassociation are *Hierochloë australis*, *Sesleria tenuifolia* and *Plagiomnium undulatum*, but *Sesleria autumnalis* also has high mean cover. Differential against other subassociations are also some species of the classes *Erico-Pinetea* (*Amelanchier ovalis*, *Chamaecytisus hirsutus*), and *Trifolio-Geranietea* (*Anthericum ramosum*, *Digitalis grandiflora*, *Melampyrum velebiticum*). This is also a distinctly thermophilic form of this association with localities in Orleška Draga, at elevations ranging between 280 and 340 m.

### Lamio orvalae-Tilietum platyphylli

We included another large-leaved lime community in the synthetic table comprising with five syntaxa described in this article (Table 6). This community is distinctly different from the other five. Its relevés were not made in the Karst or immediate vicinity, but in the Čepovan valley, mainly on shady (northwestern) slopes of the Trnovo Forest Plateau, at the contact of the sub-Mediterranean and Dinaric phytogeographical regions, in the montane belt at elevations ranging between 500 m and 700 m. Most of these large-leaved lime stands (large and small-leaved lime are occasionally quite equal) are pioneer stands that developed on former agricultural areas, especially pastures, mainly on potential sites of the montane beech forest from the

association *Lamio orvalae-Fagetum*. They cannot be classified into any of large-leaved lime associations previously described in Slovenia nor into the association *Saxifrago petraeae-Tilietum platyphylli*, whose stands occur on much more extreme and rocky sites (comp. Dakskobler 2007). We therefore classified it into the new association *Lamio orvalae-Tilietum platyphylli* ass. nov. hoc loco. Its nomenclatural type, *holotypus*, is relevé 4 in Table 5. The diagnostic species of the association are *Tilia platyphyllos*, *T. cordata*, *Lamium orvala*, *Anemone trifolia*, *Helleborus odorus*, *Sesleria autumnalis* and *Arum maculatum*. The listed species characterise the new association both ecologically and chorologically, and indicate its syndynamic relationship with the stands of the association *Lamio orvalae-Fagetum*. We differentiate between two variants, a slightly more thermophilic (littoral) variant with *Sesleria autumnalis* (relevés 1–9 in Table 5, its differential species include *Adoxa moschatellina*), and a slightly more frigoriphilic (Dinaric) variant with *Omphalodes verna* (relevés 10–13 in Table 5).

Synthetic table 6 also demonstrates that this is probably a secondary large-leaved lime community, which differs from other communities described herein in particular with a higher proportion of the species of the alliance *Aremonio-Fagion*, order *Fagetalia sylvatica* and class *Querco-Fagetea*.

## Conspectus of the syntaxa described herein

The younger of us (ID) prefer conservative view:

*Querco-Fagetea* Br.-Bl. & Vlieg. 1937 (*Carpino-Fagetea* Passarge et Hofmann 1968)

*Fagetaea sylvatica* Walas 1933

*Tilio-Acerion* Klika 1955 (also possible *Fraxino excelsioris-Acerion pseudoplatani* P. Fukarek 1969)

*Ostryo-Tilienion platyphylli* P. Košir, Čarni et Di Pietro 2008

*Corydalido ochroleucae-Aceretum pseudoplatani* Accerto 1991

*veratretosum nigri* Dakskobler et Reščič 2015

var. *Fraxinus excelsior* var. nov.

var. *Isopyrum thalictroides* var. nov.

*Paeonio officinalis-Tiletum platyphylli* P. Košir et Surina 2005

*saxifagetosum rotundifoliae* subass. nov.

*castaneetosum sativae* subass. nov.

*hierochloetosum australis* subass. nov.

*Fraxino orni-Aceretum pseudoplatani* ass. nov.

*Lamio orvalae-Tilietum platyphylli* ass. nov.

var. *Sesleria autumnalis*

var. *Omphalodes verna*

The older of the authors (LP) prefers a more recent view, which partly corresponds also with Mucina et al. (2016).

*Carpino-Fagetea sylvatica* Jakucs ex Passarge 1968

*Aceretalia pseudoplatani* Moor 1976 nom. conserv. propos.

*Fraxino excelsioris-Acerion pseudoplatani* P. Fukarek 1969

or

*Ostryo carpinifoliae-Tilion platyphylli* (Košir et al. 2008)

Čarni in Willner et al. 2016

But the problem with classifying our communities into one of these two alliances is that the researched stands are in fact Submediterranean, not only thermophilic, but also mesophilic, and definitely not xero-thermophilic.

The conservative solution therefore better corresponds to the site conditions of the researched stands.

## Nature conservation function of the described noble hardwood communities in SW Slovenia

The forests described herein belong to the habitat type of Community interest 9180\* *Tilio-Acerion* forests of slopes, screes and ravines. Forests in Orleška Draga, Risnik, Gora under Železna Vrata and Petnik gorge are part of the Natura 2000 Karst area. In terms of forest typology they belong to the forest site type of submontane-montane large-leaved lime stands on carbonate and mixed bedrock, for which we previously concluded (Dakskobler et al. 2013: 25) that they usually cover small areas, which can make their sites more vulnerable to large-scale interventions into forest. Forest management activities like tree felling and wood harvesting should be adapted to protecting their sites. Given the specifics of these sites and sensitivity of forest soils any construction of forest roads in their vicinity should be carefully planned.

The described forest stands also comprise sites of several protected species (Anon. 2004): *Convallaria majalis*, *Cyclamen purpurascens*, *Dactylorhiza fuchsii*, *Epipactis helleborine*, *Erythronium dens-canis*, *Galanthus nivalis*, *Helleborus odorus*, *H. multifidus* subsp. *istriacus*, *H. niger*, *Lilium bulbiferum*, *L. carniolicum*, *L. martagon*, *Listera ovata*, *Neottia nidus-avis*, *Orchis pallens*, *Orchis mascula* subsp. *speciosa*, *Paeonia officinalis*, *P. mascula* agg. (*P. daurica*), *Primula auricula*, *Ruscus aculeatus* and *Sedum maximum* as well as several Red List species (Anon. 2002): *Muscaria botryoides*, *Veratrum nigrum*, endemic species *Tephroseris pseudocrispa* and species that is very rare in Slovenia (*Hieracium lasiophyllum*).

Collapse dolines Risnik and Orleška Draga are valuable natural features and botanical curiosities with distinct

vegetation that is clearly different from the vegetation in their vicinity. They are home to numerous species characteristic for beech forests (order *Fagetales sylvaticae*) and it is likely that beech once occurred here as well, perhaps even in ice-age refuges.

## Conclusions

Noble hardwood communities are very rare in southwestern Slovenia and most of them are classified into the suballiance *Ostryo-Tilienion platyphylli* and associations *Corydalido ochroleucae-Aceretum pseudoplatani* and *Paeonio officinalis-Tilietum platyphylli*. Stands of associations *Veratro nigri-Fraxinetum excelsioris* and *Saxifrago petraeae-Tilietum platyphylli* were found only in fragments. With our research we determined the occurrence of the stands of the association *Corydalido ochroleucae-Aceretum* also in two notable Karst collapse dolines, Risnik at Divača and Orleška Draga at Sežana. They differ from the stands in Čičarija and on Vremščica with slightly smaller dominance of sycamore and large-leaved lime and a higher proportion (cover) of small-leaved lime and common hornbeam in the tree layer, as well with certain more thermophilic species. The stands in Orleška Draga are classified as the new variant with *Isopyrum thalictroides* of the previously described subassociation *veratretosum nigri* with stands in Risnik. In Orleška Draga we observed a direct contact with a slightly similar common hornbeam community (*Asaro-Carpinetum betuli lamietosum orvalae*). The floristic composition of the association *Paeonio officinalis-Tilietum platyphylli* from the area of the original (first) description under Lipnik above Rakitovec is very different from the stands described under Brkinski Rob above Ratečevo Brdo. Nevertheless, these stands, which also share several species with the stands of the association *Corydalido ochroleucae-Aceretum*, can still be classified into this association as a new subassociation *saxifragetosum rotundifoliae*. We found two, even more marginal forms of the association *Paeonio-Tilietum*, slightly similar to the stands of the subassociation *Seslerio autumnalis-Ostryetum tiliatosum platyphylli*, under Gora under Železna Vrata on the northern edge of the Karst and in Orleška Draga. The former can be classified into the new subassociation *castaneetosum sativae* and the latter into the new subassociation *hierochloetosum australis*.

At least in western Slovenia, large and small-leaved lime are common pioneers also on abandoned agricultural areas on beech forest sites. A higher proportion of species characteristic for beech and beech-oak forests indicates that some of the large-leaved lime stands in the Čepovan valley (at the contact between sub-Mediterranean and Dinaric phytogeographical regions) are secondary. Because

their species composition is clearly different from previously described large-leaved lime communities they are classified into the new association *Lamio orvalae-Tilietum platyphylli* and treated as a pioneer stage on the sites of the association *Lamio orvalae-Fagetum*. The new association belongs to the group of secondary noble hardwood communities on beech or oak sites, which in the Soča Valley comprise also the association *Ornithogalo pyreniaci-Fraxinetum excelsioris* and occasionally (in the Karst) also *Veronico sublobatae-Fraxinetum excelsioris*.

Sycamore is the name-giving species for predominantly montane communities of noble hardwoods. Sycamore and wych elm stands in the colline belt (at elevations of not more than 150–235 m) in the deep gorge of Petnik on the northern edge of the Karst, at the contact of flysch and limestone, cannot be classified into the association *Veratro nigri-Fraxinetum excelsioris* which is known in this belt elsewhere in the Primorska region, due to complete absence of ash in its stands. Similarly, they cannot be classified into the association *Lamio orvalae-Aceretum pseudoplatani*, even though *Acer pseudoplatanus* and *Lamium orvala* both dominate these stands, each in its layer, because this name has already been used for the altimontane community of noble hardwoods in the SE Alps and the Dinaric Alps from the suballiance *Lunario-Acerenion*. We therefore described a new association *Fraxino orni-Aceretum pseudoplatani*, which is characteristic for the northern edge of the Karst.

Although noble hardwood stands in SW Slovenia cover very small areas they are a Natura 2000 habitat type that deserves special attention, protection and proper management.

## Povzetek

### Fitocenološka analiza gozdnih sestojev plemenitih listavcev (*Ostryo-Tilienion platyphylli*) na Krasu in njegovih robnih območjih

Združbe plemenitih listavcev so v jugozahodni Sloveniji precejšnja redkost in v glavnem jih uvrščamo v podzvezko *Ostryo-Tilienion platyphylli* in v asociaciji *Corydalido ochroleucae-Aceretum pseudoplatani* in *Paeonio officinalis-Tilietum platyphylli*, le v sledovih smo našli sestoje asociacij *Veratro nigri-Fraxinetum excelsioris* in *Saxifrago petraeae-Tilietum platyphylli*. Z našimi raziskavami smo ugotovili uspevanje sestojev asociacije *Corydalido ochroleucae-Aceretum* tudi v dveh znamenitih kraških udornicah, Risniku pri Divači in Orleški dragi pri Sežani. Od sestojev v Čičariji in na Vremščici se razlikujejo po nekoliko manjši prevladi gorskega javorja in lipe in po večjem deležu (zastiranju) lipovca in belega gabre v v drevesni plasti,

prav tako po nekaterih bolj topoljubnih vrstah. Sestojem v Risniku že prej opisane subasociacije *veratretosum nigri* lahko priključimo tudi sestoje nove variante z vrsto *Isopyrum thalictroides* v Orleški dragi. Tam opažamo neposreden stik z nekoliko podobno združbo belega gabra (*Asaro-Carpinetum betuli lamietosum orvalae*). Floristična sestava asociacije *Paeonio officinalis-Tilietum platyphylli* iz območja izvornega opisa pod Lipnikom nad Rakitovcem je precej drugačna od sestojev, ki smo jih popisali pod Brkinskim robom nad Ratečevim Brdom, a kljub temu lahko te sestoje, ki imajo sicer tudi nekatere skupne vrste s sestoji asociacije *Corydalido ochroleucae-Aceretum*, vseeno še lahko uvrstimo v to asociacijo, kot novo subasociacijo *saxifragetosum rotundifoliae*. Še bolj robeni obliki asociacije *Paeonio-Tilietum*, nekoliko podobni sestojem subasociacije *Seslerio autumnalis-Ostryetum tilietosum platyphylli* smo našli pod Goro pod Železnimi vrati na severnem robu Krasa in v Orleški dragi. Prve lahko uvrstimo v novo subasociacijo *castaneetosum sativae*, druge prav tako v novo subasociacijo *hierochloetosum australis*.

Lipa in lipovec sta vsaj v zahodni Sloveniji pogosta pionirja tudi na opuščenih kmetijskih površinah na rastiščih bukovih gozdov. Na drugotnost nekaterih lipovih sestojev v Čepovanski dolini (na stiku med submediteranskim in dinarskim fitogeografskim območjem) kaže povečan delež vrst značilnih za bukove in bukovo-hrastove gozdove. Ker so ti sestoji po vrstni sestavi očitno drugačni od prej omenjenih lipovih združb, jih uvrščamo v novo asociacijo *Lamio orvalae-Tilietum platyphylli* in jih obravnavamo kot pionirski stadij na rastiščih asociacije *Lamio orvalae-Fagetum*. Nova asociacija sodi v skupino drugotnih združb plemenitih listavcev na bukovih ali hrastovih rastiščih, v kateri sta tudi asociaciji *Ornithogalo pyrenaici-Fraxinetum excelsioris* v Posočju in *Veronica sublobatae-Fraxinetum excelsioris* ponekod na Krasu.

Po gorskem javorju se v glavnem imenujejo montanske združbe plemenitih listavcev. Sestojev gorskega javorja in gorskega bresta v gričevnatem pasu (nadmorska višina le 150 m do 235 m) v globoki grapi Petnik na severnem robu Krasa, na stiku fliša in apnanca, ne moremo uvrstiti v asociacijo *Veratro nigri-Fraxinetum excelsioris*, ki jo sicer poznamo v tem višinskem pasu drugod na Primorskem, ker v njenih sestojih velikega jesena sploh nismo popisali. Prav tako jih ne moremo uvrstiti v asociacijo *Lamio orvalae-Aceretum pseudoplatani*, čeprav sta vrsti *Acer pseudoplatanus* in *Lamium orvala* dejansko v njih pravladujoči, vsaka v svoji plasti. To ime je namreč že uporabljen za altimontansko združbo plemenitih listavcev v Jugovzhodnih Alpah in Dinarskem gorstvu iz podzveze *Lunario-Acerenion*. Iz teh razlogov smo opisali novo asociacijo *Fraxino orni-Aceretum pseudoplatani* in je posebnost severnega roba Krasa.

Čeprav so sestoji plemenitih listavcev v jugozahodni Sloveniji razširjeni na zelo majhnih površinah, so kot Natura 2000 habitatni tip vredni pozornosti, varovanja in ustreznega gospodarjenja.

## Acknowledgements

The authors acknowledge the financial support from the Slovenian Research Agency and the Ministry of Agriculture, Forestry and Food (research core funding No. P1-0236, target research *The design of monitoring of the conservation status of minor Natura 2000 forest habitat types in Slovenia*, V4–1430). Sincere thanks to Matej Rešič for his help in the field work, to Doc. Dr. Andrej Rozman for telling us about Prof. Gabrijel Tomažič's manuscript table, to Prof. Dr. Jean-Paul Theurillat for his valuable data about the association *Rusco aculeati-Aceretum pseudoplatani* and to Prof. Dr. Andraž Čarni and Dr. Marisa Vidali for their suggestions. Two anonymous reviewers helped us with valuable improvements and corrections. English translation by Andreja Šalamon Verbič.

## References

- Accetto, M. 1991: *Corydalido ochroleucae-Aceretum* ass. nova v Sloveniji. Razprave 4. razreda SAZU 32 (3): 89–128.
- Braun-Blanquet, J., 1964: Pflanzensoziologie. 3. Auflage. Grundzüge der Vegetations Kunde, Springer Verlag, Wien, New York, 865 pp.
- Buser, S., 2009: Geološka karta Slovenije 1: 250.000. Geological map of Slovenia 1: 250,000. Geološki zavod Slovenije, Ljubljana.
- Cegnar T., 1998: Temperatura zraka. In: Fridl, J., D. Kladnik, M. Orožen Adamič & D. Perko: Geografski atlas Slovenije. Država v prostoru in času. Državna založba Slovenije, Ljubljana, pp. 100–101.
- Dakskobler, I. 2006: Prispevek k poznavanju gozdne vegetacije Krasa (jugozahodna Slovenija). Annales, Ser. hist. nat. 16 (1): 57–76.
- Dakskobler, I. 2007: Gozdovi plemenitih listavcev v Posočju. Forest of valuable broad-leaved tree species in the Soča valley (western Slovenia). Scopolia 60: 1–287.
- Dakskobler, I. 2016: Phytosociological analysis of riverine forests in the Vipava and Reka Valleys (southwestern Slovenia). Folia biologica et geologica 57 (1): 5–61.
- Dakskobler, I. & Rešič, M. 2015: Fitocenološka in gozdnogospodarska analiza gorskega bukovega in javorovega gozda na skalnatih rastiščih na Krasu in v Čičariji (JZ Slovenija). Gozdarski vestnik 73 (2): 67–87.
- Dakskobler, I., Košir, P. & Kutnar, L. 2013: Gozdovi plemenitih listavcev v Sloveniji. Združbe gorskega javorja, gorskega bresta, velikega jesena, ostrolistnega javorja, lipe in lipovca. Silva Slovenica in Zveza gozdarskih društev, Ljubljana, 74 pp.

Géhu, J.-M. 1997: Observations phytosociologiques préliminaires sur le littoral occidental de l' Île de Jersey (Anglo-Normande). Colloques Phytosociologiques 27: 169–196.

Košir, P. & Surina, B. 2005: *Paeonio officinalis-Tilietum platyphylli* – nova združba gozdov plemenitih listavcev v Čičariji (jugozahodna Slovenija). In: Rožec Darovec, V. (ed.): Meje in konfini. Koper, Univerza na Primorskem, Znanstveno-raziskovalno središče Koper, Založba Annales : Zgodovinsko društvo za južno Primorsko, pp. 345–366.

Košir, P. 2004: Sinsistematski pregled šuma plemenitih listača ilirske florne provincije s posebnim osvrtom na zajednice u Sloveniji. Doktorska disertacija. Sveučilište u Zagrebu, Šumarski fakultet, Zagreb, 164 pp. + priloge.

Košir, P. 2005: Noble hardwood forests of the altimontane belt (*Lamio orvalae-Aceretum pseudoplatani* P. Košir et Marinček 1999) in Slovenia (western part of the Illyrian floral province). Natura Croatica 14 (2): 59–86.

Košir, P., Čarni, A. & di Pietro, R. 2008: Classification and phytogeographical differentiation of broad-leaved ravine forests in southeastern Europe. Journal of Vegetation Science 19 (3): 331–342. DOI: <https://doi.org/10.3170/2008-8-18372>

Maarel van der, E. 1979: Transformation of cover-abundance values in phytosociology and its effects on community similarity. Vegetatio 39 (2): 97–114. DOI: <https://doi.org/10.1007/BF00052021>

Martinčič, A. 2003: Seznam listnatih mahov (Bryopsida) Slovenije. Hacquetia 2 (1): 91–166.

Martinčič, A. 2011: Seznam jetrenjakov (Marchantiophyta) in rogovnjakov (Anthocerotophyta) Slovenije. Scopula 72: 1–38.

Martinčič, A., Wraber, T., Jogan, N., Podobnik, A., Turk, B., Vreš, B., Ravnik, V., Frajman, B., Strgulc Krajkšek, S., Trčak, B., Bačić, T., Fischer, M. A., Eler, K. & Surina, B. 2007: Mala flora Slovenije. Ključ za določanje praprotnic in semenek. Četrta, dopolnjena in spremenjena izdaja. Tehniška založba Slovenije, Ljubljana. 967 pp.

Mucina, L., Bultmann, H., Dierssen, K., Theurillat, J.-P., Raus, T., Čarni, A., Šumberová, K., Willner, W., Dengler, J., Garcia, R. G., Chytrý, M., Hájek, M., Di Pietro, R., Iakushenko, D., Pallas, J., Daniëls, F. J. A., Bergmeier, E., Santos Guerra, A., Ermakov, N., Valachovič, M., Schaminée, J. H. J., Lysenko, T., Didukh, Y. P., Pignatti, S., Rodwell, J. S., Capelo, J., Weber, H. E., Solomeshch, A., Dimopoulos, P., Aguiar, C., Hennekens, S. M. & Tichý, L. 2016: Vegetation of Europe: hierarchical floristic classification system of vascular plant, bryophyte, lichen, and algal communities. Applied Vegetation Science 19: 3–264. DOI: <https://doi.org/10.1111/avsc.12257>

Ogrin, D. 1996: Podnebni tipi v Sloveniji. Geografski vestnik 68: 39–56.

Peruzzi L. 2016: *Crocus heuffelianus* (Iridaceae), a new record for the Italian flora. Phytotaxa, 261: 291–294. DOI: <https://doi.org/10.11646/phytotaxa.261.3.10>

Podani, J. 2001: SYN-TAX 2000. Computer Programs for Data Analysis in Ecology and Systematics. User's Manual, Budapest, 53 pp.

Poldini, L. 1985: L' *Asaro-Carpinetum betuli* Lausi 64 del Carso Nordadriatico. Studia Geobotanica 5: 31–38.

Poldini, L. 2009: La diversità vegetale del Carso fra Trieste e Gorizia. Lo stato dell'ambiente. Edizione Goliardiche, Trieste, 732 pp.

Rottensteiner, W. K. 2016: Attempt of a morphological differentiation of *Helleborus* species in the Northwestern Balkans. Modern Phytomorphology 9 (Suppl.): 17–33.

Seliškar, T., Vreš, B. & Seliškar, A. 2003: FloVegSi 2.0. Računalniški program za urejanje in analizo bioloških podatkov. Biološki inštitut ZRC SAZU, Ljubljana.

Sørensen, Th. 1948: A method of establishing groups of equal amplitude in plant sociology based on similarity of species content. Det Kongelige Danske Videnskabernes Selskab, Biologiske Skrifter 5 (4): 1–34.

Suppan, U., Prügger, J. & Mayrhofer, H. 2000: Catalogue of the lichenized and lichenicolous fungi of Slovenia. Bibliotheca Lichenologica 76: 1–215.

Šilc, U. & Čarni, A. 2012: Conspectus of vegetation syntaxa in Slovenia. Hacquetia 11 (1): 113–164. DOI: <https://doi.org/10.2478/v10028-012-0006-1>

Šilc, U., Čarni, A., Dakskobler, I., Kutnar, L., Marinšek, A., Rozman, A., Sajko, I. & Vreš, B. 2017: Zasnova monitoringa stanja ohranjenosti manjšinskih Natura 2000 gozdnih habitatnih tipov v Sloveniji : zaključno poročilo v okviru Ciljnega raziskovalnega projekta (V4-1430). Elaborat. Biološki inštitut ZRC SAZU, Ljubljana, 170 pp.

Urbančič, M., Simončič, P., Prus, T. & Kutnar, L. 2005: Atlas gozdnih tal. Zveza gozdarskih društev Slovenije, Gozdarski vestnik & Gozdarski inštitut Slovenije, Ljubljana, 100 pp.

Zupančič, B. 1998: Padavine. In: Orožen Adamič, M., Fridl, J., Kladnik, D. & Perko, D. (eds.): Geografski atlas Slovenije. Država v prostoru in času. Državna založba Slovenije, Ljubljana, pp. 98–99.

**Table 1 (Tabela 1):** *Corydalido ochroleucae-Aceretum pseudoplatani* Risnik, Orleška Draga.

	Number of relevé (Zaporedna številka popisa)												Pr.	Fr.	
Database number of relevé (Delovna številka popisa)		1	2	3	4	5	6	7	8	9	10	11	12		
Elevation in m (Nadmorska višina v m)	300	320	330	300	280	265	275	370	370	375	370	370	375		
Aspect (Lega)	NNE	NW	NW	N	NW	N	SEE	NE	W	SE	NW	NW	W		
Slope in degrees (Nagib v stopinjah)	25	25	30	25	25	20	25	25	25	15	10	25			
Parent material (Matična podlaga)	Gr	Gr	Gr	Gr	Gr	Gr	Gr	A	Gr	A	A	A	A		
Soil (Tla)	Re	Re	Re	Re	Re	Re	Co	Re	Re	Re	Rj	Rj			
Stoniness in % (Kamnitost v %)	20	20	30	10	10	30	10	90	60	80	10	10			
Cover in % (Zastiranje v %):															
Upper tree layer (Zgornja drevesna plast)	E3b	80	80	80	80	90	80	80	90	90	80	90	85		
Lower tree layer (Spodnja drevesna plast)	E3a	10	10	10	19	10	5	10	.	.	10	.	.		
Shrub layer (Grmovna plast)	E2	15	10	80	19	5	10	10	10	60	10	1	5		
Herb layer (Zeliščna plast)	E1	80	90	30	80	90	90	80	60	80	60	70	90		
Moss layer (Mahovna plast)	E0	30	10	.	10	10	30	20	60	30	70	5	10		
Max. tree diameter (Maks. premer dreves)	cm	45	40	40	35	40	35	35	30	30	25	30	30		
Max. tree height (Maks. višina dreves)	m	24	20	18	20	22	20	18	17	17	17	20	20		
Number of species (Število vrst)		60	51	56	53	51	41	47	80	65	53	46	30		
Relevé area (Velikost popisne ploskve)	m <sup>2</sup>	400	400	400	400	400	400	400	400	400	400	400	400		
Date of taking relevé (Datum popisa)		5061394	409458	0349/1	Orleška draga	4/18/2018									
Locality (Nahajališče)		5061435	409589	0349/1	Orleška draga	4/18/2018									
Quadrant (Kvadrant)		5061404	409570	0349/1	Orleška draga	4/18/2018									
Coordinate (Koordinate) GK Y (D-48)	m	5061403	409547	0349/1	Orleška draga	4/18/2018									
Coordinate (Koordinate) GK X (D-48)	m	5061438	409552	0349/1	Orleška draga	4/18/2018									
<b>Diagnostic species of the association (Diagnostična vrsta asociacije)</b>		5061465	409451	0349/1	Orleška draga	4/18/2018									
CF <i>Pseudofumaria alba</i>	E1	.	.	.	.	.	.	.	+	+	1	.	.	3	30
<b>Differential species of the subassociation (Razlikovalnice subasociacije)</b>															
QF <i>Veratrum nigrum</i>	E1	2	.	r	2	+	1	1	1	1	1	.	+	9	90
QF <i>Viola mirabilis</i>	E1	+	.	.	+	.	.	+	1	+	+	.	.	6	60
TG <i>Campanula rapunculoides</i>	E1	.	1	.	+	+	.	+	+	+	.	.	.	6	60
<b>Differential species of the variants (Razlikovalnice variant)</b>															
TA <i>Isopyrum thalictroides</i>	E1	2	2	3	2	1	2	1	.	.	.	.	+	7	70
FS <i>Viola reichenbachiana</i>	E1	1	1	+	1	1	.	+	.	.	.	+	+	6	60
QP <i>Mercurialis ovata</i>	<b>E1</b>	+	+	+	+	.	+	1	.	.	.	.	.	6	60
QF <i>Acer campestre</i>	E3b	.	.	.	+	+	1	.	.	+	.	.	+	4	40
QF <i>Acer campestre</i>	E3a	+	1	+	+	+	+	.	.	.	.	.	.	6	60
QF <i>Acer campestre</i>	E2b	.	+	+	.	.	.	.	.	.	.	.	+	2	20
QF <i>Acer campestre</i>	E2a	.	+	.	.	.	.	.	.	.	.	.	.	1	10
QF <i>Melica uniflora</i>	E1	+	+	+	+	+	.	.	.	.	.	.	.	5	50
		5059790	419862	0349/2	Risnik	5/20/2014								Pr. (1-10)	
		5061504	409514	0349/1	Orleška draga	4/18/2018								Fr. (1-10)	

	Number of relevé (Zaporedna številka popisa)										Pr.	Fr.		
	1	2	3	4	5	6	7	8	9	10	11	12		
MuA	<i>Aconitum lycoctonum</i>	E1	.	.	.	.	.	3	3	+	+	.	3 30	
AF	<i>Hacquetia epipactis</i>	E1	.	.	.	.	.	+	+	+	2	.	3 30	
FS	<i>Fraxinus excelsior</i>	E3b	.	.	.	.	.	+	.	.	.	.	1 10	
FS	<i>Fraxinus excelsior</i>	E2a	.	.	.	.	.	+	+	r	.	.	3 30	
FS	<i>Fraxinus excelsior</i>	E1	.	.	.	.	.	.	.	.	r	.	.	
TA	<b><i>Tilio-Acerion</i></b>													
	<i>Acer pseudoplatanus</i>	E3b	2	.	+	2	2	2	+	3	4	4	1 9 90	
	<i>Acer pseudoplatanus</i>	E3a	.	.	.	.	.	.	+	.	.	.	1 10	
	<i>Acer pseudoplatanus</i>	E2b	.	+	.	.	.	.	.	.	.	.	1 10	
	<i>Acer pseudoplatanus</i>	E2a	.	+	.	.	+	.	.	.	.	.	2 20	
	<i>Acer pseudoplatanus</i>	E1	.	1	1	1	1	.	1	.	+	1	1 7 70	
	<i>Tilia cordata</i>	E3b	1	2	2	2	2	+	2	1	+	.	+	9 90
	<i>Tilia cordata</i>	E3a	+	1	.	.	.	+	.	.	.	.	3 30	
	<i>Tilia cordata</i>	E2a	+	.	.	.	.	.	.	.	.	.	1 10	
	<i>Tilia platyphyllos</i>	E3b	3	+	1	1	+	+	.	3	3	1	.	9 90
	<i>Tilia platyphyllos</i>	E3a	1	.	.	.	.	.	+	.	.	.	2 20	
	<i>Tilia platyphyllos</i>	E2b	.	.	.	.	.	.	.	+	.	.	1 10	
	<i>Tilia platyphyllos</i>	E2a	1	.	.	.	.	.	.	.	.	.	1 10	
	<i>Adoxa moschatellina</i>	E1	1	.	+	+	+	1	1	1	+	1	9 90	
	<i>Geranium robertianum</i>	E1	1	.	+	.	+	.	+	1	+	.	6 60	
	<i>Ulmus glabra</i>	E3b	.	1	2	.	.	.	.	.	.	.	2 20	
	<i>Ulmus glabra</i>	E3a	+	1	+	+	.	.	+	.	+	.	6 60	
	<i>Ulmus glabra</i>	E2a	.	.	+	.	.	+	+	+	+	.	5 50	
	<i>Ulmus glabra</i>	E1	.	.	.	+	+	.	+	.	.	.	3 30	
	<i>Aruncus dioicus</i>	E1	2	+	.	2	+	.	.	1	.	+	.	6 60
	<i>Corydalis solida</i>	E1	1	.	+	.	+	+	.	1	.	.	5 50	
	<i>Phyllitis scolopendrium</i>	E1	.	.	.	1	+	.	.	+	+	.	4 40	
	<i>Thalictrum aquilegiifolium</i>	E1	+	.	.	.	.	.	+	.	+	.	3 30	
	<i>Acer platanoides</i>	E3b	+	.	.	.	.	.	.	1	.	.	2 20	
	<i>Acer platanoides</i>	E3a	.	.	.	.	.	.	+	.	.	.	1 10	
	<i>Acer platanoides</i>	E2a	1	.	.	.	.	.	+	.	.	.	2 20	
	<i>Acer platanoides</i>	E1	1	.	.	.	.	.	+	.	.	+	2 20	
	<i>Aesculus hippocastanum</i>	E3a	.	.	.	.	+	.	.	.	.	.	1 10	
	<i>Juglans regia</i>	E2a	.	.	.	.	.	+	.	.	.	.	1 10	
EC	<b><i>Erythronio-Carpinion</i></b>													
	<i>Galanthus nivalis</i>	E1	2	2	2	2	2	2	1	1	1	+	2 2 10 100	
	<i>Primula vulgaris</i>	E1	+	1	1	+	1	.	.	+	.	.	6 60	
AF	<b><i>Aremonio-Fagion</i></b>													
	<i>Lamium orvala</i>	E1	2	2	3	3	4	4	1	1	1	1	2 3 10 100	
	<i>Cardamine enneaphyllos</i>	E1	2	2	2	2	2	1	.	2	2	2	2 9 90	
	<i>Cyclamen purpurascens</i>	E1	1	1	+	.	.	.	+	1	+	1	7 70	
FS	<b><i>Fagetalia sylvaticae</i></b>													
	<i>Carpinus betulus</i>	E3b	1	3	2	3	3	4	4	1	2	2	4 4 10 100	
	<i>Carpinus betulus</i>	E3a	.	1	.	+	+	+	.	+	.	.	5 50	
	<i>Carpinus betulus</i>	E2b	+	.	.	.	.	.	1	.	.	.	2 20	
	<i>Asarum europaeum</i> subsp. <i>caucasicum</i>	E1	1	+	1	+	1	1	1	1	1	1	1 10 100	
	<i>Polygonatum multiflorum</i>	E1	2	+	1	1	1	1	1	2	1	2	+	1 10 100
	<i>Lathyrus vernus</i>	E1	2	1	+	1	.	+	1	+	+	+	+	9 90
	<i>Mercurialis perennis</i>	E1	1	+	+	1	1	1	+	+	+	.	+	1 9 90
	<i>Corydalis cava</i>	E1	1	+	1	+	4	4	.	+	+	.	4	8 80

	Number of relevé (Zaporedna številka popisa)												Pr.	Fr.
	1	2	3	4	5	6	7	8	9	10	11	12		
	<i>Galeobdolon flavidum</i>	E1	1	+	2	.	.	+	1	1	1	1	.	.
	<i>Actaea spicata</i>	E1	+	.	.	+	+	1	+	1	1	1	+	.
	<i>Mycelis muralis</i>	E1	+	+	+	+	.	.	+	1	+	.	.	7
	<i>Galium laevigatum</i>	E1	1	+	+	1	+	.	+	+	.	.	.	7
	<i>Sambucus nigra</i>	E2	1	.	.	.	+	+	.	+	1	+	+	6
	<i>Salvia glutinosa</i>	E1	.	+	+	.	+	.	+	.	1	.	.	5
	<i>Campanula trachelium</i>	E1	+	+	+	+	+	.	.	.	.	.	.	5
	<i>Dryopteris filix-mas</i>	E1	.	.	.	+	.	+	.	2	1	+	+	5
	<i>Heracleum sphondylium</i>	E1	+	+	+	+	+	.	.	.	.	.	+	5
	<i>Sanicula europaea</i>	E1	.	+	+	1	+	.	.	.	.	+	.	5
	<i>Symphytum tuberosum</i>	E1	.	.	.	+	+	.	1	.	+	.	.	4
	<i>Cardamine bulbifera</i>	E1	.	.	.	.	.	.	+	.	+	2	.	2
	<i>Paris quadrifolia</i>	E1	.	.	.	.	.	.	1	.	+	1	.	2
	<i>Euphorbia dulcis</i>	E1	.	.	.	.	.	.	.	+	+	+	.	2
	<i>Melica nutans</i>	E1	.	.	.	.	.	.	+	+	.	.	.	2
	<i>Neottia nidus-avis</i>	E1	+	.	.	.	.	.	+	.	+	.	+	1
	<i>Galeobdolon montanum</i>	E1	.	+	.	.	.	.	.	.	.	.	.	1
	<i>Cardamine impatiens</i>	E1	.	.	.	.	+	.	.	.	.	.	.	1
	<i>Circaeaa lutetiana</i>	E1	.	.	.	.	+	.	.	.	.	.	.	1
	<i>Epipactis helleborine</i>	E1	.	.	.	.	+	.	.	.	.	.	.	1
	<i>Lonicera alpigena</i>	E2a	.	.	.	.	.	.	+	.	.	.	.	1
	<i>Pulmonaria officinalis</i>	E1	.	.	.	.	.	.	.	1	.	.	.	1
CO	<b><i>Carpinion orientalis</i></b>													
	<i>Sesleria autumnalis</i>	E1	1	2	.	1	+	.	1	+	+	+	.	8
	<i>Carpinus orientalis</i> ?	E3a	.	r	r	.	.	.	.	.	.	.	.	2
QP	<b><i>Quercetalia pubescenti-petraeae</i></b>													
	<i>Convallaria majalis</i>	E1	+	.	+	1	+	.	2	+	+	+	.	8
	<i>Lathyrus venetus</i>	E1	1	1	1	1	1	+	1	.	.	.	.	7
	<i>Ostrya carpinifolia</i>	E3b	1	+	+	.	.	.	.	2	2	+	+	6
	<i>Ostrya carpinifolia</i>	E3a	1	+	.	.	.	.	+	.	.	.	.	3
	<i>Fraxinus ornus</i>	E3a	+	1	1	.	.	.	+	+	+	.	.	6
	<i>Fraxinus ornus</i>	E2b	.	.	+	.	.	.	.	1	+	.	.	3
	<i>Fraxinus ornus</i>	E2a	.	+	.	.	.	.	+	.	.	.	.	2
	<i>Fraxinus ornus</i>	E1	.	1	.	.	.	.	+	+	1	.	1	4
	<i>Helleborus multifidus</i> subsp. <i>istriacus</i> *	E1	.	1	+	1	+	.	+	.	.	.	1	5
	<i>Melittis melissophyllum</i>	E1	.	+	+	.	.	.	.	.	.	.	.	2
	<i>Tanacetum corymbosum</i>	E1	.	+	.	+	.	.	.	.	.	.	.	2
	<i>Asparagus tenuifolius</i>	E1	.	+	.	.	.	.	+	.	.	.	.	2
	<i>Mercurialis x paxii</i>	E1	.	.	.	+	.	.	.	+	.	.	.	2
	<i>Cornus mas</i>	E2b	.	.	.	.	.	+	+	.	.	.	.	2
	<i>Arabis turrita</i>	E1	.	.	.	.	.	.	r	+	.	.	.	2
	<i>Viola sepincola</i>	E1	.	+	.	.	.	.	.	.	.	.	.	1
	<i>Orchis pallens</i>	E1	.	+	.	.	.	.	.	.	.	.	.	1
	<i>Prunus mahaleb</i>	E2a	.	.	+	.	.	.	.	.	.	.	.	1
	<i>Quercus cerris</i>	E3b	.	.	r	.	.	.	.	.	.	.	+	1
	<i>Aristolochia lutea</i>	E1	.	.	.	.	.	+	.	.	.	.	.	1
	<i>Lathyrus niger</i>	E1	.	.	.	.	.	+	.	.	.	.	.	1
	<i>Hierochloë australis</i>	E1	.	.	.	.	.	+	.	.	.	.	.	1
	<i>Euonymus verrucosa</i>	E2a	.	.	.	.	.	.	+	.	.	.	.	1
	<i>Quercus pubescens</i>	E3a	.	.	.	.	.	.	+	.	.	.	.	1

		Number of relevé (Zaporedna številka popisa)										Pr.	Fr.			
		1	2	3	4	5	6	7	8	9	10	11	12			
	<i>Sorbus aria (Aria edulis)</i>	E3a	.	.	.	.	.	.	.	+	.	.	.	1	10	
QF	<b><i>Querco-Fagetea</i></b>															
	<i>Lonicera xylosteum</i>	E2	1	+	+	+	.	+	+	1	1	1	.	.	9	90
	<i>Hepatica nobilis</i>	E1	1	.	1	1	.	+	1	1	1	1	.	1	8	80
	<i>Hedera helix</i>	E3a	1	+	+	+	+	+	+	.	.	.	.	.	7	70
	<i>Hedera helix</i>	E1	1	+	+	.	1	+	+	.	+	+	+	+	8	80
	<i>Carex digitata</i>	E1	1	+	.	+	.	.	1	+	+	+	+	.	7	70
	<i>Acer campestre</i>	E1	.	.	1	.	.	.	+	.	.	.	.	.	2	20
	<i>Anemone ranunculoides</i>	E1	+	.	.	+	+	1	+	1	.	.	+	1	6	60
	<i>Corylus avellana</i>	E3a	.	.	.	.	.	.	.	.	.	.	+	.	1	10
	<i>Corylus avellana</i>	E2b	2	.	.	.	.	2	.	+	1	1	.	+	5	50
	<i>Corylus avellana</i>	E2a	+	.	.	.	.	.	.	.	.	.	.	.	1	10
	<i>Quercus petraea</i>	E3b	r	1	1	.	+	.	.	.	.	.	+	.	4	40
	<i>Gagea lutea</i>	E1	.	.	.	+	+	+	.	+	.	.	1	.	4	40
	<i>Lathraea squamaria</i>	E1	.	+	r	.	+	.	.	.	.	.	.	+	3	30
	<i>Viola riviniana</i>	E1	+	.	.	+	.	.	.	.	.	.	+	.	2	20
	<i>Stellaria holostea</i>	E1	.	.	.	.	.	.	.	+	+	+	2	.	3	30
	<i>Ranunculus ficaria</i>	E1	.	.	.	.	1	1	.	.	.	.	.	1	2	20
	<i>Anemone nemorosa</i>	E1	.	.	.	.	.	.	.	+	.	+	1	.	2	20
	<i>Moebringia trinervia</i>	E1	.	.	.	.	+	.	.	.	.	.	+	.	1	10
	<i>Dactylis glomerata</i> subsp. <i>lobata</i> ( <i>D. polygama</i> )	E1	.	.	.	.	.	.	+	.	.	+	.	.	1	10
	<i>Ulmus minor</i>	E2a	.	.	.	.	.	.	+	.	.	.	.	.	1	10
	<i>Carex pilosa</i>	E1	.	.	.	.	.	.	.	.	.	+	.	.	.	.
	<i>Listera ovata</i>	E1	.	.	.	.	.	.	.	.	.	.	+	.	.	.
VP	<b><i>Vaccinio-Piceetea</i></b>															
	<i>Maianthemum bifolium</i>	E1	.	.	.	.	.	.	+	.	+	2	.	2	20	
	<i>Solidago virgaurea</i>	E1	.	.	.	.	.	.	+	.	+	.	.	2	20	
	<i>Hieracium murorum</i>	E1	.	.	.	.	.	.	+	.	.	.	.	1	10	
RP	<b><i>Rhmano-Prunetea</i></b>															
	<i>Euonymus europaea</i>	E2	.	.	.	.	.	.	+	+	.	.	.	2	20	
	<i>Berberis vulgaris</i>	E2a	.	.	.	.	.	.	+	.	.	.	.	1	10	
MuA	<b><i>Mulgedio-Aconitetea, Betulo-Alnetea</i></b>															
	<i>Senecio nemorensis</i>	E1	.	.	.	.	.	.	+	+	.	.	.	2	20	
	<i>Ribes alpinum</i>	E2a	.	.	.	.	.	.	1	.	.	.	.	1	10	
	<i>Senecio ovatus</i>	E1	.	.	.	.	.	.	+	.	.	.	.	1	10	
EA	<b><i>Epilobietea angustifolii</i></b>															
	<i>Solanum dulcamara</i>	E1	.	.	.	.	.	.	.	.	+	.	.	1	10	
	<b><i>Galio-Urticetea</i></b>															
	<i>Urtica dioica</i>	E1	.	.	.	.	.	+	.	.	+	.	.	2	20	
	<i>Geum urbanum</i>	E1	.	.	.	.	.	.	.	.	.	+	.	.	.	
SM	<b><i>Stellarietea mediae</i></b>															
	<i>Stellaria neglecta</i>	E1	.	.	.	.	+	+	.	.	.	.	.	2	20	
TG	<b><i>Trifolio-Geranietea</i></b>															
	<i>Lilium carniolicum</i>	E1	.	+	.	.	.	.	r	.	.	.	.	2	20	
	<i>Viola odorata</i>	E1	.	.	.	.	+	.	.	.	.	.	+	1	10	
	<i>Melampyrum velebiticum</i>	E1	.	.	.	.	.	.	.	.	+	.	.	1	10	
FB	<b><i>Festuco-Brometea</i></b>															
	<i>Allium carinatum</i> subsp. <i>carinatum</i>	E1	.	.	.	.	.	+	.	.	.	.	.	1	10	
KC	<b><i>Koelerio-Corynephoretea</i></b>															
	<i>Cardaminopsis arenosa</i>	E1	.	.	.	.	.	.	+	.	.	.	.	1	10	

	Number of relevé (Zaporedna številka popisa)										11	12	Pr.	Fr.		
	1	2	3	4	5	6	7	8	9	10						
MA	<b><i>Molinio-Arrhenatheretea</i></b>															
	<i>Veronica chamaedrys</i>	E1	.	.	+	.	.	.	.	.	.	.	1	10		
	<i>Anthriscus sylvestris</i>	E1	.	.	.	.	.	+	.	.	.	.	1	10		
	<i>Muscaris botryoides</i>	E1	.	.	.	.	.	.	r	.	.	.	1	10		
Cy	<b><i>Cystopteridion fragilis</i></b>															
	<i>Moehringia muscosa</i>	E1	1	+	.	.	.	.	.	+	.	.	3	30		
	<i>Cystopteris fragilis</i>	E1	+	.	.	.	.	.	.	.	.	.	1	10		
PS	<b><i>Physoplexido-Saxifragion, Potentilletalia caulescentis</i></b>															
	<i>Campanula pyramidalis</i>	E1	.	.	+	.	.	.	.	.	.	.	1	10		
AT	<b><i>Asplenietea trichomanis</i></b>															
	<i>Asplenium trichomanes</i>	E1	.	.	.	.	.	.	.	+	+	+	3	30		
	<i>Polypodium vulgare</i>	E1	.	.	.	.	.	.	.	+	+	+	3	30		
	<i>Asplenium adiantum-nigrum</i>	E1	.	+	.	.	.	.	.	.	.	.	1	10		
	<i>Polypodium interjectum</i>	E1	.	.	.	.	.	.	.	+	.	.	1	10		
	<i>Asplenium ruta-muraria</i>	E1	.	.	.	.	.	.	+	.	.	.	1	10		
ML	<b>Mosses and lichens (Mahovi in lišaji)</b>															
	<i>Isothecium alopecuroides</i>	E0	1	.	1	+	1	.	1	2	1	2	1	8	80	
	<i>Brachythecium rutabulum</i>	E0	1	.	1	+	1	1	.	1	1	1	+	8	80	
	<i>Ctenidium molluscum</i>	E0	1	.	1	1	.	.	1	2	2	2	+	7	70	
	<i>Neckera crispa</i>	E0	1	.	+	+	1	.	.	+	+	2	.	7	70	
	<i>Thamnobryum alopecurum</i>	E0	+	.	+	1	1	.	.	2	1	1	1	7	70	
	<i>Plagiomnium undulatum</i>	E0	2	+	1	+	+	+	.	+	.	.	.	7	70	
	<i>Homalothecium lutescens</i>	E0	+	.	1	.	.	+	1	+	1	.	1	+	6	60
	<i>Peltigera canina</i>	E0	+	.	+	.	.	+	.	+	+	.	.	5	50	
	<i>Anomodon viticulosus</i>	E0	.	+	.	.	.	.	.	.	1	2	+	3	30	
	<i>Neckera complanata</i>	E0	.	.	+	1	.	.	1	.	.	.	.	3	30	
	<i>Anomodon attenuatus</i>	E0	.	.	.	.	.	.	.	1	1	+	.	3	30	
	<i>Eurychium striatum</i>	E0	1	.	.	.	.	.	.	.	.	.	.	1	10	
	<i>Polytrichum formosum</i>	E0	.	.	.	.	.	.	+	.	.	.	.	1	10	

#### Legend – Legenda

Relevés 1–10: *Corydalido-Aceretum pseudoplatani*

Relevés 11–12: *Asaro-Carpinetum betuli*

A Limestone – apnenec

Gr Gravel – grušč

Re Rendzina – rendzina

Co Colluvial soil – koluvialna tla

Rj Calcareous brown soil – rjava pokarbonatna tla

Pr. Presence (number of relevés in which the species is presented) – število popisov, v katerih se pojavlja vrsta

Fr. Frequency in % – frekvence v %

? determination is unreliable – določitev ni zanesljiva

*Helleborus multifidus* subsp. *istriacus*\* (incl. *Helleborus dumetorum* subsp. *istriacus*) – Rottensteiner (2016)

**Table 2 (Tabela 2):** *Fraxino orni-Aceretum pseudoplatani* ass. nov.

	Number of relevé (Zaporedna številka popisa)															Pr.	Fr.
Database number of relevé (Delovna številka popisa)		1	2	3	4	5	6	7	8	9	10	11	12	13			
Elevation in m (Nadmorska višina v m)	235	175	180	150	170	200	175	185	140	170	180	275	330				
Aspect (Legi)	NNE	N	NNE	NE	SSW	N	S	S	S	SE	SE	NE	NE				
Slope in degrees (Nagib v stopinjah)	30	25	5	0-10	15	40	5	20	0-35	35	25	45	1				
Parent material (Matična podlaga)	A,Fl	Ps	Ta	Ps	Ta	Gr	Ps	Ps	Br	Ps	Ps	L	Fl				
Soil (Tla)	Eu	Co	Co	Co	Co	Co	Co	Co	Re	Re	Re	Co	Eu				
Stoniness in % (Kamnitost v %)	30	70	30	30	60	40	20	70	40	80	80	0	0				
Cover in % (Zastiranje v %):																	
Upper tree layer (Zgornja drevesna plast)	E3b	80	70	70	60	70	60	60	70	70	80	70	70				
Lower tree layer (Spodnja drevesna plasti)	E3a	10	10	5	10	10	.	5	5	10	10	5	5	.			
Shrub layer (Grmovna plast)	E2	40	20	20	20	30	10	10	10	20	20	20	20	10			
Herb layer (Zeliščna plast)	E1	80	70	80	80	70	90	80	60	60	60	70	80	70			
Moss layer (Mahovna plast)	E0	30	40	5	40	30	20	20	40	30	50	50	5	0			
Max. tree diameter (Maks. premer dreves)	cm	40	50	40	40	40	40	50	60	35	40	40	40	30			
Max. tree height (Maks. višina dreves)	m	30	26	30	25	20	28	30	30	18	24	22	30	28			
Number of species (Število vrst)		64	53	42	42	31	23	38	38	60	46	47	31	40			
Relevé area (Velikost popisne ploskve)	m <sup>2</sup>	400	400	400	400	400	400	400	400	400	400	400	400	400			
Date of taking relevé (Datum popisa)																	
Locality (Nahajališče)																	
Quadrant (Kvadrant)																	
Coordinate (Koordinate) GK Y (D-48)	m	5080018	404700	0148/2	Petnik	5/6/2019											
Coordinate (Koordinate) GK X (D-48)	m	5079617	405261	0148/2	Petnik	4/15/2019											
<b>Diagnostic species of the association (Diagnostične vrste asocijacije)</b>															Pr.	Fr.	
TA <i>Acer pseudoplatanus</i>	E3b	4	4	3	3	3	3	3	+	1	1	4	4	13	100		
TA <i>Acer pseudoplatanus</i>	E3a	+	+	.	.	.	.	+	.	.	+	.	1	5	38		
TA <i>Acer pseudoplatanus</i>	E2b	.	.	.	.	+	.	.	+	+	+	1	.	5	38		
TA <i>Acer pseudoplatanus</i>	E2a	.	+	.	+	.	.	.	+	+	+	1	.	6	46		
TA <i>Acer pseudoplatanus</i>	E1	1	1	1	2	1	.	3	2	1	1	2	2	2	12	92	
TA <i>Ulmus glabra</i>	E3b	+	1	.	.	+	3	.	.	2	1	.	.	1	7	54	
TA <i>Ulmus glabra</i>	E3a	1	+	+	.	.	.	.	+	+	2	.	+	7	54		
TA <i>Ulmus glabra</i>	E2b	1	+	1	+	+	1	+	+	+	1	+	.	12	92		
TA <i>Ulmus glabra</i>	E2a	1	+	+	+	.	.	+	+	.	.	+	+	8	62		
TA <i>Ulmus glabra</i>	E1	.	.	.	.	+	.	+	.	+	.	1	4	31			
AF <i>Lamium orvala</i>	E1	3	3	4	4	3	3	3	2	3	3	3	3	4	13	100	
CO <i>Ruscus aculeatus</i>	E2a	4	4	4	3	3	3	2	3	+	1	r	.	12	92		
QP <i>Fraxinus ornus</i>	E3b	+	.	.	.	.	.	.	.	+	1	+	.	4	31		

	Number of relevé (Zaporedna številka popisa)													Pr.	Fr.	
	1	2	3	4	5	6	7	8	9	10	11	12	13	Pr.	Fr.	
QP <i>Fraxinus ornus</i>	E3a	.	.	.	.	.	.	.	.	.	+	.	.	1	8	
QP <i>Fraxinus ornus</i>	E2b	+	.	.	.	.	.	.	.	.	1	.	.	2	15	
QP <i>Fraxinus ornus</i>	E2a	.	+	+	+	.	.	+	1	.	+	1	.	7	54	
CO <i>Asparagus acutifolius</i>	E2a	.	+	.	.	+	.	.	.	+	.	+	.	4	31	
TA <i>Tilio-Acerion</i>																
<i>Polystichum setiferum</i>	E1	+	3	1	+	1	4	+	1	1	+	.	+	.	11	85
<i>Phyllitis scolopendrium</i>	E1	2	+	+	1	1	3	+	2	1	1	1	.	.	11	85
<i>Lunaria rediviva</i>	E1	.	1	2	4	4	4	4	3	2	+	.	.	9	69	
<i>Isopyrum thalictroides</i>	E1	3	2	+	1	.	.	1	+	+	1	.	.	8	62	
<i>Geranium robertianum</i>	E1	+	.	.	.	.	+	.	.	+	2	2	.	5	38	
<i>Tilia platyphyllos</i>	E3b	.	+	.	.	.	.	.	.	1	.	.	.	2	15	
<i>Tilia platyphyllos</i>	E3a	.	.	+	.	.	.	.	.	.	+	.	.	2	15	
<i>Tilia platyphyllos</i>	E2b	.	.	.	.	.	.	.	.	.	.	+	.	1	8	
<i>Aruncus dioicus</i>	E1	.	+	.	.	.	.	.	.	+	.	.	.	2	15	
<i>Juglans regia</i>	E3b	.	.	.	.	.	.	.	r	.	.	.	r	2	15	
<i>Juglans regia</i>	E2a	+	.	.	+	.	.	.	.	.	.	.	.	2	15	
<i>Polystichum aculeatum</i>	E1	+	.	.	.	.	.	.	.	.	.	.	.	1	8	
<i>Tilia cordata</i>	E3b	.	.	+	.	.	.	.	.	.	.	.	.	1	8	
<i>Dryopteris affinis</i>	E1	.	.	.	+	.	.	.	.	.	.	.	.	1	8	
<i>Tephroseris pseudocrispia</i>	E1	.	.	.	.	.	.	.	.	.	.	1	.	1	8	
EC <i>Erythronio-Carpinion</i>																
<i>Galanthus nivalis</i>	E1	2	.	.	2	2	3	2	2	2	1	1	+	11	85	
<i>Helleborus odorus</i>	E1	1	+	1	+	.	.	+	+	+	+	.	.	1	9	69
<i>Crocus vernus</i> subsp. <i>vernus</i> *	E1	.	+	+	.	.	.	+	.	+	.	.	.	2	5	38
<i>Primula vulgaris</i>	E1	.	.	.	.	.	.	.	.	.	.	.	+	1	8	
AF <i>Aremonio-Fagion</i>																
<i>Cardamine enneaphyllos</i>	E1	2	.	2	1	2	+	2	+	1	+	1	.	10	77	
<i>Hacquetia epipactis</i>	E1	1	1	+	.	.	.	1	.	+	.	.	+	1	7	54
<i>Cyclamen purpurascens</i>	E1	+	.	.	+	.	.	+	+	.	+	.	.	5	38	
AI <i>Alnion incanae</i>																
<i>Alnus glutinosa</i>	E3b	.	.	.	.	.	.	.	.	.	.	.	+	1	8	
<i>Festuca gigantea</i>	E1	.	.	.	.	.	.	.	.	.	.	.	+	1	8	
FS <i>Fagetalia sylvaticae</i>																
<i>Mercurialis perennis</i>	E1	2	2	1	1	1	2	1	2	1	1	1	+	13	100	
<i>Asarum europaeum</i> subsp. <i>caucasicum</i>	E1	+	1	+	1	+	.	+	+	+	+	+	1	+	12	92
<i>Corydalis cava</i>	E1	1	+	+	3	3	2	2	2	2	1	+	.	.	11	85
<i>Sambucus nigra</i>	E2b	+	+	+	+	+	+	.	+	1	1	1	+	.	11	85
<i>Sambucus nigra</i>	E2a	.	.	.	+	+	.	.	+	+	+	.	.	5	38	
<i>Cardamine bulbifera</i>	E1	1	+	1	+	1	1	+	+	1	1	1	.	.	11	85
<i>Polygonatum multiflorum</i>	E1	1	1	.	+	.	.	+	.	+	+	+	1	1	9	69
<i>Salvia glutinosa</i>	E1	.	+	+	.	+	.	.	+	+	+	+	+	2	9	69
<i>Symphytum tuberosum</i>	E1	.	+	1	.	.	.	+	.	r	+	+	1	1	8	62
<i>Mycelis muralis</i>	E1	1	+	.	.	+	1	.	.	1	1	.	+	7	54	
<i>Lilium martagon</i>	E1	+	+	+	+	.	+	+	.	r	.	.	.	7	54	
<i>Pulmonaria officinalis</i>	E1	+	+	+	.	.	.	+	+	.	+	+	.	7	54	
<i>Carpinus betulus</i>	E3b	.	1	+	+	.	.	.	2	+	.	+	.	6	46	
<i>Carpinus betulus</i>	E3a	+	.	.	.	.	.	.	.	+	.	.	.	2	15	

	Number of relevé (Zaporedna številka popisa)		1	2	3	4	5	6	7	8	9	10	11	12	13	Pr.	Fr.
	<i>Carpinus betulus</i>	E2a	+	.	.	.	.	.	.	.	.	.	.	.	.	2	15
	<i>Carpinus betulus</i>	E1	.	.	.	.	.	.	.	+	.	.	+	.	.	2	15
	<i>Galeobdolon flavidum</i>	E1	1	+	.	.	.	.	.	+	1	1	1	.	.	6	46
	<i>Viola reichenbachiana</i>	E1	+	+	+	.	.	.	.	.	+	.	.	+	+	6	46
	<i>Cardamine impatiens</i>	E1	+	.	.	.	.	+	.	.	+	1	1	.	.	5	38
	<i>Lathyrus vernus</i>	E1	+	+	+	.	.	.	.	.	+	.	.	.	.	4	31
	<i>Dryopteris filix-mas</i>	E1	1	.	.	+	.	.	.	.	.	.	.	1	1	4	31
	<i>Actaea spicata</i>	E1	+	.	.	.	.	.	+	+	.	.	.	+	.	4	31
	<i>Galeobdolon montanum</i>	E1	.	+	2	+	+	.	.	.	.	.	.	.	.	4	31
	<i>Brachypodium sylvaticum</i>	E1	.	+	.	.	.	.	.	+	+	.	.	.	1	4	31
	<i>Euphorbia dulcis</i>	E1	+	.	.	.	.	.	.	r	.	+	.	.	3	23	
	<i>Circaea lutetiana</i>	E1	+	.	.	.	.	.	.	+	.	.	.	.	2	3	23
	<i>Fagus sylvatica</i>	E3a	.	.	.	.	.	.	.	r	.	.	.	.	.	1	8
	<i>Fagus sylvatica</i>	E2b	.	.	.	.	.	.	.	r	.	.	.	.	2	15	
	<i>Fagus sylvatica</i>	E2a	r	.	.	.	.	.	.	.	.	.	.	.	1	8	
	<i>Fagus sylvatica</i>	E1	.	.	.	.	.	.	.	.	.	.	.	+	1	8	
	<i>Prunus avium</i>	E3b	.	.	r	.	.	.	.	.	.	.	.	.	1	8	
	<i>Carex sylvatica</i>	E1	.	.	.	.	.	.	.	+	.	.	.	.	1	8	
	<i>Scrophularia nodosa</i>	E1	.	.	.	.	.	.	.	.	.	.	.	+	1	8	
	<i>Prenanthes purpurea</i>	E1	.	.	.	.	.	.	.	.	.	.	.	+	1	8	
CO	<b><i>Carpinion orientalis</i></b>	E1	r	.	.	.	.	.	.	.	.	.	.	.	1	8	
Sesleria autumnalis																	
QP	<b><i>Quercetalia pubescenti-petraeae</i></b>																
	<i>Lathyrus venetus</i>	E1	+	+	.	.	.	.	.	.	.	.	.	.	2	15	
	<i>Ostrya carpinifolia</i>	E3b	.	+	+	.	.	.	.	.	.	.	4	.	3	23	
	<i>Cornus mas</i>	E2b	+	+	.	.	.	.	.	.	.	.	.	.	2	15	
	<i>Arabis turrita</i>	E1	.	.	.	.	.	+	.	.	.	.	1	.	2	15	
	<i>Helleborus multifidus</i> subsp. <i>istriacus</i>	E1	.	.	.	+	.	.	.	.	.	.	.	.	1	8	
	<i>Tamus communis</i>	E1	.	.	.	.	.	.	.	.	.	.	+	.	1	8	
QR	<b><i>Quercetalia roboris</i></b>																
	<i>Castanea sativa</i>	E3b	.	.	.	.	.	.	+	.	.	.	.	.	1	8	
	<i>Castanea sativa</i>	E1	.	.	.	+	.	.	.	.	.	.	.	.	1	8	
	<i>Rubus hirtus</i>	E2a	.	.	.	.	.	.	.	.	.	.	.	+	1	8	
QF	<b><i>Querco-Fagetea</i></b>																
	<i>Hedera helix</i>	E3a	1	1	1	1	.	1	+	1	1	1	+	1	+	12	92
	<i>Hedera helix</i>	E1	+	.	+	+	.	1	.	+	1	+	.	1	1	9	69
	<i>Aegopodium podagraria</i>	E1	+	+	1	2	1	1	+	+	1	+	.	+	1	12	92
	<i>Anemone nemorosa</i>	E1	1	+	1	+	+	.	1	.	+	+	.	+	1	10	77
	<i>Corylus avellana</i>	E3a	1	.	.	.	.	.	.	.	+	.	.	.	2	15	
	<i>Corylus avellana</i>	E2	1	1	1	1	1	.	+	.	1	1	.	1	.	9	69
	<i>Corylus avellana</i>	E1	.	.	.	.	.	.	.	.	+	.	.	+	2	15	
	<i>Hepatica nobilis</i>	E1	1	+	+	+	.	.	.	+	.	1	.	.	6	46	
	<i>Ranunculus ficaria</i>	E1	+	.	.	+	.	.	.	+	1	+	.	.	6	46	
	<i>Clematis vitalba</i>	E3a	.	.	.	.	.	.	.	.	+	.	.	.	1	8	
	<i>Clematis vitalba</i>	E2	.	.	.	.	+	.	+	+	.	+	.	+	6	46	
	<i>Acer campestre</i>	E3b	+	.	.	1	.	.	+	+	1	+	.	.	6	46	
	<i>Acer campestre</i>	E3a	+	+	.	.	.	.	.	+	+	+	.	.	5	38	

	Number of relevé (Zaporedna številka popisa)		1	2	3	4	5	6	7	8	9	10	11	12	13	Pr.	Fr.	
	<i>Acer campestre</i>	E2	.	+	.	+	.	.	.	.	.	.	.	.	.	2	15	
	<i>Acer campestre</i>	E1	+	.	.	+	.	.	.	+	.	.	.	.	.	3	23	
	<i>Crataegus laevigata</i>	E2b	+	+	+	.	.	.	+	.	.	.	+	.	.	5	38	
	<i>Carex digitata</i>	E1	+	1	.	.	.	.	.	.	+	.	.	1	.	4	31	
	<i>Cerastium sylvaticum</i>	E1	+	.	.	.	.	.	.	+	.	.	.	.	+	3	23	
	<i>Lathraea squamaria</i>	E1	.	.	.	.	.	.	+	+	+	.	.	.	.	3	23	
	<i>Quercus petraea</i>	E3b	+	+	.	.	.	.	.	.	.	.	.	.	.	2	15	
	<i>Quercus petraea</i>	E1	.	.	.	.	.	.	.	.	+	.	.	.	.	1	8	
	<i>Malus sylvestris</i>	E2b	r	.	.	.	.	.	.	.	.	.	.	.	.	1	8	
	<i>Veratrum nigrum</i>	E1	.	.	.	r	.	.	.	.	.	.	.	.	.	1	8	
	<i>Gagea lutea</i>	E1	.	.	.	.	.	.	+	.	.	.	.	.	.	1	8	
	<i>Scilla bifolia</i>	E1	.	.	.	.	.	.	1	.	.	.	.	.	+	2	15	
	<i>Moehringia trinervia</i>	E1	.	.	.	.	.	.	.	.	.	+	.	.	.	1	8	
VP	<b>Vaccinio-Piceetea</b>																	
	<i>Oxalis acetosella</i>	E1	+	+	.	.	+	+	.	+	+	.	.	1	.	7	54	
	<i>Aposeris foetida</i>	E1	.	.	1	.	.	.	+	.	.	.	.	.	.	2	15	
	<i>Picea abies</i>	E3b	.	.	.	.	.	.	.	.	.	.	.	+	.	1	8	
RP	<b>Rhmano-Prunetea</b>																	
	<i>Robinia pseudoacacia</i>	E3b	+	.	.	2	.	.	+	.	2	3	+	.	.	6	46	
	<i>Robinia pseudoacacia</i>	E3a	.	.	.	.	+	.	.	.	.	.	.	.	.	1	8	
	<i>Robinia pseudoacacia</i>	E2a	.	.	.	.	.	.	.	.	+	.	.	.	.	1	8	
	<i>Euonymus europaea</i>	E2	+	.	.	.	+	.	.	.	+	+	+	.	.	5	38	
	<i>Crataegus monogyna</i>	E3a	.	.	.	.	.	.	.	.	.	.	+	.	.	1	8	
MuA	<b>Mulgedio-Aconitetea, Betulo-Alnetea</b>																	
	<i>Aconitum lycoctonum</i>	E1	+	+	+	.	.	.	+	+	.	.	.	.	.	5	38	
	<i>Athyrium filix-femina</i>	E1	+	.	.	+	.	.	.	.	.	.	.	+	+	4	31	
	<i>Senecio nemorensis</i>	E1	.	.	+	.	.	.	.	.	.	.	.	+	.	2	15	
EA	<b>Epilobietea angustifolii</b>																	
	<i>Carpesium cernuum</i>	E1	.	.	.	.	+	.	.	.	+	.	.	.	.	1	3	23
	<i>Galeopsis pubescens</i>	E1	+	.	.	.	.	.	.	.	.	.	.	.	.	1	8	
	<i>Physalis alkekengi</i>	E1	.	.	.	.	.	.	.	.	+	.	.	.	.	1	8	
	<i>Arctium nemorosum</i>	E1	.	.	.	.	.	.	.	.	.	.	.	.	+	1	8	
	<i>Stachys sylvatica</i>	E1	.	.	.	.	.	.	.	.	.	.	.	.	+	1	8	
GU	<b>Galio-Urticetea</b>																	
	<i>Geum urbanum</i>	E1	+	.	.	.	.	.	.	.	.	.	.	.	+	2	15	
	<i>Parietaria officinalis</i>	E1	.	.	.	+	.	.	.	.	.	.	.	.	.	1	8	
	<i>Urtica dioica</i>	E1	.	.	.	.	.	.	.	.	.	.	.	.	+	1	8	
SM	<b>Stellarietea mediae</b>																	
	<i>Galium aparine</i>	E1	.	.	.	.	.	.	.	.	.	.	.	+	.	1	8	
	<i>Erigeron annuus</i>	E1	.	.	.	.	.	.	.	.	.	.	.	.	r	1	8	
Cy	<b>Cystopteridion fragilis</b>																	
	<i>Moehringia muscosa</i>	E1	.	.	.	.	.	.	.	.	.	.	1	.	.	1	8	
PS	<b>Physoplexido-Saxifragion, Potentilletalia caulescentis</b>																	
	<i>Campanula pyramidalis</i>	E1	.	.	.	.	.	.	.	.	.	r	+	.	.	2	15	
AT	<b>Asplenietea trichomanis</b>																	
	<i>Asplenium trichomanes</i>	E1	+	+	.	.	+	.	.	.	+	+	1	.	.	6	46	
	<i>Polypodium interjectum</i>	E1	+	+	.	.	.	+	.	.	.	+	1	.	.	5	38	
	<i>Polypodium vulgare</i>	E1	.	+	.	.	.	.	.	.	+	+	.	.	.	3	23	

Number of relevé (Zaporedna številka popisa)	1	2	3	4	5	6	7	8	9	10	11	12	13	Pr.	Fr.	
<b>ML Mosses and lichens (Mahovi in lišaji)</b>																
<i>Thamnobryum alopecurum</i>	E0	3	3	1	3	3	3	2	.	2	3	3	+	.	11	85
<i>Isothecium alopecuroides</i>	E0	1	2	1	+	2	.	1	2	1	.	2	.	.	9	69
<i>Ctenidium molluscum</i>	E0	.	+	.	+	.	.	.	.	1	2	3	.	.	5	38
<i>Anomodon viticulosus</i>	E0	+	.	.	.	.	.	.	1	1	1	1	.	.	5	38
<i>Neckera complanata</i>	E0	.	.	1	.	.	.	.	2	.	.	1	.	.	3	23
<i>Brachythecium rutabulum</i>	E0	.	.	.	2	1	.	.	.	1	.	.	.	.	3	23
<i>Anomodon attenuatus</i>	E0	.	.	.	.	.	.	1	+	.	.	.	.	.	2	15
<i>Neckera crispa</i>	E0	.	.	.	.	.	.	.	.	+	1	.	.	.	2	15
<i>Homalothecium lutescens</i>	E0	.	.	.	.	.	.	.	.	.	1	1	.	.	2	15
<i>Fissidens taxifolius</i>	E0	+	.	.	.	.	.	.	.	.	.	.	.	.	1	8
<i>Plagiomnium undulatum</i>	E0	+	.	.	.	.	.	.	.	.	.	.	.	.	1	8
<i>Conocephalum conicum</i>	E0	.	+	.	.	.	.	.	.	.	.	.	.	.	1	8
<i>Thuidium delicatulum</i>	E0	.	.	.	1	.	.	.	.	.	.	.	.	.	1	8

#### Legend – Legenda

A Limestone – apnenec

Fl Flysch – fliš

Gr Gravel – grušč

Ro Rockslide – podorno skalovje

Ta Talus – vršaj

Br Breccia – breča

L Marlstone – laporovec

Re Rendzina – rendzina

Co Colluvial soil – koluvialna tla

Eu Eutric brown soli – evtrična rjava tla

Pr. Presence (number of relevés in which the species is presented) – število popisov, v katerih se pojavlja vrsta

Fr. Frequency in % – frekvenca v %

*Crocus vernus* subsp. *vernus*\* is according to new findings *Crocus heuffelianus* Herb. (Peruzzi 2016)

**Tabla 3 (Tabela 3):** *Paeonio officinalis-Tilietum platyphylli saxifragetosum rotundifoliae, castaneetosum.*

Number of relevé (Zaporedna številka popisa)	1	2	3	4	5	6	7	8	9	10	11	12	13	Pr.	Fr.	
Database number of relevé (Delovna številka popisa)	257525	263574	263582	263588	263589	263587	263590	263597	275066	275070	275067	275068	275069			
Elevation in m (Nadmorska višina v m)	740	750	735	755	755	740	740	750	335	335	340	310	320			
Aspect (Lega)	SWW	NW	NWW	NW	NW	NWW	NW	W	NE	NE	NE	NE	NE			
Slope in degrees (Nagib v stopinjah)	30	30	40	35	35	30	25	30	20	35	35	35	35			
Parent material (Matična podlaga)	Gr	Gr	A	Gr	Gr	Gr	Gr	AL	AL	AL	AL	AL	AL			
Soil (Tla)	Co	Co	Re	Co	Co	Co	Co	Re	Re	Re	Re	Co	Re			
Stoniness in % (Kamnitost v %)	40	60	40	30	30	40	30	20	70	70	70	60	30			
Cover in % (Zastiranje v %):																
Upper tree layer (Zgornja drevesna plast)	E3b	80	70	80	70	70	80	80	80	80	80	80	80	70		
Lower tree layer (Spodnja drevesna plasti)	E3a	10	10	10	20	10	10	10	10	10	5	10	10	10		
Shrub layer (Grmovna plast)	E2	10	10	10	10	10	5	10	10	10	20	20	20	20		
Herb layer (Zeliščna plast)	E1	50	70	60	70	70	60	70	80	30	30	60	60	70		
Moss layer (Mahovna plast)	E0	10	50	30	30	10	20	30	10	20	20	20	20	5	5	
Max. tree diameter (Maks. premer dreves)	cm	35	35	30	30	35	35	50	30	50	40	60	40	60		
Max. tree height (Maks. višina dreves)	m	19	18	16	15	20	20	25	17	25	25	25	20	24		
Number of species (Število vrst)		66	66	80	65	61	77	66	52	40	48	44	47	55		
Relevé area (Velikost popisne ploskve)	m <sup>2</sup>	400	400	400	400	400	400	400	400	400	400	400	400	400		
Date of taking relevé (Datum popisa)																
Locality (Nahajališče)																
Quadrant (Kvadrant)																
Coordinate (Koordinate) GK Y (D-48)	m	5053771	439572	0351/3	Brkiški rob	5/4/2016										
Coordinate (Koordinate) GK X (D-48)	m	5053566	439646	0351/3	Brkiški rob	5/4/2016										
		5053446	439564	0351/3	Brkiški rob	5/4/2016										
		5053445	439610	0351/3	Brkiški rob	5/4/2016										
		5053504	439633	0351/3	Brkiški rob	5/4/2016										
		5053463	439577	0351/3	Brkiški rob	5/4/2016										
		5053501	439607	0351/3	Brkiški rob	5/4/2016										
		5053636	439634	0351/3	Brkiški rob	5/4/2016										
		5080894	401985	0148/1	Gora (Trstelj)	4/1/2019										
		5080952	401754	0148/1	Gora (Trstelj)	4/1/2019										
		5080948	401659	0148/1	Gora (Trstelj)	4/1/2019										
		5080994	401579	0148/1	Gora (Trstelj)	4/1/2019										
		5080975	401638	0148/1	Gora (Trstelj)	4/1/2019										
<b>Diagnostic species of the association (Diagnostične vrste asociacije)</b>														Pr.	Fr.	
TA <i>Tilia platyphyllos</i>	E3b	4	4	4	4	4	4	4	3	4	2	2	1	3	13	100
TA <i>Tilia platyphyllos</i>	E3a	.	.	.	.	.	+	.	.	1	1	+	1	5	38	
TA <i>Tilia platyphyllos</i>	E2b	+	.	.	.	.	.	.	.	1	+	.	+	4	31	
TA <i>Tilia platyphyllos</i>	E2a	.	.	+	.	+	.	+	.	.	.	.	+	4	31	
TA <i>Tilia platyphyllos</i>	E1	.	+	+	+	.	+	+	.	.	+	.	.	7	54	
QP <i>Cnidium silafolium</i>	E1	+	+	1	1	+	+	+	2	+	+	r	.	11	85	
QP <i>Helleborus multifidus</i> subsp. <i>istriacus</i> *	E1	1	+	1	+	+	2	.	2	.	.	.	.	7	54	
TG <i>Paeonia officinalis</i>	E1	r	.	.	.	.	.	.	.	.	.	.	.	1	8	
<b>Differential species of the subassociations (Razlikovalnice subasociaciј)</b>																
MuA <i>Saxifraga rotundifolia</i>	E1	.	+	2	1	1	+	1	.	.	.	.	.	6	46	
CF <i>Pseudofumaria alba</i>	E1	1	2	2	.	+	+	1	.	.	.	.	.	6	46	
FS <i>Galeobdolon montanum</i>	E1	+	.	+	1	.	.	+	+	.	.	.	.	5	38	
QP <i>Euonymus verrucosa</i>	E2	.	.	+	+	+	.	.	+	.	.	.	.	4	31	
QF <i>Hedera helix</i>	E3a	+	.	.	.	.	.	.	.	1	+	1	.	5	38	

Number of relevé (Zaporedna številka popisa)		1	2	3	4	5	6	7	8	9	10	11	12	13	Pr.	Fr.	
QF	<i>Hedera helix</i>	E1	.	+	.	.	.	.	.	1	1	1	1	1	6	46	
QP	<i>Cornus mas</i>	E2b	.	.	.	+	.	.	.	1	+	+	1	+	6	46	
QR	<i>Castanea sativa</i>	E3b	.	.	.	.	.	.	.	+	+	r	+	+	5	38	
CO	<i>Ruscus aculeatus</i>	E2a	.	.	.	.	.	.	.	2	.	3	1	2	4	31	
Ta	<b><i>Tilio-Acerion</i></b>																
	<i>Acer pseudoplatanus</i>	E3b	+	.	.	.	.	+	r	.	+	.	.	+	+	6	46
	<i>Acer pseudoplatanus</i>	E3a	.	.	.	.	.	+	.	.	.	.	.	+	.	2	15
	<i>Acer pseudoplatanus</i>	E2b	.	.	.	.	+	+	+	.	.	.	.	.	+	4	31
	<i>Acer pseudoplatanus</i>	E2a	+	.	+	.	+	+	.	.	.	.	.	+	+	6	46
	<i>Acer pseudoplatanus</i>	E1	1	1	1	.	+	1	1	+	1	+	.	+	+	11	85
	<i>Adoxa moschatellina</i>	E1	1	+	+	+	.	+	1	+	.	.	.	.	.	7	54
	<i>Ulmus glabra</i>	E3b	.	+	.	.	.	.	.	.	r	+	4	3	3	6	46
	<i>Ulmus glabra</i>	E3a	.	.	.	.	.	.	.	.	.	.	1	1	1	3	23
	<i>Ulmus glabra</i>	E2b	.	.	.	.	.	.	.	.	+	+	1	.	+	4	31
	<i>Ulmus glabra</i>	E2a	.	+	.	.	.	.	.	.	.	+	.	1	1	4	31
	<i>Ulmus glabra</i>	E1	.	+	.	.	.	.	.	.	+	+	+	+	.	5	38
	<i>Geranium robertianum</i>	E1	1	1	.	.	+	1	1	.	.	.	+	.	.	6	46
	<i>Corydalis solida</i>	E1	.	+	+	1	.	+	1	.	.	.	.	.	.	5	38
	<i>Thalictrum aquilegiifolium</i>	E1	+	.	+	+	.	+	.	.	.	.	.	.	.	4	31
	<i>Tilia cordata</i>	E3b	.	.	.	.	+	.	.	.	+	+	.	+	.	4	31
	<i>Tilia cordata</i>	E3a	.	.	.	.	.	.	.	+	.	.	.	.	1	8	
	<i>Tilia cordata</i>	E2b	.	.	.	.	.	.	.	.	+	.	.	.	.	1	8
	<i>Tilia cordata</i>	E2a	.	.	.	.	.	.	.	+	.	.	.	.	1	8	
	<i>Glechoma hirsuta</i>	E1	.	.	.	.	.	+	.	.	.	.	.	.	1	8	
	<i>Acer platanoides</i>	E3b	.	.	.	.	.	.	.	.	.	.	+	.	1	8	
	<i>Acer platanoides</i>	E1	.	.	.	.	.	.	.	.	.	+	.	1	8		
	<i>Aruncus dioicus</i>	E1	.	.	.	.	.	.	.	.	.	.	.	+	1	8	
EC	<b><i>Erythronio-Carpinion</i></b>																
	<i>Galanthus nivalis</i>	E1	1	1	1	1	1	2	1	1	.	.	3	2	3	11	85
	<i>Primula vulgaris</i>	E1	+	.	.	+	.	+	+	1	.	.	.	+	+	7	54
	<i>Erythronium dens-canis</i>	E1	.	.	1	1	1	1	1	.	.	.	.	.	.	5	38
	<i>Ornithogalum pyrenaicum</i>	E1	+	.	+	.	.	.	.	+	.	.	.	.	.	3	23
	<i>Lonicera caprifolium</i>	E2a	.	.	.	.	.	.	.	.	+	.	.	.	+	2	15
	<i>Crocus vernus</i> subsp. <i>vernus</i> *	E1	.	.	.	.	+	.	.	.	.	.	.	.	.	1	8
	<i>Helleborus odorus</i>	E1	.	.	.	.	.	.	.	+	.	.	.	.	.	1	8
AF	<b><i>Arenonio-Fagion</i></b>																
	<i>Cyclamen purpurascens</i>	E1	.	+	1	1	+	1	+	+	1	1	1	+	2	12	92
	<i>Lamium orvala</i>	E1	2	1	.	1	1	2	2	1	.	.	1	+	2	10	77
	<i>Cardamine enneaphyllos</i>	E1	.	.	2	2	.	2	.	.	2	2	3	2	3	8	62
	<i>Geranium nodosum</i>	E1	+	1	+	1	1	1	+	.	.	.	.	.	.	7	54
	<i>Calamintha grandiflora</i>	E1	.	.	+	1	1	1	+	.	.	.	.	.	5	38	
	<i>Hacquetia epipactis</i>	E1	.	.	.	.	.	.	.	+	.	.	+	+	3	23	
AI	<b><i>Alnion incanae</i></b>																
	<i>Rubus caesius</i>	E1	.	.	.	.	+	.	.	.	+	.	.	.	2	15	
	<i>Aesculus hippocastanum</i>	E3b	r	.	.	.	.	.	.	.	.	.	.	.	1	8	
FS	<b><i>Fagetalia sylvaticae</i></b>																
	<i>Asarum europaeum</i> subsp. <i>caucasicum</i>	E1	1	1	+	+	1	+	1	+	+	.	+	+	12	92	
	<i>Salvia glutinosa</i>	E1	+	+	+	+	+	+	+	+	+	.	+	+	12	92	
	<i>Mercurialis perennis</i>	E1	.	+	1	1	1	2	2	+	+	+	2	3	2	12	92
	<i>Mycelis muralis</i>	E1	1	+	+	+	+	+	+	.	+	+	+	+	11	85	

Number of relevé (Zaporedna številka popisa)	1	2	3	4	5	6	7	8	9	10	11	12	13	Pr.	Fr.	
<i>Lathyrus vernus</i>	E1	+	.	1	1	1	1	.	+	2	+	+	+	11	85	
<i>Dryopteris filix-mas</i>	E1	+	+	+	1	1	1	.	+	.	.	+	+	10	77	
<i>Campanula trachelium</i>	E1	.	.	+	1	1	+	1	.	.	+	+	+	9	69	
<i>Polygonatum multiflorum</i>	E1	.	.	+	.	1	1	+	+	.	.	+	+	1	8	
<i>Heracleum sphondylium</i>	E1	1	+	+	+	1	+	+	+	.	.	.	.	8	62	
<i>Symphytum tuberosum</i>	E1	+	+	.	.	+	+	.	+	.	+	+	+	8	62	
<i>Pulmonaria officinalis</i>	E1	+	+	.	+	.	+	+	+	.	.	.	+	7	54	
<i>Euphorbia dulcis</i>	E1	+	.	+	+	1	+	.	.	+	.	+	.	7	54	
<i>Actaea spicata</i>	E1	+	+	.	.	+	1	+	.	.	.	.	.	5	38	
<i>Galeobdolon flavidum</i>	E1	.	.	.	.	.	.	.	+	.	+	+	+	4	31	
<i>Fraxinus excelsior</i>	E3b	+	1	.	.	+	.	1	.	.	.	.	.	4	31	
<i>Fraxinus excelsior</i>	E2a	.	.	.	.	.	.	.	.	.	.	+	+	2	15	
<i>Fraxinus excelsior</i>	E1	+	1	.	.	.	.	+	.	.	.	.	.	3	23	
<i>Fagus sylvatica</i>	E3b	.	.	.	.	.	.	r	.	.	1	+	.	r	31	
<i>Fagus sylvatica</i>	E3a	.	.	.	.	.	.	.	.	+	+	.	.	2	15	
<i>Fagus sylvatica</i>	E1	.	.	r	.	.	.	.	.	.	.	.	.	1	8	
<i>Carpinus betulus</i>	E3b	.	+	.	+	.	.	.	.	.	.	.	.	2	15	
<i>Carpinus betulus</i>	E3a	.	.	+	.	.	+	+	.	.	.	.	.	3	23	
<i>Carpinus betulus</i>	E2b	.	.	+	.	.	.	.	.	.	.	.	.	1	8	
<i>Sambucus nigra</i>	E2b	+	.	.	.	.	.	.	.	.	.	+	+	3	23	
<i>Sambucus nigra</i>	E2a	+	.	.	.	.	+	.	.	.	.	.	.	2	15	
<i>Scrophularia nodosa</i>	E1	.	+	.	.	+	.	+	.	.	.	.	.	3	23	
<i>Lilium martagon</i>	E1	.	.	.	.	.	.	.	+	.	.	+	+	3	23	
<i>Corydalis cava</i>	E1	.	+	.	.	.	+	.	.	.	.	.	.	2	15	
<i>Paris quadrifolia</i>	E1	.	.	.	.	+	+	.	.	.	.	.	.	2	15	
<i>Galium laevigatum</i>	E1	.	.	.	.	.	.	.	.	.	.	+	+	2	15	
<i>Ranunculus lanuginosus</i>	E1	.	+	.	.	+	.	.	.	.	.	.	.	2	15	
<i>Prunus avium</i>	E3b	.	.	.	.	r	.	r	.	.	.	.	.	2	15	
<i>Prunus avium</i>	E1	.	.	.	.	.	+	.	.	.	.	.	.	1	8	
<i>Melica nutans</i>	E1	.	.	.	.	+	.	+	.	.	.	.	.	2	15	
<i>Prenanthes purpurea</i>	E1	.	.	.	.	.	.	.	.	+	.	.	.	1	8	
<i>Laburnum alpinum</i>	E3a	.	.	.	.	.	.	.	.	.	.	+	.	1	8	
<i>Laburnum alpinum</i>	E2b	.	.	.	.	.	.	.	.	+	.	.	.	1	8	
<i>Laburnum alpinum</i>	E2a	.	.	.	.	.	.	.	.	.	+	.	.	1	8	
<i>Laburnum alpinum</i>	E1	.	.	.	.	.	.	.	+	.	.	.	.	1	8	
<i>Cardamine bulbifera</i>	E1	.	.	.	.	.	.	.	.	.	.	+	.	1	8	
CO <i>Carpinion orientalis</i>																
<i>Sesleria autumnalis</i>	E1	+	+	3	3	2	1	+	3	1	2	+	+	13	100	
<i>Acer monspessulanum</i>	E3b	.	.	.	.	.	.	.	.	+	.	.	.	1	8	
QP <i>Quercetalia pubescenti-petraeae</i>																
<i>Lathyrus venetus</i>	E1	1	1	+	+	.	+	+	.	+	+	+	+	11	85	
<i>Ostrya carpinifolia</i>	E3b	.	.	+	r	1	.	.	.	1	3	2	2	+	8	62
<i>Ostrya carpinifolia</i>	E3a	.	.	+	+	.	.	.	.	+	.	.	.	3	23	
<i>Fraxinus ornus</i>	E3b	+	.	.	1	1	.	.	1	+	.	.	+	7	54	
<i>Fraxinus ornus</i>	E3a	+	+	1	+	.	+	+	.	+	1	.	.	8	62	
<i>Fraxinus ornus</i>	E2b	.	.	.	+	+	.	.	.	.	.	.	.	2	15	
<i>Fraxinus ornus</i>	E2a	.	.	.	1	+	.	.	.	.	+	.	.	3	23	
<i>Fraxinus ornus</i>	E1	+	.	+	.	.	.	.	+	.	.	.	.	3	23	
<i>Tanacetum corymbosum</i>	E1	+	.	+	1	+	+	+	1	.	+	.	.	8	62	
<i>Convallaria majalis</i>	E1	+	.	1	1	2	+	.	.	+	.	.	.	6	46	

	Number of relevé (Zaporedna številka popisa)		1	2	3	4	5	6	7	8	9	10	11	12	13	Pr.	Fr.
	<i>Melittis melissophyllum</i>	E1	+	.	+	+	+	+	.	1	.	.	.	.	.	6	46
	<i>Mercurialis ovata</i>	E1	1	.	1	+	.	.	+	+	.	.	.	.	.	5	38
	<i>Sorbus aria (Aria edulis)</i>	E3b	+	.	.	+	+	+	.	1	.	.	.	.	.	4	31
	<i>Sorbus aria (Aria edulis)</i>	E3a	.	.	+	.	+	+	.	.	+	+	.	.	.	5	38
	<i>Sorbus aria (Aria edulis)</i>	E2b	.	.	.	.	+	.	.	.	.	+	.	.	.	2	15
	<i>Sorbus aria (Aria edulis)</i>	E2a	.	.	+	.	.	+	.	.	.	.	.	.	.	1	8
	<i>Sorbus aria (Aria edulis)</i>	E1	.	+	.	.	.	+	.	.	.	.	.	.	.	1	8
	<i>Asparagus tenuifolius</i>	E1	+	.	+	+	.	.	.	+	.	.	.	.	.	4	31
	<i>Campanula persicifolia</i>	E1	.	.	+	+	+	.	.	+	.	.	.	.	.	4	31
	<i>Quercus cerris</i>	E3b	+	.	.	r	.	.	.	3	.	.	.	.	.	3	23
	<i>Mercurialis x paxii</i>	E1	.	.	+	.	.	+	.	+	.	.	.	.	.	2	15
	<i>Arabis turrita</i>	E1	.	.	.	.	.	+	.	.	.	+	+	.	.	2	15
	<i>Hypericum montanum</i>	E1	.	.	+	.	.	+	.	.	.	.	.	.	.	1	8
	<i>Lathyrus niger</i>	E1	.	.	.	.	.	+	.	+	.	.	.	.	.	1	8
	<i>Orchis pallens</i>	E1	.	.	.	.	.	+	.	r	.	.	.	.	.	1	8
	<i>Tamus communis</i>	E1	.	.	.	.	.	+	.	.	.	.	.	.	+	1	8
	<i>Quercus pubescens</i>	E3b	.	.	.	.	+	.	.	.	.	.	.	.	r	1	8
QR	<b><i>Quercetalia roboris</i></b>																
	<i>Serratula tinctoria</i>	E1	.	.	.	.	.	.	.	.	+	.	.	.	.	1	8
QF	<b><i>Querco-Fagetea</i></b>																
	<i>Corylus avellana</i>	E2b	1	1	.	1	1	+	1	1	+	1	1	2	2	12	92
	<i>Corylus avellana</i>	E2a	.	.	+	.	.	.	.	.	.	.	.	1	1	3	23
	<i>Hepatica nobilis</i>	E1	.	+	1	+	1	1	1	1	.	1	+	+	2	11	85
	<i>Lonicera xylosteum</i>	E2	.	+	+	+	1	1	+	1	.	.	.	.	.	7	54
	<i>Acer campestre</i>	E3b	.	.	.	.	.	.	.	.	.	.	+	.	+	2	15
	<i>Acer campestre</i>	E3a	+	+	.	+	+	+	.	+	.	.	.	.	.	6	46
	<i>Acer campestre</i>	E2b	+	.	.	.	+	.	.	.	.	.	.	.	.	2	15
	<i>Acer campestre</i>	E2a	.	.	+	.	+	+	.	+	.	.	.	.	.	4	31
	<i>Acer campestre</i>	E1	.	+	+	+	.	+	+	+	.	+	.	+	.	7	54
	<i>Veratrum nigrum</i>	E1	.	.	.	.	1	r	+	.	1	+	.	+	.	6	46
	<i>Scilla bifolia</i>	E1	.	+	1	+	+	1	+	.	.	.	.	.	.	6	46
	<i>Clematis vitalba</i>	E3a	.	.	.	.	.	.	.	+	+	.	.	r	3	23	
	<i>Clematis vitalba</i>	E2a	1	+	+	+	.	.	.	+	.	.	.	.	5	38	
	<i>Clematis vitalba</i>	E1	.	.	.	.	+	.	.	.	+	.	+	.	3	23	
	<i>Melica uniflora</i>	E1	1	+	.	.	.	+	2	.	.	.	.	.	.	4	31
	<i>Carex digitata</i>	E1	.	.	+	+	+	.	+	.	.	.	.	.	.	4	31
	<i>Aegopodium podagraria</i>	E1	.	+	.	.	.	+	+	.	.	.	.	.	.	3	23
	<i>Moehringia trinervia</i>	E1	.	+	.	+	.	.	.	.	.	.	.	.	.	2	15
	<i>Anemone nemorosa</i>	E1	.	.	.	.	.	.	.	+	.	.	.	.	2	2	15
	<i>Quercus petraea</i>	E3b	.	.	.	.	.	.	.	.	+	1	.	.	2	15	
	<i>Quercus petraea</i>	E1	.	.	.	.	.	.	.	.	+	.	.	.	1	8	
	<i>Crataegus laevigata</i>	E2a	.	.	.	.	.	.	.	.	.	.	+	+	2	15	
	<i>Malus sylvestris</i>	E3a	r	.	.	.	.	.	.	.	.	.	.	.	1	8	
	<i>Ranunculus ficaria</i>	E1	.	+	.	.	.	.	.	.	.	.	.	.	1	8	
	<i>Pyrus pyraster</i>	E2a	.	.	+	.	.	.	.	.	.	.	.	.	1	8	
	<i>Rosa arvensis</i>	E2a	.	.	.	.	.	.	.	1	.	.	.	.	1	8	
	<i>Spiraea chamaedryfolia</i>	E2a	.	.	.	.	.	.	.	.	.	+	.	.	1	8	
	<i>Lathraea squamaria</i>	E1	.	.	.	.	.	.	.	.	.	.	.	+	1	8	
VP	<b><i>Vaccinio-Piceetea</i></b>																
	<i>Solidago virgaurea</i>	E1	.	+	+	+	+	+	.	.	.	.	.	.	5	38	

	Number of relevé (Zaporedna številka popisa)		1	2	3	4	5	6	7	8	9	10	11	12	13	Pr.	Fr.
	<i>Aposeris foetida</i>	E1	.	.	.	.	.	1	+	.	+	+	.	+	.	5	38
	<i>Picea abies</i>	E2b	.	.	.	.	.	+	+	.	.	.	.	.	.	2	15
	<i>Rosa pendulina</i>	E2a	.	.	+	.	.	.	.	.	.	.	.	.	.	1	8
	<i>Maianthemum bifolium</i>	E1	.	.	.	.	.	+	.	.	.	.	.	.	.	1	8
EP	<b><i>Erico-Pinetea</i></b>															0	0
	<i>Calamagrostis varia</i>	E1	.	.	.	.	+	.	.	.	.	.	.	.	.	1	8
RP	<b><i>Rhamno-Prunetea</i></b>																
	<i>Euonymus europaea</i>	E2	+	.	+	+	.	.	.	+	.	.	.	.	.	4	31
	<i>Crataegus monogyna</i>	E3a	.	.	.	.	.	.	.	.	.	.	.	+	.	1	8
	<i>Crataegus monogyna</i>	E2b	.	.	.	.	.	.	.	+	+	.	+	.	.	3	23
	<i>Robinia pseudoacacia</i>	E3b	.	.	.	.	.	.	.	.	.	r	+	.	.	2	15
	<i>Robinia pseudoacacia</i>	E3a	.	.	.	.	.	.	.	.	+	.	.	.	1	2	15
	<i>Cornus sanguinea</i>	E2b	+	.	.	.	.	.	.	.	.	.	.	.	.	1	8
	<i>Cornus sanguinea</i>	E2a	.	.	.	.	.	.	.	+	.	.	.	.	.	1	8
	<i>Berberis vulgaris</i>	E2a	.	.	.	.	.	.	.	.	+	.	.	.	.	1	8
	<i>Rubus fruticosus</i> agg.	E2a	.	.	.	.	.	.	.	.	.	+	.	.	+	2	15
MuA	<b><i>Mulgedio-Aconitetea, Betulo-Alnetea</i></b>																
	<i>Aconitum lycoctonum</i>	E1	+	+	+	.	1	+	+	.	.	.	.	.	.	6	46
	<i>Senecio ovatus</i>	E1	+	.	.	.	+	+	.	.	.	.	+	.	.	4	31
	<i>Silene dioica</i>	E1	+	.	.	.	.	.	+	.	.	.	.	.	.	2	15
	<i>Aconitum variegatum</i>	E1	.	.	+	.	.	+	.	.	.	.	.	.	.	2	15
	<i>Senecio nemorensis</i>	E1	.	.	.	.	.	.	.	.	.	.	+	+	.	2	15
EA	<b><i>Epilobietea angustifoli</i></b>																
	<i>Hypericum hirsutum</i>	E1	.	+	+	+	+	.	.	.	.	.	.	.	.	4	31
	<i>Fragaria vesca</i>	E1	.	+	+	+	.	r	.	.	.	.	.	.	.	4	31
	<i>Arctium nemorosum</i>	E1	+	+	.	.	.	.	.	.	.	.	.	.	.	2	15
	<i>Lapsana communis</i>	E1	r	.	.	.	.	.	+	.	.	.	.	.	.	2	15
GU	<b><i>Galio-Urticetea</i></b>																
	<i>Geum urbanum</i>	E1	+	+	.	1	.	+	.	+	.	.	.	.	.	5	38
	<i>Lamium maculatum</i>	E1	+	+	.	.	.	.	.	+	.	.	.	.	.	3	23
	<i>Urtica dioica</i>	E1	.	+	.	.	.	+	.	.	.	.	.	.	.	2	15
	<i>Alliaria petiolata</i>	E1	1	.	.	.	.	.	.	.	.	.	.	.	.	1	8
	<i>Torilis japonica</i>	E1	.	.	.	.	.	.	+	.	.	.	.	.	.	1	8
SM	<b><i>Stellarietea mediae</i></b>																
	<i>Galium aparine</i>	E1	r	.	.	.	.	.	.	.	.	.	.	.	.	1	8
	<i>Myosotis arvensis</i>	E1	+	.	.	.	.	.	.	.	.	.	.	.	.	1	8
	<i>Myosotis</i> sp.	E1	.	+	.	.	.	.	.	.	.	.	.	.	.	1	8
TG	<b><i>Trifolio-Geranietea</i></b>																
	<i>Campanula rapunculoides</i>	E1	2	+	+	1	.	+	.	1	+	+	.	.	+	9	69
	<i>Lilium carniolicum</i>	E1	r	.	+	.	.	.	.	+	.	.	.	.	.	3	23
	<i>Vincetoxicum hirundinaria</i>	E1	.	+	.	.	.	.	.	+	.	.	.	.	.	2	15
	<i>Verbascum chaixii</i>	E1	+	+	.	.	.	.	.	.	.	.	.	.	.	2	15
	<i>Verbascum lanatum</i>	E1	.	.	.	+	.	r	.	.	.	.	.	.	.	2	15
	<i>Vicia</i> sp.	E1	.	+	.	.	.	.	.	.	.	.	.	.	.	1	8
	<i>Calamintha einseleana</i>	E1	.	+	.	.	.	.	.	.	.	.	.	.	.	1	8
	<i>Polygonatum odoratum</i>	E1	.	.	+	.	.	.	.	.	.	.	.	.	.	1	8
	<i>Silene nutans</i>	E1	.	.	+	.	.	.	.	.	.	.	.	.	.	1	8
	<i>Valeriana nemorensis</i>	E1	.	.	+	.	.	.	.	.	.	.	.	.	.	1	8
	<i>Thalictrum minus</i>	E1	.	.	+	.	.	.	.	.	.	.	.	.	.	1	8
	<i>Vicia sylvatica</i>	E1	.	.	.	.	.	.	.	1	.	.	.	.	.	1	8

	Number of relevé (Zaporedna številka popisa)		1	2	3	4	5	6	7	8	9	10	11	12	13	Pr.	Fr.	
FB <i>Festuco-Brometea</i>			E1	.	+	+	.	.	.	.	.	.	.	.	.	2	15	
	<i>Taraxacum laevigatum</i>		E1	+	.	.	.	.	.	.	.	.	.	.	.	1	8	
	<i>Arabis hirsuta</i>		E1	.	.	.	.	.	.	+	.	.	.	.	.	1	8	
	<i>Brachypodium rupestre</i>		E1	.	.	.	.	.	.	.	.	.	.	.	.	1	8	
KC <i>Koelerio-Corynephoretea</i>			E1	.	.	+	+	.	.	.	.	.	+	.	.	3	23	
	<i>Cardaminopsis arenosa</i>		E1	.	.	.	.	.	.	.	.	.	.	.	.	7	54	
MA <i>Molinio-Arrhenatheretea</i>			E1	+	+	+	+	.	+	+	1	.	.	.	.	4	31	
	<i>Veronica chamaedrys</i>		E1	+	+	.	.	+	.	.	.	.	+	.	.	2	15	
	<i>Taraxacum sect. Ruderalia</i>		E1	.	.	1	+	+	+	1	.	+	1	1	.	8	62	
Cy <i>Cystopteridion fragilis</i>			E1	.	.	+	.	.	.	+	.	.	.	.	.	2	15	
	<i>Moehringia muscosa</i>		E1	.	.	1	+	+	+	1	.	+	1	1	.	5	38	
	<i>Cystopteris fragilis</i>		E1	.	.	+	.	.	.	+	.	.	.	.	.	7	54	
PS <i>Physoplexido-Saxifragion, Potentilletalia caulescentis</i>			E1	+	+	+	+	+	.	.	.	.	.	.	.	4	31	
	<i>Campanula pyramidalis</i>		E1	.	.	1	+	+	+	1	.	+	1	1	.	2	15	
AT <i>Asplenietea trichomanis</i>			E1	.	.	1	.	.	+	+	1	+	+	1	.	8	62	
	<i>Asplenium trichomanes</i>		E1	.	+	+	.	.	r	.	+	.	.	.	.	4	31	
	<i>Sedum maximum</i>		E1	.	r	.	.	+	.	.	.	.	.	.	.	2	15	
	<i>Ceterach officinarum</i>		E1	.	.	+	.	+	.	.	.	.	.	.	.	2	15	
	<i>Asplenium ruta-muraria</i>		E1	.	.	+	.	+	.	.	.	.	.	.	.	2	15	
	<i>Polypodium vulgare</i>		E1	.	.	.	.	+	.	.	.	.	+	.	.	2	15	
ML Mosses and lichens (Mahovi in lišaji)			E0	.	.	2	1	1	2	.	.	1	2	2	+	+	9	69
	<i>Neckera crispa</i>		E0	2	2	1	2	1	1	2	.	.	.	1	.	.	8	62
	<i>Homalothecium lutescens</i>		E0	1	+	+	.	1	1	.	.	1	+	+	.	.	8	62
	<i>Schistidium apocarpum</i>		E0	.	.	2	1	1	2	1	.	1	2	.	.	8	62	
	<i>Ctenidium molluscum</i>		E0	1	.	1	1	.	1	.	1	.	1	.	+	.	7	54
	<i>Anomodon viticulosus</i>		E0	.	.	.	.	1	1	.	1	.	2	1	2	6	46	
	<i>Isothecium alopecuroides</i>		E0	.	.	.	.	1	1	.	1	.	2	1	.	4	31	
	<i>Neckera complanata</i>		E0	.	+	.	+	+	.	+	.	.	1	.	.	2	15	
	<i>Porella platyphylla</i>		E0	.	.	+	.	.	1	.	.	.	.	.	.	2	15	
	<i>Plagiochila poreloides</i>		E0	.	.	+	.	.	.	+	.	.	.	.	.	2	15	
	<i>Peltigera canina</i>		E0	.	.	.	.	+	+	.	.	.	.	.	.	2	15	
	<i>Polytrichum formosum</i>		E0	.	.	+	.	.	.	.	.	.	.	.	.	1	8	
	<i>Homalothecium sericeum</i>		E0	.	.	.	.	.	1	.	.	.	.	.	.	1	8	
	<i>Mnium sp.</i>		E0	.	.	.	.	.	.	+	.	.	.	.	.	1	8	

#### Legend – Legenda

A Limestone – apnenec

Gr Gravel – grušč

L Marlstone – laporovec

Re Rendzina – rendzina

Co Colluvial soil – koluvialna tla

Pr. Presence (number of relevés in which the species is presented) – število popisov, v katerih se pojavlja vrsta

Fr. Frequency in % – frekvenca v %

*Helleborus multifidus* subsp. *istriacus*\* (incl. *Helleborus dumetorum* subsp. *istriacus*) – Rottensteiner (2016)

*Crocus vernus* subsp. *vernus*\* is according to new findings *Crocus heuffelianus* Herb. – Peruzzi (2016)

**Table 4 (Tabela 4):** *Paeonio officinalis-Tilietum platyphylli hierochloetosum australis.*

Number of relevé (Zaporedna številka popisa)	1	2	3	4	5	6	7	8	Pr.	Fr.
Database number of relevé (Delovna številka popisa)	274490	274494	274492	274498	274495	263591	274503	274509		
Elevation in m (Nadmorska višina v m)	320	340	280	330	340	765	320	280		
Aspect (Legă)	N	N	NNE	NE	NE	W	W	S		
Slope in degrees (Nagib v stopinjah)	30	35-45	30	30	50	35	30	25		
Parent material (Matična podlaga)	Gr	A	Gr	Gr	A	A	Gr	A		
Soil (Tla)	Re	Re	Re	Re	Re	Re	Rj	Rj		
Stoniness in % (Kamnitost v %)	20	40	20	20	80	50	10	5		
Cover in % (Zastiranje v %):										
Upper tree layer (Zgornja drevesna plast)	E3b	70	60	70	90	20	80	70	80	
Lower tree layer (Spodnja drevesna plast)	E3a	20	20	30	.	.	.	20	.	
Shrub layer (Grmovna plast)	E2	20	20	10	10	70	20	20	5	
Herb layer (Zeliščna plast)	E1	90	70	70	90	50	70	80	30	
Moss layer (Mahovna plast)	E0	20	30	40	20	69	30	10	5	
Maximum tree diameter (Maksimalni premer dreves)	cm	45	35	35	25	20	25	35	35	
Maximum tree height (Maksimalna višina dreves)	m	19	18	20	18	10	10	20	20	
Number of species (Število vrst)		47	51	60	47	62	62	63	34	
Relevé area (Velikost popisne ploskve)	m <sup>2</sup>	400	400	400	400	400	200	400	400	
Date of taking relevé (Datum popisa)										
Locality (Nahajališče)										
Quadrant (Kvadrant)										
Coordinate (Koordinate) GK Y (D-48)	m	5061360	409524	0349/1	Orleška draga	4/18/2018				
Coordinate (Koordinate) GK X (D-48)	m	5061374	409502	0349/1	Orleška draga	4/18/2018				
<b>Diagnostic species of the association (Diagnostične vrste asociacije)</b>										
TA <i>Tilia platyphyllos</i>	E3b	1	1	2	2	.	.	.	4	80
TA <i>Tilia platyphyllos</i>	E3a	+	+	1	+	1	.	.	5	100
TA <i>Tilia platyphyllos</i>	E2b	.	.	1	.	+	+	.	2	40
TA <i>Tilia platyphyllos</i>	E2a	.	.	+	+	.	.	+	2	40
QP <i>Helleborus multifidus</i> subsp. <i>istriacus</i> *	E1	1	+	+	.	+	+	1	1	80
TG <i>Paeonia officinalis</i>	E1	1	.	.	.	+	1	.	2	40
<b>Differential species of the subassociation (Razlikovalnice subasociacijske)</b>										
ML <i>Plagiomnium undulatum</i>	E0	+	+	1	1	1	.	.	5	100
QP <i>Hierochloë australis</i>	E1	+	.	+	1	+	.	.	4	80
FB <i>Sesleria tenuifolia</i>	E1	.	+	.	.	1	.	.	2	40

Number of relevé (Zaporedna številka popisa)		1	2	3	4	5	6	7	8	Pr.	Fr.	
TA	<b><i>Tilio-Acerion</i></b>											
	<i>Acer pseudoplatanus</i>	E3b	+	.	+	+	.	.	.	3	60	
	<i>Acer pseudoplatanus</i>	E2b	+	.	.	.	.	.	.	1	20	
	<i>Acer pseudoplatanus</i>	E2a	.	.	.	+	.	.	+	1	20	
	<i>Acer pseudoplatanus</i>	E1	+	+	.	.	.	.	.	2	40	
	<i>Geranium robertianum</i>	E1	.	.	+	+	+	.	.	3	60	
	<i>Aruncus dioicus</i>	E1	+	.	1	+	.	.	.	3	60	
	<i>Tilia cordata</i>	E3b	+	.	1	.	.	.	.	2	40	
	<i>Tilia cordata</i>	E3a	+	1	+	.	.	.	.	3	60	
	<i>Tilia cordata</i>	E2a	.	.	+	.	.	.	.	1	20	
	<i>Isopyrum thalictroides</i>	E1	.	.	2	1	.	.	+	2	40	
	<i>Adoxa moschatellina</i>	E1	.	.	+	.	.	.	.	1	20	
	<i>Ulmus glabra</i>	E3a	+	.	.	.	.	.	.	1	20	
	<i>Ulmus glabra</i>	E2a	r	.	.	.	.	.	+	1	20	
	<i>Phyllitis scolopendrium</i>	E1	.	.	1	.	.	.	.	1	20	
	<i>Acer platanoides</i>	E3b	.	.	1	.	.	.	.	1	20	
	<i>Acer platanoides</i>	E2a	.	.	+	.	.	.	.	1	20	
	<i>Acer platanoides</i>	E1	.	.	1	.	.	.	.	1	20	
	<i>Thalictrum aquilegiifolium</i>	E1	.	.	.	.	.	+	.	.	.	
EC	<b><i>Erythronio-Carpinion</i></b>											
	<i>Galanthus nivalis</i>	E1	1	+	2	1	+	1	.	+	5	100
	<i>Primula vulgaris</i>	E1	+	+	+	+	.	.	+	1	4	80
	<i>Erythronium dens-canis</i>	E1	.	.	.	.	.	+	.	.	.	
AF	<b><i>Aremonio-Fagion</i></b>											
	<i>Cyclamen purpurascens</i>	E1	+	1	1	1	1	1	+	+	5	100
	<i>Cardamine enneaphyllos</i>	E1	1	.	2	1	.	.	+	.	3	60
	<i>Lamium orvala</i>	E1	.	.	.	.	.	+	+	.	.	
AI	<b><i>Alnion incanae</i></b>											
	<i>Aesculus hippocastanum</i>	E2a	.	+	.	.	.	.	.	1	20	
FS	<b><i>Fagetalia sylvaticae</i></b>											
	<i>Galium laevigatum</i>	E1	+	1	1	1	+	.	+	.	5	100
	<i>Polygonatum multiflorum</i>	E1	+	1	2	1	.	.	.	+	4	80
	<i>Lathyrus vernus</i>	E1	1	1	.	1	+	.	1	.	4	80
	<i>Asarum europaeum</i> subsp. <i>caucasicum</i>	E1	.	+	1	+	.	.	.	1	3	60
	<i>Mycelis muralis</i>	E1	.	.	1	+	+	.	.	.	3	60
	<i>Campanula trachelium</i>	E1	.	.	+	+	+	.	+	.	3	60
	<i>Carpinus betulus</i>	E3b	1	.	1	.	.	.	3	4	2	40
	<i>Carpinus betulus</i>	E3a	+	.	+	.	.	.	+	1	2	40
	<i>Carpinus betulus</i>	E2b	+	.	.	.	.	.	.	.	1	20
	<i>Carpinus betulus</i>	E1	.	.	.	.	.	.	.	1	.	
	<i>Galeobdolon flavidum</i>	E1	.	r	.	.	+	.	+	.	2	40
	<i>Mercurialis perennis</i>	E1	.	.	+	.	.	.	+	.	1	20
	<i>Galeobdolon montanum</i>	E1	.	.	1	.	.	.	.	.	1	20
	<i>Epipactis helleborine</i>	E1	.	.	.	1	.	.	.	.	1	20
	<i>Salvia glutinosa</i>	E1	.	.	.	.	.	.	+	+	.	

Number of relevé (Zaporedna številka popisa)		1	2	3	4	5	6	7	8	Pr.	Fr.
<i>Prunus avium</i>	E3b	.	.	.	.	.	.	.	r	.	.
<i>Prunus avium</i>	E1	.	.	.	.	.	.	+	+	.	.
<i>Symphytum tuberosum</i>	E1	.	.	.	.	.	.	+	1	.	.
<i>Neottia nidus-avis</i>	E1	.	.	.	.	.	.	+	.	.	.
<i>Sanicula europaea</i>	E1	.	.	.	.	.	.	+	.	.	.
<i>Viola reichenbachiana</i>	E1	.	.	.	.	.	.	+	.	.	.
<i>Corydalis cava</i>	E1	.	.	.	.	.	.	.	r	.	.
<i>Actaea spicata</i>	E1	.	.	.	.	.	.	.	+	.	.
CO <i>Carpinion orientalis</i>										.	.
<i>Sesleria autumnalis</i>	E1	4	4	3	4	3	3	4	1	5	100
<i>Acer monspessulanum</i>	E2a	r	+	.	.	.	.	+	.	2	40
<i>Acer monspessulanum</i>	E1	.	.	.	.	.	.	+	.	.	.
<i>Frangula rupestris</i>	E2a	.	+	.	.	+	1	.	.	2	40
QP <i>Quercetalia pubescenti-petraeae</i>											
<i>Mercurialis ovata</i>	E1	1	1	+	1	+	+	+	1	5	100
<i>Convallaria majalis</i>	E1	1	1	2	+	+	.	.	.	5	100
<i>Ostrya carpinifolia</i>	E3b	.	2	3	4	.	4	+	.	3	60
<i>Ostrya carpinifolia</i>	E3a	1	1	1	.	+	.	.	.	4	80
<i>Ostrya carpinifolia</i>	E2b	.	.	+	.	3	.	.	.	2	40
<i>Ostrya carpinifolia</i>	E2a	.	.	.	.	+	.	.	.	1	20
<i>Fraxinus ornus</i>	E3b	.	.	+	1	.	2	.	.	2	40
<i>Fraxinus ornus</i>	E3a	1	1	1	1	.	.	.	+	4	80
<i>Fraxinus ornus</i>	E2b	1	1	.	1	2	+	1	.	4	80
<i>Fraxinus ornus</i>	E2a	+	.	.	+	.	1	2	.	2	40
<i>Fraxinus ornus</i>	E1	.	.	.	.	.	.	1	+	.	.
<i>Melittis melissophyllum</i>	E1	+	1	.	+	.	1	+	+	3	60
<i>Euonymus verrucosa</i>	E2a	.	.	1	+	+	+	.	.	3	60
<i>Campanula persicifolia</i>	E1	.	+	.	+	+	+	.	.	3	60
<i>Cornus mas</i>	E2b	+	.	+	.	+	.	.	.	3	60
<i>Sorbus aria (Aria edulis)</i>	E3b	.	.	+	+	.	.	.	.	2	40
<i>Sorbus aria (Aria edulis)</i>	E3a	+	1	.	.	.	+	+	.	2	40
<i>Sorbus aria (Aria edulis)</i>	E2b	+	1	.	.	.	.	.	.	2	40
<i>Sorbus aria (Aria edulis)</i>	E2a	.	.	.	.	+	.	.	.	1	20
<i>Lathyrus venetus</i>	E1	2	.	+	.	.	.	2	+	2	40
<i>Tanacetum corymbosum</i>	E1	1	+	.	.	.	.	+	.	2	40
<i>Arabis turrita</i>	E1	.	.	+	.	+	.	.	.	2	40
<i>Quercus pubescens</i>	E3b	3	.	r	.	.	.	3	.	2	40
<i>Quercus pubescens</i>	E2b	+	.	.	.	.	.	.	.	1	20
<i>Cnidium silaifolium</i>	E1	+	.	.	.	.	1	+	.	1	20
<i>Asparagus tenuifolius</i>	E1	+	.	.	.	.	+	.	.	1	20
<i>Mercurialis x paxii</i>	E1	.	.	+	.	.	+	+	.	1	20
<i>Hypericum montanum</i>	E1	.	.	.	.	+	.	.	.	1	20
<i>Prunus mahaleb</i>	E2b	.	.	.	.	+	.	+	.	1	20
<i>Euonymus verrucosa</i>	E2b	.	.	.	.	.	+	.	.	.	.
<i>Quercus cerris</i>	E3b	.	.	.	.	.	.	1	1	.	.

Number of relevé (Zaporedna številka popisa)		1	2	3	4	5	6	7	8	Pr.	Fr.
	<i>Paeonia mascula</i> agg. ( <i>P. daurica</i> )	E1	.	.	.	.	.	+	.	.	.
	<i>Aristolochia lutea</i>	E1	.	.	.	.	.	+	1	.	.
	<i>Lathyrus niger</i>	E1	.	.	.	.	.	+	.	.	.
	<i>Buglossoides purpurocaerulea</i>	E1	.	.	.	.	.	.	+	.	.
QR	<b><i>Quercetalia roboris</i></b>										
	<i>Serratula tinctoria</i>	E1	1	.	.	.	.	1	+	1	10
	<i>Hieracium racemosum</i>	E1	.	.	.	.	.	+	+	.	.
QF	<b><i>Querco-Fagetea</i></b>										
	<i>Hepatica nobilis</i>	E1	1	1	1	1	+	+	1	1	100
	<i>Carex digitata</i>	E1	+	1	2	1	+	.	+	.	100
	<i>Veratrum nigrum</i>	E1	1	1	2	1	1	.	.	5	100
	<i>Hedera helix</i>	E3a	+	+	.	.	.	1	.	2	40
	<i>Hedera helix</i>	E2a	.	+	.	.	+	.	.	2	40
	<i>Hedera helix</i>	E1	.	+	1	.	+	.	1	+	3
	<i>Lonicera xylosteum</i>	E2	+	.	1	+	.	+	.	3	60
	<i>Corylus avellana</i>	E2b	.	.	2	+	.	.	.	2	40
	<i>Corylus avellana</i>	E2a	.	.	.	.	.	+	.	.	.
	<i>Quercus petraea</i>	E3b	.	3	.	.	.	.	.	1	20
	<i>Quercus petraea</i>	E2a	.	.	.	.	.	+	.	.	.
	<i>Viola riviniana</i>	E1	.	.	+	.	.	.	+	1	20
	<i>Ulmus minor</i>	E2a	+	.	.	.	.	.	.	1	20
	<i>Corylus avellana</i>	E1	.	.	.	.	.	.	.	.	.
	<i>Acer campestre</i>	E3b	.	.	.	.	.	+	.	.	.
	<i>Acer campestre</i>	E3a	.	.	.	.	.	+	1	.	.
	<i>Acer campestre</i>	E2b	.	.	.	.	.	+	+	.	.
	<i>Acer campestre</i>	E2a	.	.	.	.	.	+	.	.	.
	<i>Acer campestre</i>	E1	.	.	.	.	.	.	+	.	.
	<i>Clematis vitalba</i>	E2a	.	.	.	.	.	+	.	.	.
	<i>Melica uniflora</i>	E1	.	.	.	.	.	+	.	.	.
	<i>Epipactis microphylla</i>	E1	.	.	.	.	.	+	.	.	.
	<i>Lathraea squamaria</i>	E1	.	.	.	.	.	.	+	.	.
	<i>Carex montana</i>	E1	.	.	.	.	.	.	.	1	.
VP	<b><i>Vaccinio-Piceetea</i></b>										
	<i>Solidago virgaurea</i>	E1	.	+	+	.	.	.	.	2	40
EP	<b><i>Erico-Pinetea</i></b>										
	<i>Amelanchier ovalis</i>	E2a	.	+	.	.	+	.	.	2	40
	<i>Chamaecytisus hirsutus</i>	E1	.	+	.	.	+	.	.	2	40
	<i>Pinus nigra</i>	E3b	.	.	.	r	.	.	.	1	20
	<i>Pinus nigra</i>	E2a	.	.	.	.	.	r	.	.	.
RP	<b><i>Rhamno-Prunetea</i></b>										
	<i>Crataegus monogyna</i>	E3a	.	.	.	.	.	+	.	.	.
	<i>Crataegus monogyna</i>	E2b	.	+	.	.	.	.	.	1	20
	<i>Crataegus monogyna</i>	E2a	.	.	.	.	.	+	.	.	.
	<i>Rosa canina</i>	E2a	.	.	.	.	+	+	.	1	20
	<i>Euonymus europaea</i>	E2	.	.	.	.	.	+	.	.	.

Number of relevé (Zaporedna številka popisa)		1	2	3	4	5	6	7	8	Pr.	Fr.
MuA	<b><i>Mulgedio-Aconitetea, Betulo-Alnetea</i></b>										
	<i>Saxifraga rotundifolia</i>	E1	.	.	.	.	.	.	.	.	.
TG	<b><i>Trifolio-Geranietea</i></b>										
	<i>Campanula rapunculoides</i>	E1	1	+	1	.	.	+	1	.	3 60
	<i>Polygonatum odoratum</i>	E1	.	+	.	.	1	1	+	.	2 40
	<i>Anthericum ramosum</i>	E1	.	+	.	.	+	+	.	.	2 40
	<i>Digitalis grandiflora</i>	E1	.	.	.	+	+	+	.	.	2 40
	<i>Melampyrum velebiticum</i>	E1	.	.	.	+	+	.	.	.	2 40
	<i>Valeriana nemorensis</i>	E1	.	.	.	+	+	.	.	.	2 40
	<i>Lilium carniolicum</i>	E1	+	.	.	.	.	.	.	1	20
	<i>Vincetoxicum hirundinaria</i>	E1	+	.	.	.	.	+	+	.	1 20
	<i>Peucedanum cervaria</i>	E1	+	.	.	.	.	.	.	.	1 20
	<i>Valeriana wallrothii</i>	E1	.	.	+	.	.	.	.	.	1 20
	<i>Silene nutans</i>	E1	.	.	.	.	+	1	.	.	1 20
	<i>Viola hirta</i>	E1	.	.	.	.	+	+	.	.	1 20
	<i>Verbascum chaixii</i>	E1	.	.	.	.	.	+	.	.	.
	<i>Thalictrum minus</i>	E1	.	.	.	.	.	+	.	.	.
	<i>Geranium sanguineum</i>	E1	.	.	.	.	.	+	.	.	.
	<i>Hypericum perforatum</i>	E1	.	.	.	.	.	+	.	.	.
	<i>Trifolium rubens</i>	E1	.	.	.	.	.	+	.	.	.
FB	<b><i>Festuco-Brometea</i></b>										
	<i>Carex humilis</i>	E1	.	1	.	.	.	+	.	.	2 20
	<i>Iberis linifolia</i>	E1	.	.	.	+	.	.	.	.	1 20
	<i>Brachypodium rupestre</i>	E1	.	.	.	.	.	1	+	.	.
	<i>Allium carinatum</i> subsp. <i>pulchellum</i>	E1	.	.	.	.	.	+	.	.	.
	<i>Betonica serotina</i>	E1	.	.	.	.	.	+	.	.	.
	<i>Bromopsis erecta</i>	E1	.	.	.	.	.	+	.	.	.
	<i>Dianthus tergestinus</i>	E1	.	.	.	.	.	+	.	.	.
	<i>Satureja montana</i> subsp. <i>variegata</i>	E1	.	.	.	.	.	+	.	.	.
	<i>Satureja subspicata</i> subsp. <i>liburnica</i>	E1	.	.	.	.	.	+	.	.	.
	<i>Teucrium chamaedrys</i>	E1	.	.	.	.	.	+	.	.	.
KC	<b><i>Koelerio-Corynephoretea</i></b>										
	<i>Cardaminopsis arenosa</i>	E1	.	.	+	+	1	+	.	.	3 60
	<i>Saxifraga tridactylites</i>	E1	.	.	.	.	+	.	.	.	1 20
MA	<b><i>Molinio-Arrhenatheretea</i></b>										
	<i>Muscaris botryoides</i>	E1	.	.	.	.	.	+	.	+	.
	<i>Ajuga reptans</i>	E1	.	.	.	.	.	.	+	.	.
	<i>Veronica chamaedrys</i>	E1	.	.	.	.	.	.	.	+	.
	<i>Colchicum autumnale</i>	E1	.	.	.	.	.	.	.	+	.
Cy	<b><i>Cystopteridion fragilis</i></b>										
	<i>Moehringia muscosa</i>	E1	1	+	1	+	1	.	+	.	5 100
	<i>Pseudofumaria alba</i>	E1	.	.	.	.	.	1	.	.	.
PS	<b><i>Physoplexido-Saxifragion, Potentilletalia caulescentis</i></b>										
	<i>Campanula pyramidalis</i>	E1	.	+	.	+	1	1	.	.	3 60
	<i>Micromeria thymifolia</i>	E1	.	+	.	.	+	+	.	.	2 40

Number of relevé (Zaporedna številka popisa)		1	2	3	4	5	6	7	8	Pr.	Fr.
	<i>Primula auricula</i>	E1	.	+	.	.	1	.	.	2	40
	<i>Hieracium lasiophyllum</i>	E1	.	.	.	.	+	.	.	1	20
AT	<b><i>Asplenietea trichomanis</i></b>										
	<i>Asplenium trichomanes</i>	E1	+	+	.	+	1	1	+	.	40
	<i>Sedum maximum</i>	E1	.	.	+	1	1	1	.	.	60
	<i>Polypodium interjectum</i>	E1	.	+	.	.	3	.	.	2	40
	<i>Asplenium ruta-muraria</i>	E1	.	.	+	.	+	1	.	.	40
	<i>Polypodium vulgare</i>	E1	.	+	.	.	.	.	.	1	20
	<i>Polypodium australe</i>	E1	.	.	.	.	1	.	.	1	20
	<i>Parietaria judaica</i>	E1	.	.	.	.	+	.	.	1	20
	<i>Sedum sexangulare</i>	E1	.	.	.	.	.	+	.	.	.
ML	<b>Mosses and lichens (Mahovi in lišaji)</b>										
	<i>Ctenidium molluscum</i>	E0	2	1	3	1	2	.	.	5	100
	<i>Neckera crispa</i>	E0	2	2	1	.	2	+	1	.	80
	<i>Thuidium tamariscinum</i>	E0	2	.	2	3	.	.	.	3	60
	<i>Dicranum scoparium</i>	E0	.	+	+	.	+	.	.	3	60
	<i>Hylocomium splendens</i>	E0	.	+	.	.	+	.	.	2	40
	<i>Anomodon viticulosus</i>	E0	.	.	+	.	1	1	1	2	40
	<i>Homalothecium lutescens</i>	E0	.	.	+	+	.	2	1	.	40
	<i>Peltigera canina</i>	E0	.	.	+	+	.	.	.	2	40
	<i>Rhytidiodelphus triquetrus</i>	E0	.	.	.	2	+	.	.	2	40
	<i>Tortella tortuosa</i>	E0	.	+	.	.	.	.	.	1	20
	<i>Brachythecium rutabulum</i>	E0	.	.	+	.	.	.	.	1	20
	<i>Neckera complanata</i>	E0	.	.	1	.	.	.	1	.	20
	<i>Schistidium apocarpum</i>	E0	.	.	+	.	.	.	.	1	20
	<i>Anomodon attenuatus</i>	E0	.	.	.	.	+	.	+	.	20
	<i>Thuidium delicatulum</i>	E0	.	.	.	.	+	.	.	1	20
	<i>Isothecium alopecuroides</i>	E0	.	.	.	.	.	.	.	1	.

### Legend – Legenda

- 1–5 *Paeonia officinalis-Tilietum platyphylli hierochloetosum australis*
- 6 *Seslerio autumnalis-Ostryetum carpinifoliae*
- 7 *Seslerio autumnalis-Quercetum cerridis /Aristolochio luteae-Quercetum pubescens carpinetosum betuli*
- 8 *Asaro-Carpinetum betuli*
- A Limestone – apnenec
- Gr Gravel – grušč
- L Marlstone – laporovec
- Re Rendzina – rendzina
- Rj Brown calcareous soil – rjava pokarbonatna tla
- Pr. Presence (number of relevés in which the species is presented) – število popisov, v katerih se pojavlja vrsta
- Fr. Frequency in % – frekvanca v %

*Helleborus multifidus* subsp. *istriacus*\* (incl. *Helleborus dumetorum* subsp. *istriacus*) – Rottensteiner (2016)

**Table 5 (Tabela 5):** *Lamio orvalae-Tilietum platyphylli* ass. nov.

Number of relevé (Zaporedna štev. popisa)		1	2	3	4	5	6	7	8	9	10	11	12	13	Pr.	fr.	
Database number of relevé (Delovna številka popisa)		233951	233952	233939	233940	233943	233941	233942	233944	233945	245842	245843	245846	245847			
Elevation in m (Nadmorska višina v m)		580	560	570	570	550	600	630	500	520	620	620	670	675			
Aspect (Legă)		NW	NW	NW	NW	NW	NNW	NE	NE	0	W	NW	NW	NW			
Slope in degrees (Nagib v stopinjah)		20	15	20	20	25	25	25	10	0	15	15	20	20			
Parent material (Matična podlaga)		A	A	A	A	A	A	A	A	A	DA	A	D	D			
Soil (Tla)		Rj	Rj	Re	Rj	Rj	Rj	Rj	Rj	Rj	Rj	Rj	Re	Re			
Stoniness in % (Kamnitost v %)		50	30	60	40	60	60	60	20	10	60	40	30	20			
Cover in % (Zastiranje v %):																	
Upper tree layer (Zgornja drevesna plast)	E3b	90	90	80	90	80	80	80	70	70	80	70	80	70			
Lower tree layer (Spodnja drevesna plasti)	E3a	10	10	10	10	10	10	10	20	10	20	20	20	20			
Shrub layer (Grmovna plast)	E2	10	20	20	20	20	30	30	40	20	20	30	20	30			
Herb layer (Zeliščna plast)	E1	60	70	50	60	50	40	60	30	50	70	70	80	80			
Moss layer (Mahovna plast)	E0	10	5	20	20	20	20	30	10	10	20	30	10	20			
Max. tree diameter (Maks. premer dreves)	cm	40	30	45	40	35	40	40	40	25	35	35	35	25			
Max. tree height (Maks. višina dreves)	m	24	18	26	22	22	26	27	18	17	22	22	20	16			
Number of species (Število vrst)		51	51	55	53	62	50	57	48	42	85	88	76	58			
Relevé area (Velikost popisne ploskve)	m <sup>2</sup>	400	400	400	400	400	400	400	200	400	200	400	400	200			
Date of taking relevé (Datum popisa)																	
Locality (Nahajališče)																	
Quadrant (Kvadrant)																	
Coordinate (Koordinate) GK Y (D-48)	m	50909068	4061117	9948/4	Čepovan-Puštal	4/9/2009					5/3/2012						
Coordinate (Koordinate) GK X (D-48)	m	50909090	406061	9948/4	Čepovan-Puštal	4/9/2009					5/3/2012						
<b>Diagnostic species of the association (Diagnostične vrste asocijacije)</b>															Pr.	Fr.	
TA <i>Tilia platyphyllos</i>	E3b	2	4	3	4	3	4	3	2	+	1	1	3	1	13	100	
TA <i>Tilia platyphyllos</i>	E3a	.	.	.	+	+	+	+	+	.	.	.	.	.	5	38	
TA <i>Tilia platyphyllos</i>	E2b	.	.	.	+	.	+	+	.	+	.	.	.	.	4	31	
TA <i>Tilia platyphyllos</i>	E1	.	.	.	.	.	.	.	.	.	.	.	.	.	1	8	
TA <i>Tilia cordata</i>	E3b	2	+	2	2	2	+	1	3	4	3	4	3	3	13	100	
TA <i>Tilia cordata</i>	E3a	1	+	+	+	+	+	.	1	.	1	.	.	1	9	69	
TA <i>Tilia cordata</i>	E2b	.	.	+	.	.	.	.	1	.	.	+	.	.	3	23	
TA <i>Tilia cordata</i>	E2a	.	.	.	.	.	.	.	.	.	+	+	.	+	3	23	
EC <i>Helleborus odorus</i>	E1	2	2	+	1	1	.	.	1	1	+	2	2	2	11	85	
AF <i>Lamium orvala</i>	E1	1	1	1	1	1	+	1	.	.	1	1	+	1	11	85	
AF <i>Anemone trifolia</i>	E1	1	.	1	1	1	1	1	+	.	+	1	1	.	10	77	
QP <i>Sesleria autumnalis</i>	E1	2	3	.	1	1	1	+	+	+	.	.	.	.	8	62	
TA <i>Arum maculatum</i>	E1	.	.	1	1	1	+	1	+	+	.	.	.	+	8	62	

	Number of relevé (Zaporedna štev. popisa)	1	2	3	4	5	6	7	8	9	10	11	12	13	Pr.	fr.	
<b>Differential species of variants (Razlikovalnica variante)</b>																	
TA	<i>Adoxa moschatellina</i>	E1	.	+	1	+	2	+	1	1	1	.	.	.	8	62	
AF	<i>Omphalodes verna</i>	E1	.	.	.	.	.	.	.	.	.	+	+	+	4	31	
TA	<i>Tilio-Acerion</i>		.	.	.	.	.	.	.	.	.	.	.	.			
	<i>Corydalis solida</i>	E1	.	.	1	+	3	.	.	1	1	+	+	.	7	54	
	<i>Acer pseudoplatanus</i>	E3b	.	.	.	.	.	.	+	+	.	+	1	1	.	6	46
	<i>Acer pseudoplatanus</i>	E3a	.	.	.	.	.	.	.	.	.	+	+	+	.	4	31
	<i>Acer pseudoplatanus</i>	E2b	.	.	.	.	.	.	.	.	.	+	.	+	.	2	15
	<i>Acer pseudoplatanus</i>	E2a	.	.	.	.	.	.	+	.	.	.	.	.	1	8	
	<i>Acer pseudoplatanus</i>	E1	.	.	.	.	.	.	+	.	.	1	1	+	+	5	38
	<i>Polystichum aculeatum</i>	E1	.	.	.	.	+	.	+	.	.	+	+	+	+	6	46
	<i>Phyllitis scolopendrium</i>	E1	.	.	.	.	.	+	+	.	.	1	1	.	.	4	31
	<i>Acer platanoides</i>	E3b	.	.	.	.	.	+	.	.	.	.	.	.	1	8	
	<i>Acer platanoides</i>	E3a	.	.	.	.	.	.	.	.	.	+	.	.	.	1	8
	<i>Acer platanoides</i>	E1	.	.	.	.	.	.	.	.	.	+	+	+	+	3	23
	<i>Aruncus dioicus</i>	E1	.	.	.	.	.	.	.	.	.	+	+	+	.	3	23
	<i>Isopyrum thalictroides</i>	E1	.	.	.	.	.	.	.	1	2	.	+	.	.	3	23
	<i>Geranium robertianum</i>	E1	.	.	.	.	.	.	.	.	+	+	.	.	.	2	15
	<i>Euonymus latifolia</i>	E2a	.	.	.	.	.	.	.	.	.	+	.	+	.	2	15
	<i>Euonymus latifolia</i>	E1	.	.	.	.	.	.	.	.	.	+	+	+	.	2	15
	<i>Lunaria rediviva</i>	E1	.	.	.	.	.	.	1	.	.	.	.	.	.	1	8
	<i>Stellaria montana</i>	E1	.	.	.	.	.	.	+	.	.	.	.	.	.	1	8
	<i>Juglans regia</i>	E3b	.	.	.	.	.	.	.	.	.	+	.	.	.	1	8
	<i>Ulmus glabra</i>	E2a										+				1	8
EC	<i>Erythronio-Carpinion</i>																
	<i>Galanthus nivalis</i>	E1	2	.	2	2	2	+	.	+	2	.	.	.	.	7	54
	<i>Primula vulgaris</i>	E1	+	1	.	+	+	.	.	.	.	+	1	+	7	54	
	<i>Crocus vernus</i> subsp. <i>vernus</i> *	E1	+	1	.	.	+	.	.	1	.	.	.	.	4	31	
	<i>Ornithogalum pyrenaicum</i>	E1	.	+	.	.	.	.	.	.	.	.	.	.	1	8	
AF	<i>Aremonio-Fagion</i>																
	<i>Cyclamen purpurascens</i>	E1	+	.	+	+	.	1	.	.	.	1	1	1	.	7	54
	<i>Cardamine enneaphyllos</i>	E1	.	+	+	3	+	2	2	.	.	.	.	.	+	7	54
	<i>Cardamine trifolia</i>	E1	.	.	+	1	.	1	.	.	.	1	1	.	.	5	38
	<i>Euphorbia carniolica</i>	E1	.	.	.	.	.	.	.	.	.	+	+	1	.	3	23
	<i>Anemone x pittonii</i>	E1	.	+	.	.	.	.	.	.	+	.	.	.	.	2	15
	<i>Daphne laureola</i>	E2a	.	.	.	.	.	.	.	.	.	r	.	+	.	2	15
	<i>Rhamnus fallax</i>	E2a	.	.	.	.	.	.	.	.	.	+	+	.	.	2	15
	<i>Aremonia agrimonoides</i>	E1	.	.	.	.	.	.	.	.	.	+	+	.	.	2	15
	<i>Helleborus niger</i>	E1	.	.	.	.	.	.	.	.	.	.	.	+	.	1	8
AI	<i>Alnion incanae</i>																
	<i>Chrysosplenium alternifolium</i>	E1	.	.	.	.	.	.	.	+	+	.	.	.	.	2	15
	<i>Dryopteris carthusiana</i>	E1	.	.	.	.	.	.	.	.	.	+	.	.	.	1	8
FS	<i>Fagetalia sylvaticae</i>																
	<i>Asarum europaeum</i> subsp. <i>caucasicum</i>	E1	1	1	1	1	1	+	+	+	+	1	1	1	1	13	100
	<i>Mercurialis perennis</i>	E1	1	1	+	1	1	1	1	+	+	3	1	2	1	13	100
	<i>Paris quadrifolia</i>	E1	+	+	1	+	+	+	+	+	+	1	+	1	+	12	92
	<i>Daphne mezereum</i>	E2a	+	+	+	+	+	.	+	+	+	.	+	+	+	11	85
	<i>Fraxinus excelsior</i>	E3b	3	1	2	.	1	+	+	+	.	1	+	1	1	11	85
	<i>Fraxinus excelsior</i>	E3a	+	.	.	.	+	.	.	.	.	.	.	.	.	2	15
	<i>Fraxinus excelsior</i>	E2b	.	.	.	+	1	1	.	.	.	.	.	.	.	3	23

Number of relevé (Zaporedna štev. popisa)	1	2	3	4	5	6	7	8	9	10	11	12	13	Pr.	fr.	
<i>Fraxinus excelsior</i>	E2a	.	.	.	.	+	1	.	.	.	.	.	.	2	15	
<i>Fraxinus excelsior</i>	E1	.	.	.	.	1	.	.	.	.	+	+	+	5	38	
<i>Actaea spicata</i>	E1	+	.	1	1	+	+	+	+	1	+	.	+	10	77	
<i>Polygonatum multiflorum</i>	E1	+	+	+	.	+	+	+	1	.	1	+	1	10	77	
<i>Dryopteris filix-mas</i>	E1	+	.	+	+	+	+	+	+	.	1	1	1	10	77	
<i>Carpinus betulus</i>	E3b	1	.	+	+	+	+	+	+	1	+	.	.	9	69	
<i>Carpinus betulus</i>	E3a	+	1	.	+	+	+	+	.	.	+	1	1	.	8	62
<i>Carpinus betulus</i>	E2b	.	.	.	+	+	+	.	.	.	.	.	.	3	23	
<i>Carpinus betulus</i>	E2a	.	.	.	.	.	.	.	.	.	+	.	.	1	8	
<i>Carpinus betulus</i>	E1	+	.	.	.	.	.	.	.	r	.	+	.	3	23	
<i>Heracleum sphondylium</i>	E1	+	+	+	+	+	.	+	.	+	+	.	+	9	69	
<i>Sambucus nigra</i>	E3a	.	.	.	.	.	.	+	+	.	.	.	.	2	15	
<i>Sambucus nigra</i>	E2b	.	.	.	+	.	.	1	+	+	+	.	.	5	38	
<i>Sambucus nigra</i>	E2a	.	+	+	+	+	.	+	.	+	+	+	.	9	69	
<i>Sambucus nigra</i>	E1	.	.	.	.	.	.	+	+	.	.	.	.	2	15	
<i>Campanula trachelium</i>	E1	+	+	.	+	+	.	+	+	+	.	+	.	8	62	
<i>Euphorbia amygdaloides</i>	E1	+	.	+	+	+	+	.	.	+	+	+	+	8	62	
<i>Fagus sylvatica</i>	E3b	+	.	+	r	+	+	r	.	+	.	+	.	8	62	
<i>Fagus sylvatica</i>	E3a	.	.	.	+	.	.	+	.	.	+	+	+	5	38	
<i>Fagus sylvatica</i>	E2b	.	.	+	+	.	+	+	.	+	+	+	.	7	54	
<i>Fagus sylvatica</i>	E2a	+	+	.	+	.	.	.	.	+	+	.	.	4	31	
<i>Fagus sylvatica</i>	E1	.	.	.	.	.	.	.	.	+	+	1	+	4	31	
<i>Galeobdolon flavidum</i>	E1	.	+	.	.	+	+	+	.	1	1	+	+	8	62	
<i>Salvia glutinosa</i>	E1	+	+	.	+	+	.	+	.	+	+	+	+	8	62	
<i>Cardamine pentaphyllos</i>	E1	.	2	.	.	.	+	1	.	3	2	2	+	7	54	
<i>Cardamine bulbifera</i>	E1	.	+	+	1	+	.	+	.	+	.	.	.	6	46	
<i>Lathyrus vernus</i>	E1	.	.	.	+	+	.	.	.	1	1	1	+	6	46	
<i>Prunus avium</i>	E3b	1	+	.	.	r	.	+	.	+	+	.	.	6	46	
<i>Prunus avium</i>	E3a	+	.	.	.	.	.	.	.	.	.	.	.	1	8	
<i>Galium laevigatum</i>	E1	+	+	+	.	+	.	.	.	+	.	.	.	5	38	
<i>Cardamine impatiens</i>	E1	.	.	+	+	+	.	.	+	+	.	.	.	5	38	
<i>Lonicera alpigena</i>	E2a	+	.	.	.	.	.	.	.	+	1	+	.	4	31	
<i>Neottia nidus-avis</i>	E1	.	.	.	+	.	.	.	.	+	+	+	.	4	31	
<i>Mycelis muralis</i>	E1	.	.	.	.	+	.	+	.	+	+	.	.	4	31	
<i>Pulmonaria officinalis</i>	E1	+	.	.	.	.	.	.	.	1	.	1	.	3	23	
<i>Symphtum tuberosum</i>	E1	.	.	.	.	.	.	.	.	.	1	+	1	3	23	
<i>Allium ursinum</i>	E1	.	+	+	.	.	.	.	.	.	.	.	.	2	15	
<i>Myosotis sylvatica</i>	E1	.	+	.	.	.	.	.	.	+	.	.	.	2	15	
<i>Brachypodium sylvaticum</i>	E1	.	.	.	.	.	.	.	.	+	.	+	.	2	15	
<i>Carex sylvatica</i>	E1	.	.	.	.	.	.	.	.	+	.	.	+	2	15	
<i>Sanicula europaea</i>	E1	.	.	.	.	.	.	.	.	+	+	.	.	2	15	
<i>Lilium martagon</i>	E1	.	1	.	.	.	.	.	.	.	.	.	.	1	8	
<i>Festuca altissima</i>	E1	.	+	.	.	.	.	.	.	.	.	.	.	1	8	
<i>Scrophularia nodosa</i>	E1	.	.	.	.	.	.	.	.	+	.	.	.	1	8	
<i>Viola reichenbachiana</i>	E1	.	.	.	.	.	.	.	.	+	.	.	.	1	8	
<i>Corydalis cava</i>	E1	.	.	.	.	.	.	.	.	+	.	.	.	1	8	
<i>Melica nutans</i>	E1	.	.	.	.	.	.	.	.	+	.	1	.	1	8	
QP <i>Quercetalia pubescenti-petraeae</i>	E3b	.	.	+	.	.	.	.	+	.	.	.	.	2	15	
<i>Fraxinus ornus</i>	E3a	+	+	+	+	+	+	+	+	.	+	+	+	11	85	

Number of relevé (Zaporedna štev. popisa)		1	2	3	4	5	6	7	8	9	10	11	12	13	Pr.	fr.	
	<i>Fraxinus ornus</i>	E2b	.	.	.	.	.	.	.	.	.	+	.	.	1	8	
	<i>Fraxinus ornus</i>	E2a	.	.	.	+	.	.	.	.	.	.	+	.	2	15	
	<i>Ostrya carpinifolia</i>	E3b	.	.	+	+	+	+	+	+	+	+	1	+	10	77	
	<i>Ostrya carpinifolia</i>	E3a	.	.	+	.	.	.	+	.	+	.	.	.	3	23	
	<i>Cornus mas</i>	E2b	.	.	.	.	r	.	r	.	.	.	.	.	2	15	
	<i>Orchis mascula</i> subsp. <i>speciosa</i>	E1	.	+	.	.	.	.	.	.	.	.	+	.	2	15	
	<i>Tanacetum corymbosum</i>	E1	+	.	.	.	.	.	.	.	.	.	.	.	1	8	
	<i>Sorbus aria</i> ( <i>Aria edulis</i> )	E3a	.	.	.	.	.	.	r	.	.	.	.	.	1	8	
QF	<b><i>Querco-Fagetea</i></b>																
	<i>Corylus avellana</i>	E3a	+	1	1	1	.	.	+	2	1	.	2	.	8	62	
	<i>Corylus avellana</i>	E2b	1	1	1	1	1	2	1	1	2	1	1	1	2	13	100
	<i>Anemone nemorosa</i>	E1	1	1	+	1	.	+	.	1	+	1	2	2	3	11	85
	<i>Lonicera xylosteum</i>	E2b	.	.	.	.	.	+	+	.	.	.	.	.	2	15	
	<i>Lonicera xylosteum</i>	E2a	+	+	1	+	+	+	+	.	.	+	1	+	+	11	85
	<i>Carex digitata</i>	E1	+	+	+	+	.	+	.	.	1	.	+	+	8	62	
	<i>Aegopodium podagraria</i>	E1	+	1	+	.	.	.	.	+	1	.	.	+	1	7	54
	<i>Anemone ranunculoides</i>	E1	+	.	+	+	.	.	.	.	1	+	1	.	6	46	
	<i>Acer campestre</i>	E3b	+	.	.	+	+	.	.	+	+	.	.	.	5	38	
	<i>Acer campestre</i>	E3a	+	+	.	+	.	.	.	.	.	.	.	.	3	23	
	<i>Acer campestre</i>	E1	.	.	.	.	.	.	.	.	.	.	.	.	+	1	8
	<i>Dactylis glomerata</i> subsp. <i>lobata</i> ( <i>D. polygama</i> )	E1	+	1	+	+	+	.	.	.	.	.	.	.	5	38	
	<i>Festuca heterophylla</i>	E1	+	+	.	.	.	.	.	.	.	+	+	+	.	5	38
	<i>Gagea lutea</i>	E1	+	.	+	.	1	.	.	1	+	.	.	.	5	38	
	<i>Listera ovata</i>	E1	+	.	.	.	.	.	.	.	.	+	+	+	.	4	31
	<i>Hedera helix</i>	E3a	.	.	.	.	.	.	.	.	.	+	.	+	2	15	
	<i>Hedera helix</i>	E1	.	.	.	.	.	.	.	.	.	+	+	+	1	4	31
	<i>Dactylorhiza fuchsii</i>	E1	.	.	.	.	.	.	.	.	.	+	+	+	.	3	23
	<i>Lathraea squamaria</i>	E1	+	+	.	.	.	.	.	.	.	.	.	.	2	15	
	<i>Veratrum nigrum</i>	E1	.	+	.	.	.	.	.	.	.	r	.	.	2	15	
	<i>Vinca minor</i>	E1	.	.	+	.	.	.	.	.	.	.	.	2	.	2	15
	<i>Moehringia trinervia</i>	E1	.	.	.	.	.	.	.	+	+	.	.	.	2	15	
	<i>Hepatica nobilis</i>	E1	.	.	.	.	.	.	.	.	.	+	+	.	.	2	15
	<i>Clematis vitalba</i>	E1	.	.	.	.	.	.	.	.	.	+	.	.	+	2	15
	<i>Cruciata glabra</i>	E1	.	.	.	.	.	.	.	.	.	+	.	.	+	2	15
	<i>Viola riviniana</i>	E1	.	.	.	.	.	.	.	.	.	+	.	+	2	15	
	<i>Malus sylvestris</i>	E1	.	.	.	.	.	.	.	.	.	+	.	.	1	8	
	<i>Pyrus pyraster</i>	E2a	.	.	.	.	.	.	.	.	.	r	.	.	1	8	
VP	<b><i>Vaccinio-Piceetea</i></b>																
	<i>Oxalis acetosella</i>	E1	.	.	1	1	+	+	.	+	.	1	1	+	1	9	69
	<i>Luzula luzuloides</i>	E1	.	.	.	.	+	+	+	+	.	+	+	+	.	7	54
	<i>Solidago virgaurea</i>	E1	.	.	.	.	.	.	.	+	.	+	+	.	3	23	
	<i>Picea abies</i>	E3b	.	.	r	.	.	.	.	.	.	+	+	+	.	4	31
	<i>Picea abies</i>	E3a	.	.	.	.	.	r	.	.	.	.	.	.	1	8	
	<i>Picea abies</i>	E2b	.	.	.	.	.	.	.	.	.	+	.	+	+	3	23
	<i>Picea abies</i>	E1	.	.	.	.	.	.	.	.	.	+	.	.	.	1	8
	<i>Maianthemum bifolium</i>	E1	.	.	.	.	.	.	.	.	.	+	+	.	.	2	15
	<i>Picea abies</i>	E2a	.	.	.	.	.	.	.	.	.	+	+	.	+	2	15
	<i>Larix decidua</i>	E3b	.	.	r	.	.	.	.	.	.	.	.	.	1	8	
	<i>Dryopteris dilatata</i>	E1	.	.	.	.	+	.	.	.	.	.	.	.	1	8	
	<i>Gentiana asclepiadea</i>	E1	.	.	.	.	.	.	.	.	.	+	.	.	1	8	

Number of relevé (Zaporedna štev. popisa)		1	2	3	4	5	6	7	8	9	10	11	12	13	Pr.	fr.
EP	<b><i>Erico-Pinetea</i></b>															
	<i>Calamagrostis varia</i>	E1	.	.	.	.	.	.	.	.	+	+	+	+	4	31
	<i>Peucedanum austriacum</i>	E1	.	.	.	.	.	.	.	.	r	+	+	.	3	23
	<i>Pinus nigra</i>	E3b	.	.	.	.	r	.	.	.	.	.	.	.	1	8
	<i>Rubus saxatilis</i>	E1	.	.	.	.	.	.	.	.	+	.	.	.	1	8
	<i>Aquilegia nigricans</i>	E1	.	.	.	.	.	.	.	.	.	+	.	.	1	8
	<i>Carex alba</i>	E1	.	.	.	.	.	.	.	.	.	.	+	.	1	8
SSC	<b><i>Sambuco-Salicetum capreae</i></b>															
	<i>Salix caprea</i>	E3b	.	.	.	.	.	.	.	.	.	+	.	.	1	8
	<i>Salix caprea</i>	E3a	r	.	.	.	.	.	.	+	.	.	.	.	2	15
	<i>Betula pendula</i>	E3b	.	.	.	.	.	r	.	.	.	.	.	.	1	8
	<i>Sorbus aucuparia</i>	E3b	.	.	.	.	.	.	r	.	.	.	.	.	1	8
RP	<b><i>Rhamno-Prunetea</i></b>															
	<i>Crataegus monogyna</i>	E2a	.	.	.	.	.	.	.	.	+	+	.	.	2	15
	<i>Crataegus monogyna</i>	E2b	.	.	.	.	.	.	.	.	+	.	+	.	2	15
	<i>Crataegus monogyna</i>	E1	.	.	.	.	.	.	.	.	.	.	+	.	1	8
	<i>Euonymus europaea</i>	E1	.	.	.	.	.	.	.	.	+	.	.	.	1	8
	<i>Rubus hirtus</i>	E2a	.	.	.	.	.	.	.	.	r	.	.	.	1	8
	<i>Berberis vulgaris</i>	E2a	.	.	.	.	.	.	.	.	.	.	+	.	1	8
MuA	<b><i>Mulgedio-Aconitetea</i></b>															
	<i>Senecio ovatus</i>	E1	.	+	+	.	+	.	+	.	.	+	+	.	7	54
	<i>Aconitum lycoctonum</i>	E1	2	+	.	.	.	.	.	.	.	.	.	.	2	15
	<i>Athyrium filix-femina</i>	E1	.	.	.	.	.	.	.	.	+	+	.	.	2	15
	<i>Milium effusum</i>	E1	.	.	.	.	.	.	.	.	+	.	.	.	1	8
	<i>Polygonatum verticillatum</i>	E1	.	.	.	.	.	.	.	.	.	+	.	.	1	8
EA	<b><i>Epilobietea angustifoli</i></b>															
	<i>Fragaria vesca</i>	E1	+	+	.	.	+	.	.	.	+	.	+	+	6	46
GU	<b><i>Galio-Urticetea</i></b>															
	<i>Geum urbanum</i>	E1	+	+	+	.	+	.	.	+	1	.	.	+	8	62
	<i>Urtica dioica</i>	E1	.	.	+	.	+	.	.	+	+	.	.	.	4	31
	<i>Alliaria petiolata</i>	E1	.	.	.	.	.	.	.	+	.	.	.	.	1	8
	<i>Allium vineale</i>	E1	.	.	.	.	.	.	.	.	.	.	.	+	1	8
TG	<b><i>Trifolio-Geranietea</i></b>															
	<i>Campanula rapunculoides</i>	E1	.	.	.	.	.	.	.	.	.	+	+	+	3	23
	<i>Lilium bulbiferum</i>	E1	.	.	.	.	.	.	.	.	.	.	r	.	1	8
	<i>Valeriana wallrothii</i>	E1	.	.	.	.	.	.	.	.	.	.	.	+	1	8
FB	<b><i>Festuco-Brometea</i></b>															
	<i>Allium carinatum</i> subsp. <i>carinatum</i>	E1	.	.	.	.	.	.	.	.	+	+	1	.	3	23
	<i>Cirsium erisithales</i>	E1	.	.	.	.	.	.	.	.	+	.	+	+	3	23
	<i>Euphorbia cyparissias</i>	E1	.	.	.	.	.	.	.	.	+	.	.	.	1	8
MA	<b><i>Molinio-Arrhenatheretea</i></b>															
	<i>Angelica sylvestris</i>	E1	.	.	.	.	+	+	.	.	+	+	+	+	6	46
	<i>Veronica chamaedrys</i>	E1	+	+	.	.	.	.	.	+	.	.	.	.	3	23
	<i>Colchicum autumnale</i>	E1	.	+	.	.	.	.	.	.	.	.	.	.	1	8
	<i>Anthriscus sylvestris</i>	E1	.	.	.	.	.	.	.	+	.	.	.	.	1	8
	<i>Crocus albiflorus</i>	E1	.	.	.	.	.	.	.	+	.	.	.	.	1	8
	<i>Poa trivialis</i>	E1	.	.	.	.	.	.	.	+	.	.	.	.	1	8
	<i>Galium mollugo</i>	E1	.	.	.	.	.	.	.	.	.	.	.	+	1	8
AT	<b><i>Asplenietea trichomanis</i> s. lat.</b>															
	<i>Asplenium trichomanes</i>	E1	.	.	+	+	+	+	+	+	1	+	+	1	10	77

Number of relevé (Zaporedna štev. popisa)		1	2	3	4	5	6	7	8	9	10	11	12	13	Pr.	fr.	
<i>Polyodium vulgare</i>	E1	.	.	.	.	.	+	.	.	.	1	1	+	+	5	38	
<i>Moehringia muscosa</i>	E1	.	.	.	.	.	.	.	.	.	1	1	+	.	3	23	
<i>Cymbalaria muralis</i>	E1	.	.	.	.	.	+	+	.	.	.	.	.	.	2	15	
<i>Asplenium ruta-muraria</i>	E1	.	.	.	.	.	+	.	.	.	.	.	.	.	1	8	
<i>Cardaminopsis arenosa</i>	E1	.	.	.	.	.	.	.	+	.	.	.	.	.	1	8	
<i>Phyteuma scheuchzeri</i> subsp. <i>columnae</i>	E1	.	.	.	.	.	.	.	.	.	.	.	+	.	1	8	
<b>ML Mosses and lichens (Mahovi in lišaji)</b>																	
<i>Isothecium alopecuroides</i>	E0	1	1	3	2	2	1	1	+	.	+	1	+	.	11	85	
<i>Ctenidium molluscum</i>	E0	1	.	+	2	2	2	2	+	.	3	2	2	+	11	85	
<i>Homalothecium lutescens</i>	E0	.	.	2	1	+	+	1	.	+	.	.	.	.	6	46	
<i>Plagiomnium cuspidatum</i>	E0	.	.	+	+	+	+	+	.	.	+	.	.	.	6	46	
<i>Neckera crispa</i>	E0	.	.	.	+	1	1	1	.	.	.	2	2	.	6	46	
<i>Polytrichum formosum</i>	E0	.	.	.	+	+	.	.	+	.	+	+	.	+	6	46	
<i>Anomodon viticulosus</i>	E0	.	.	+	+	.	.	+	.	.	1	1	.	.	5	38	
<i>Schistidium apocarpum</i>	E0	.	.	+	+	.	+	+	.	+	.	.	.	.	5	38	
<i>Brachythecium rutabulum</i>	E0	.	.	.	.	+	.	+	+	+	.	+	.	.	5	38	
<i>Porella platyphylla</i>	E0	.	.	+	1	+	.	1	.	.	.	.	.	.	4	31	
<i>Homalothecium philippeanum</i>	E0	.	.	+	+	.	+	1	.	.	.	.	.	.	4	31	
<i>Plagiomnium undulatum</i>	E0	.	.	.	.	.	+	+	+	.	.	.	.	.	1	4	31
<i>Thamnobryum alopecurum</i>	E0	.	.	.	.	.	.	+	.	.	2	1	+	.	4	31	
<i>Neckera complanata</i>	E0	.	.	.	.	+	+	+	.	.	.	.	.	.	3	23	
<i>Atrichum undulatum</i>	E0	+	.	.	.	.	.	.	1	.	.	.	.	.	2	15	
<i>Brachythecium salebrosum</i>	E0	.	.	+	.	.	.	.	+	.	.	.	.	.	2	15	
<i>Anomodon attenuatus</i>	E0	+	.	.	.	.	.	.	.	.	.	.	.	.	1	8	
<i>Porella arboris-vitae</i>	E0	.	.	.	+	.	.	.	.	.	.	.	.	.	1	8	
<i>Fissidens dubius</i>	E0	.	.	.	.	.	+	.	.	.	.	.	.	.	1	8	
<i>Homalothecium sericeum</i>	E0	.	.	.	.	.	.	.	+	.	.	.	.	.	1	8	
<i>Thuidium tamariscinum</i>	E0	.	.	.	.	.	.	.	+	.	.	.	.	.	1	8	
<i>Mnium</i> sp.	E0	.	.	.	.	.	.	.	.	+	.	.	.	.	1	8	
<i>Peltigera canina</i>	E0	.	.	.	.	.	.	.	.	.	.	.	+	.	1	8	

#### Legend – Legenda

A Limestone – apnenec

D Dolomite – dolomit

Re Rendzina – rendzina

Rj Brown calcareous soil – rjava pokarbonatna tla

Pr. Presence (number of relevés in which the species is presented) – število popisov, v katerih se pojavlja vrsta

Fr. Frequency in % – frekvenca v %

*Crocus vernus* subsp. *vernus*\* is according to new findings *Crocus heuffelianus* Herb. (Peruzzi 2016)

**Table 6:** Synoptic table of syntaxa from the suballiance *Ostryo-Tilienion platyphylli* in the (south)western Slovenia.

**Tabela 6:** Sintezna tabela sintaxonov podzveze *Ostryo-Tilienion platyphylli* v (jugo)zahodni Sloveniji.

Successive number (Zaporedna številka)	1	2	3	4	5	6	
Sign for syntaxa (Oznaka sintaksona)	CoAp	RaAp	PoTpsr	PoTpcs	PoTpha	LoTp	
Number of relevés (Število popisov)	10	13	8	5	5	13	
<b><i>Tilio-Acerion</i></b>							
<i>Adoxa moschatellina</i>	E1	90	.	88	.	20	62
<i>Acer pseudoplatanus</i>	E3b	90	100	38	60	60	46
<i>Acer pseudoplatanus</i>	E3a	10	38	13	20	.	31
<i>Acer pseudoplatanus</i>	E2b	10	38	38	20	20	15
<i>Acer pseudoplatanus</i>	E2a	20	46	50	40	20	8
<i>Acer pseudoplatanus</i>	E1	70	92	88	80	40	38
<i>Tilia platyphyllos</i>	E3b	90	15	100	100	80	100
<i>Tilia platyphyllos</i>	E3a	20	15	13	80	100	38
<i>Tilia platyphyllos</i>	E2b	10	.	13	60	40	31
<i>Tilia platyphyllos</i>	E2a	10	.	38	20	40	8
<i>Tilia platyphyllos</i>	E1	.	.	75	20	.	.
<i>Tilia cordata</i>	E3b	90	8	13	60	40	100
<i>Tilia cordata</i>	E3a	30	.	.	20	60	69
<i>Tilia cordata</i>	E2b	.	.	.	20	.	23
<i>Tilia cordata</i>	E2a	10	.	.	20	20	23
<i>Isopyrum thalictroides</i>	E1	70	62	.	.	40	23
<i>Geranium robertianum</i>	E1	60	38	63	20	60	15
<i>Aruncus dioicus</i>	E1	60	15	.	20	60	23
<i>Corydalis solida</i>	E1	50	.	63	.	.	54
<i>Ulmus glabra</i>	E3b	20	54	13	100	.	.
<i>Ulmus glabra</i>	E3a	60	54	.	60	20	.
<i>Ulmus glabra</i>	E2b	.	92	.	80	.	.
<i>Ulmus glabra</i>	E2a	50	62	13	60	20	8
<i>Ulmus glabra</i>	E1	30	31	13	80	.	.
<i>Phyllitis scolopendrium</i>	E1	40	85	.	.	20	31
<i>Thalictrum aquilegiifolium</i>	E1	30	.	50	.	.	.
<i>Acer platanoides</i>	E3b	20	.	.	20	20	8
<i>Acer platanoides</i>	E3a	10	.	.	.	.	8
<i>Acer platanoides</i>	E2b	.	.	.	.	.	.
<i>Acer platanoides</i>	E2a	20	.	.	.	20	.
<i>Acer platanoides</i>	E1	20	.	.	20	20	23
<i>Juglans regia</i>	E3b	.	15	.	.	.	8
<i>Juglans regia</i>	E2a	10	15	.	.	.	.
<i>Polystichum setiferum</i>	E1	.	85	.	.	.	.
<i>Lunaria rediviva</i>	E1	.	69	.	.	.	8
<i>Tephroseris pseudocrispa</i>	E1	.	8	.	.	.	.
<i>Dryopteris affinis</i>	E1	.	8	.	.	.	.
<i>Polystichum aculeatum</i>	E1	.	8	.	.	.	.
<i>Glechoma hirsuta</i>	E1	.	.	13	.	.	.
<i>Arum maculatum</i>	E1	.	.	.	.	.	62
<i>Euonymus latifolia</i>	E2a	.	.	.	.	.	15
<i>Euonymus latifolia</i>	E1	.	.	.	.	.	15
<i>Stellaria montana</i>	E1	.	.	.	.	.	8

Successive number (Zaporedna številka)		1	2	3	4	5	6
<b><i>Erythronio-Carpinion</i></b>							
<i>Galanthus nivalis</i>	E1	100	85	100	60	100	54
<i>Primula vulgaris</i>	E1	60	8	63	40	80	54
<i>Helleborus odorus</i>	E1	.	69	.	20	.	85
<i>Crocus vernus</i> subsp. <i>vernus</i> *	E1	.	38	13	.	.	.
<i>Erythronium dens-canis</i>	E1	.	.	63	.	.	31
<i>Ornithogalum pyrenaicum</i>	E1	.	.	38	.	.	8
<i>Lonicera caprifolium</i>	E2a	.	.	.	40	.	.
<b><i>Aremonio-Fagion</i></b>							
<i>Lamium orvala</i>	E1	100	100	88	60	.	85
<i>Cardamine enneaphyllos</i>	E1	90	77	38	100	60	54
<i>Cyclamen purpurascens</i>	E1	70	38	88	100	100	54
<i>Hacquetia epipactis</i>	E1	30	54	.	60	.	.
<i>Geranium nodosum</i>	E1	.	.	88	.	.	.
<i>Calamintha grandiflora</i>	E1	.	.	63	.	.	.
<i>Anemone trifolia</i>	E1	.	.	.	.	.	71
<i>Cardamine trifolia</i>	E1	.	.	.	.	.	38
<i>Omphalodes verna</i>	E1	.	.	.	.	.	31
<i>Euphorbia carniolica</i>	E1	.	.	.	.	.	23
<i>Anemone x pittonii</i>	E1	.	.	.	.	.	15
<i>Daphne laureola</i>	E2a	.	.	.	.	.	15
<i>Rhamnus fallax</i>	E2a	.	.	.	.	.	15
<i>Aremonia agrimonoides</i>	E1	.	.	.	.	.	15
<i>Helleborus niger</i>	E1	.	.	.	.	.	8
<b><i>Alnion incanae</i></b>							
<i>Aesculus hippocastanum</i>	E3b	.	.	13	.	.	.
<i>Aesculus hippocastanum</i>	E3a	10	.	.	.	.	.
<i>Aesculus hippocastanum</i>	E2a	.	.	.	.	20	.
<i>Rubus caesius</i>	E1	.	.	13	20	.	.
<i>Alnus glutinosa</i>	E3b	.	8	.	.	.	.
<i>Festuca gigantea</i>	E1	.	8	.	.	.	.
<i>Chrysosplenium alternifolium</i>	E1	.	.	.	.	.	15
<i>Dryopteris carthusiana</i>	E1	.	.	.	.	.	8
<b><i>Fagetalia sylvaticae</i></b>							
<i>Asarum europaeum</i> subsp. <i>caucasicum</i>	E1	100	92	100	80	60	100
<i>Polygonatum multiflorum</i>	E1	100	85	63	60	80	77
<i>Carpinus betulus</i>	E3b	100	46	25	.	40	69
<i>Carpinus betulus</i>	E3a	50	15	38	.	40	62
<i>Carpinus betulus</i>	E2b	20	.	13	.	20	23
<i>Carpinus betulus</i>	E2a	.	15	.	.	.	8
<i>Carpinus betulus</i>	E1	.	15	.	.	.	23
<i>Mercurialis perennis</i>	E1	90	100	88	100	20	100
<i>Lathyrus vernus</i>	E1	90	31	75	100	80	46
<i>Corydalis cava</i>	E1	80	85	25	.	.	8
<i>Galeobdolon flavidum</i>	E1	80	46	.	80	40	62
<i>Actaea spicata</i>	E1	80	31	63	.	.	77
<i>Mycelis muralis</i>	E1	70	54	88	80	60	31
<i>Galium laevigatum</i>	E1	70	.	.	40	100	38
<i>Viola reichenbachiana</i>	E1	60	46	.	.	.	8

Successive number (Zaporedna številka)		1	2	3	4	5	6
<i>Heracleum sphondylium</i>	E1	50	.	100	.	.	69
<i>Dryopteris filix-mas</i>	E1	50	31	88	60	.	77
<i>Campanula trachelium</i>	E1	50	.	63	80	60	62
<i>Salvia glutinosa</i>	E1	50	69	100	80	.	62
<i>Sambucus nigra</i>	E3	.	.	.	.	.	15
<i>Sambucus nigra</i>	E2b	20	85	13	40	.	38
<i>Sambucus nigra</i>	E2a	50	38	25	.	.	69
<i>Sanicula europaea</i>	E1	50	.	.	.	.	15
<i>Symphytum tuberosum</i>	E1	40	62	63	60	.	23
<i>Fraxinus excelsior</i>	E3b	10	.	50	.	.	85
<i>Fraxinus excelsior</i>	E2a	30	.	.	40	.	23
<i>Fraxinus excelsior</i>	E1	.	.	38	.	.	38
<i>Cardamine bulbifera</i>	E1	20	85	.	20	.	46
<i>Euphorbia dulcis</i>	E1	20	23	63	40	.	.
<i>Paris quadrifolia</i>	E1	20	.	25	.	.	92
<i>Melica nutans</i>	E1	20	.	25	.	.	.
<i>Neottia nidus-avis</i>	E1	20	.	.	.	.	31
<i>Pulmonaria officinalis</i>	E1	10	54	75	20	.	23
<i>Galeobdolon montanum</i>	E1	10	31	63	.	20	.
<i>Cardamine impatiens</i>	E1	10	38	.	.	.	38
<i>Circaea lutetiana</i>	E1	10	23	.	.	.	.
<i>Epipactis helleborine</i>	E1	10	.	.	.	20	.
<i>Lonicera alpigena</i>	E2a	10	.	.	.	.	31
<i>Lilium martagon</i>	E1	.	54	.	60	.	8
<i>Brachypodium sylvaticum</i>	E1	.	31	.	.	.	15
<i>Fagus sylvatica</i>	E3b	.	.	13	60	.	62
<i>Fagus sylvatica</i>	E3a	.	8	.	40	.	38
<i>Fagus sylvatica</i>	E2b	.	15	.	.	.	54
<i>Fagus sylvatica</i>	E2a	.	8	.	.	.	31
<i>Fagus sylvatica</i>	E1	.	8	13	.	.	31
<i>Prunus avium</i>	E3b	.	8	25	.	.	46
<i>Prunus avium</i>	E1	.	.	13	.	.	.
<i>Carex sylvatica</i>	E1	.	8	.	.	.	15
<i>Scrophularia nodosa</i>	E1	.	8	38	.	.	8
<i>Prenanthes purpurea</i>	E1	.	8	.	20	.	.
<i>Ranunculus lanuginosus</i>	E1	.	.	25	.	.	.
<i>Laburnum alpinum</i>	E3a	.	.	.	20	.	.
<i>Laburnum alpinum</i>	E2b	.	.	.	20	.	.
<i>Laburnum alpinum</i>	E2a	.	.	.	20	.	.
<i>Laburnum alpinum</i>	E1	.	.	.	20	.	.
<i>Daphne mezereum</i>	E2a	.	.	.	.	.	85
<i>Euphorbia amygdaloides</i>	E1	.	.	.	.	.	62
<i>Cardamine pentaphyllos</i>	E1	.	.	.	.	.	54
<i>Myosotis sylvatica</i> agg.	E1	.	.	.	.	.	15
<i>Allium ursinum</i>	E1	.	.	.	.	.	15
<i>Festuca altissima</i>	E1	.	.	.	.	.	8
<i>Carpinion orientalis</i>							
<i>Sesleria autumnalis</i>	E1	80	8	100	100	100	62
<i>Carpinus orientalis</i>	E3a	20	.	.	.	.	.

Successive number (Zaporedna številka)		1	2	3	4	5	6
<i>Ruscus aculeatus</i>	E2a	.	92	.	80	.	.
<i>Asparagus acutifolius</i>	E2a	.	31	.	.	.	.
<i>Acer monspessulanum</i>	E3b	.	.	.	20	.	.
<i>Acer monspessulanum</i>	E2a	.	.	.	.	40	.
<i>Frangula rupestris</i>	E2a	.	.	.	.	40	.
<b><i>Quercetalia pubescenti-petraeae</i></b>							
<i>Convallaria majalis</i>	E1	80	.	63	20	100	.
<i>Lathyrus venetus</i>	E1	70	15	75	100	40	.
<i>Ostrya carpinifolia</i>	E3b	60	23	38	100	60	77
<i>Ostrya carpinifolia</i>	E3a	30	.	25	20	80	23
<i>Ostrya carpinifolia</i>	E2b	.	.	.	.	40	.
<i>Ostrya carpinifolia</i>	E2a	.	.	.	.	20	.
<i>Helleborus multifidus</i> subsp. <i>istriacus</i> *	E1	50	8	88	.	80	.
<i>Fraxinus ornus</i>	E3b	.	31	50	60	40	15
<i>Fraxinus ornus</i>	E3a	60	8	75	40	80	85
<i>Fraxinus ornus</i>	E2b	30	15	25	.	80	8
<i>Fraxinus ornus</i>	E2a	20	54	25	20	40	15
<i>Fraxinus ornus</i>	E1	40	.	25	20	.	.
<i>Mercurialis ovata</i>	E1	60	.	63	.	100	.
<i>Melittis melissophyllum</i>	E1	20	.	75	.	60	.
<i>Cornus mas</i>	E2b	20	15	13	100	60	15
<i>Tanacetum corymbosum</i>	E1	20	.	88	20	40	8
<i>Arabis turrita</i>	E1	20	15	.	40	40	.
<i>Asparagus tenuifolius</i>	E1	20	.	50	.	20	.
<i>Mercurialis x paxii</i>	E1	20	.	25	.	20	.
<i>Quercus cerris</i>	E3b	10	.	38	.	.	.
<i>Sorbus aria</i> ( <i>Aria edulis</i> )	E3b	.	.	50	.	40	.
<i>Sorbus aria</i> ( <i>Aria edulis</i> )	E3a	10	.	38	40	40	8
<i>Sorbus aria</i> ( <i>Aria edulis</i> )	E2b	.	.	13	20	40	.
<i>Sorbus aria</i> ( <i>Aria edulis</i> )	E2a	.	.	13	.	20	.
<i>Sorbus aria</i> ( <i>Aria edulis</i> )	E1	.	.	13	.	.	.
<i>Euonymus verrucosa</i>	E2b	.	.	25	.	.	.
<i>Euonymus verrucosa</i>	E2a	10	.	50	.	60	.
<i>Quercus pubescens</i>	E3b	.	.	.	20	40	.
<i>Quercus pubescens</i>	E3a	10	.	.	.	.	.
<i>Quercus pubescens</i>	E2b	.	.	.	.	20	.
<i>Lathyrus niger</i>	E1	10	.	13	.	.	.
<i>Orchis pallens</i>	E1	10	.	.	20	.	.
<i>Hierochloë australis</i>	E1	10	.	.	.	80	.
<i>Aristolochia lutea</i>	E1	10	.	.	.	.	.
<i>Prunus mahaleb</i>	E2b	.	.	.	.	20	.
<i>Prunus mahaleb</i>	E2a	10	.	.	.	.	.
<i>Viola sepincola</i>	E1	10	.	.	.	.	.
<i>Tamus communis</i>	E1	.	8	.	20	.	.
<i>Cnidium silaifolium</i>	E1	.	.	100	60	20	.
<i>Campanula persicifolia</i>	E1	.	.	50	.	60	.
<i>Hypericum montanum</i>	E1	.	.	13	.	20	.
<i>Orchis mascula</i> subsp. <i>speciosa</i>	E1	.	.	.	.	.	8

Successive number (Zaporedna številka)	1	2	3	4	5	6
<b>Quercetalia roboris</b>						
<i>Castanea sativa</i>						
E3b	.	8	.	100	.	.
<i>Castanea sativa</i>	E1	.	8	.	.	.
<i>Rubus hirtus</i>	E2	.	8	.	.	8
<i>Serratula tinctoria</i>	E1	.	.	.	20	20
<b>Querco-Fagetea</b>						
<i>Veratrum nigrum</i>	E1	90	8	38	60	100
<i>Hepatica nobilis</i>	E1	80	46	88	80	100
<i>Hedera helix</i>	E3a	70	92	13	80	40
<i>Hedera helix</i>	E2a	.	.	.	40	.
<i>Hedera helix</i>	E1	80	69	13	100	60
<i>Lonicera xylosteum</i>	E2	90	.	88	.	60
<i>Carex digitata</i>	E1	70	31	50	.	100
<i>Anemone ranunculoides</i>	E1	60	.	.	.	46
<i>Corylus avellana</i>	E3a	10	15	.	.	62
<i>Corylus avellana</i>	E2b	50	69	88	100	40
<i>Corylus avellana</i>	E2a	10	.	13	40	.
<i>Corylus avellana</i>	E1	.	15	.	.	.
<i>Acer campestre</i>	E3b	40	46	.	40	.
<i>Acer campestre</i>	E3a	60	38	75	.	23
<i>Acer campestre</i>	E2b	20	15	25	.	.
<i>Acer campestre</i>	E2a	10	.	50	.	.
<i>Acer campestre</i>	E1	20	23	63	40	.
<i>Viola mirabilis</i>	E1	60	.	.	.	.
<i>Melica uniflora</i>	E1	50	.	50	.	.
<i>Lathraea squamaria</i>	E1	30	23	.	20	.
<i>Quercus petraea</i>	E3b	40	15	.	40	20
<i>Quercus petraea</i>	E1	.	8	.	20	.
<i>Gagea lutea</i>	E1	40	8	.	.	38
<i>Stellaria holostea</i>	E1	30	.	.	.	.
<i>Ranunculus ficaria</i>	E1	20	46	13	.	.
<i>Anemone nemorosa</i>	E1	20	77	.	40	.
<i>Viola riviniana</i>	E1	20	.	.	.	20
<i>Moehringia trinervia</i>	E1	10	8	25	.	15
<i>Dactylis glomerata</i> subsp. <i>lobata</i> ( <i>D. polygama</i> )	E1	10	.	.	.	38
<i>Ulmus minor</i>	E2a	10	.	.	.	20
<i>Aegopodium podagraria</i>	E1	.	92	38	.	54
<i>Crataegus laevigata</i>	E2b	.	38	.	.	.
<i>Crataegus laevigata</i>	E2a	.	.	.	40	.
<i>Clematis vitalba</i>	E3a	.	8	.	60	.
<i>Clematis vitalba</i>	E2a	.	46	63	.	.
<i>Clematis vitalba</i>	E1	.	.	13	40	.
<i>Cerastium sylvaticum</i>	E1	.	23	.	.	.
<i>Scilla bifolia</i>	E1	.	15	75	.	.
<i>Malus sylvestris</i>	E3a	.	.	13	.	.
<i>Malus sylvestris</i>	E2b	.	8	.	.	8
<i>Pyrus pyraster</i>	E2a	.	.	13	.	8
<i>Rosa arvensis</i>	E2a	.	.	13	.	.
<i>Spiraea chamaedryfolia</i>	E2a	.	.	.	20	.

Successive number (Zaporedna številka)		1	2	3	4	5	6
<i>Festuca heterophylla</i>	E1	.	.	.	.	.	38
<i>Listera ovata</i>	E1	.	.	.	.	.	31
<i>Dactylorhiza fuchsii</i>	E1	.	.	.	.	.	23
<i>Vinca minor</i>	E1	.	.	.	.	.	15
<i>Cruciata glabra</i>	E1	.	.	.	.	.	15
<b><i>Vaccinio-Piceetea</i></b>							
<i>Solidago virgaurea</i>	E1	20	.	63	.	40	.
<i>Maianthemum bifolium</i>	E1	20	.	13	.	.	.
<i>Hieracium murorum</i>	E1	10	.	.	.	.	.
<i>Aposeris foetida</i>	E1	.	15	25	60	.	.
<i>Oxalis acetosella</i>	E1	.	54	.	.	.	.
<i>Picea abies</i>	E3b	.	.	.	.	.	.
<i>Picea abies</i>	E2b	.	.	25	.	.	.
<i>Rosa pendulina</i>	E2a	.	.	13	.	.	.
<b><i>Erico-Pinetea</i></b>							
<i>Calamagrostis varia</i>	E1	.	.	13	.	.	31
<i>Amelanchier ovalis</i>	E2a	.	.	.	.	40	.
<i>Chamaecytisus hirsutus</i>	E1	.	.	.	.	40	.
<i>Pinus nigra</i>	E3b	.	.	.	.	20	8
<i>Peucedanum austriacum</i>	E1	.	.	.	.	.	23
<i>Rubus saxatilis</i>	E1	.	.	.	.	.	8
<i>Carex alba</i>	E1	.	.	.	.	.	8
<b><i>Sambuco-Salicion capreae</i></b>							
<i>Salix caprea</i>	E3b	.	.	.	.	.	8
<i>Salix caprea</i>	E3a	.	.	.	.	.	15
<i>Betula pendula</i>	E3b	.	.	.	.	.	8
<i>Sorbus aucuparia</i>	E3b	.	.	.	.	.	8
<b><i>Rhmano-Prunetea</i></b>							
<i>Euonymus europaea</i>	E2	20	38	50	.	.	8
<i>Berberis vulgaris</i>	E2a	10	.	.	20	.	8
<i>Robinia pseudoacacia</i>	E3b	.	46	.	40	.	.
<i>Robinia pseudoacacia</i>	E3a	.	8	.	40	.	.
<i>Robinia pseudoacacia</i>	E2a	.	8	.	.	.	.
<i>Crataegus monogyna</i>	E3a	.	8	.	20	.	15
<i>Crataegus monogyna</i>	E2b	.	.	.	60	20	15
<i>Cornus sanguinea</i>	E2b	.	.	13	.	.	.
<i>Cornus sanguinea</i>	E2a	.	.	13	.	.	.
<i>Rubus fruticosus agg.</i>	E2a	.	.	.	40	.	.
<i>Rosa canina</i>	E2a	.	.	.	.	20	.
<b><i>Mulgedio-Aconitetea, Betulo-Alnetea</i></b>							
<i>Aconitum lycoctonum</i>	E1	30	38	75	.	.	15
<i>Senecio nemorensis</i>	E1	20	15	.	40	.	.
<i>Senecio ovatus</i>	E1	10	.	38	20	.	54
<i>Ribes alpinum</i>	E2a	10	.	.	.	.	.
<i>Athyrium filix-femina</i>	E1	.	31	.	.	.	15
<i>Aconitum variegatum</i>	E1	.	.	25	.	.	.
<i>Saxifraga rotundifolia</i>	E1	.	.	75	.	.	.
<i>Silene dioica</i>	E1	.	.	25	.	.	.
<i>Milium effusum</i>	E1	.	.	.	.	.	8

Successive number (Zaporedna številka)		1	2	3	4	5	6
<i>Polygonatum verticillatum</i>	E1	.	.	.	.	.	8
<b><i>Epilobietea angustifolii</i></b>							
<i>Solanum dulcamara</i>	E1	10	.	.	.	.	.
<i>Carpesium cernuum</i>	E1	.	23	.	.	.	.
<i>Galeopsis pubescens</i>	E1	.	8	.	.	.	.
<i>Physalis alkekengi</i>	E1	.	8	.	.	.	.
<i>Arctium nemorosum</i>	E1	.	8	25	.	.	.
<i>Stachys sylvatica</i>	E1	.	8	.	.	.	.
<i>Fragaria vesca</i>	E1	.	.	50	.	.	46
<i>Hypericum hirsutum</i>	E1	.	.	50	.	.	.
<i>Lapsana communis</i>	E1	.	.	25	.	.	.
<b><i>Galio-Urticetea</i></b>							
<i>Urtica dioica</i>	E1	20	8	25	.	.	31
<i>Geum urbanum</i>	E1	.	15	63	.	.	62
<i>Parietaria officinalis</i>	E1	.	8	.	.	.	.
<i>Lamium maculatum</i>	E1	.	.	38	.	.	.
<i>Alliaria petiolata</i>	E1	.	.	13	.	.	8
<i>Torilis japonica</i>	E1	.	.	13	.	.	.
<i>Allium vineale</i>	E1	.	.	.	.	.	8
<b><i>Stellarietea mediae</i></b>							
<i>Stellaria neglecta</i>	E1	20	.	.	.	.	.
<i>Galium aparine</i>	E1	.	8	13	.	.	.
<i>Erigeron annuus</i>	E1	.	8	.	.	.	.
<i>Myosotis arvensis</i>	E1	.	.	13	.	.	.
<i>Myosotis</i> sp.	E1	.	.	13	.	.	.
<b><i>Trifolio-Geranietea</i></b>							
<i>Campanula rapunculoides</i>	E1	60	.	75	60	60	23
<i>Lilium carniolicum</i>	E1	20	.	38	.	20	.
<i>Viola odorata</i>	E1	10	.	.	.	.	.
<i>Melampyrum velebiticum</i>	E1	10	.	.	.	40	.
<i>Verbascum lanatum</i>	E1	.	.	25	.	.	.
<i>Verbascum chaixii</i>	E1	.	.	25	.	.	.
<i>Polygonatum odoratum</i>	E1	.	.	13	.	40	.
<i>Vincetoxicum hirundinaria</i>	E1	.	.	13	20	20	.
<i>Paeonia officinalis</i>	E1	.	.	13	.	40	.
<i>Silene nutans</i>	E1	.	.	13	.	20	.
<i>Valeriana nemorensis</i>	E1	.	.	13	.	40	.
<i>Thalictrum minus</i>	E1	.	.	13	.	.	.
<i>Vicia</i> sp.	E1	.	.	13	.	.	.
<i>Vicia sylvatica</i>	E1	.	.	13	.	.	.
<i>Calamintha einseleana</i>	E1	.	.	13	.	.	.
<i>Anthericum ramosum</i>	E1	.	.	.	.	40	.
<i>Digitalis grandiflora</i>	E1	.	.	.	.	40	.
<i>Viola hirta</i>	E1	.	.	.	.	20	.
<i>Peucedanum cervaria</i>	E1	.	.	.	.	20	.
<i>Valeriana wallrothii</i> ( <i>V. collina</i> )	E1	.	.	.	.	20	8
<i>Lilium bulbiferum</i>	E1	.	.	.	.	.	8
<b><i>Festuco-Brometea</i></b>							
<i>Allium carinatum</i> subsp. <i>carinatum</i>	E1	10	.	.	.	.	23

Successive number (Zaporedna številka)		1	2	3	4	5	6
<i>Taraxacum laevigatum</i>	E1	.	.	25	.	.	.
<i>Brachypodium rupestre</i>	E1	.	.	13	.	.	.
<i>Arabis hirsuta</i>	E1	.	.	13	.	.	.
<i>Sesleria tenuifolia</i>	E1	.	.	.	.	40	.
<i>Carex humilis</i>	E1	.	.	.	.	20	.
<i>Iberis linifolia</i>	E1	.	.	.	.	20	.
<i>Cirsium erisithales</i>	E1	.	.	.	.	.	23
<i>Euphorbia cyparissias</i>	E1	.	.	.	.	.	8
<b>Koelerio-Corynephoretea</b>							
<i>Cardaminopsis arenosa</i>	E1	10	.	25	20	60	8
<i>Saxifraga tridactylites</i>	E1	.	.	.	.	20	.
<b>Molinio-Arrhenatheretea</b>							
<i>Veronica chamaedrys</i>	E1	10	.	88	.	.	23
<i>Muscari botryoides</i>	E1	10	.	.	.	.	.
<i>Anthriscus sylvestris</i>	E1	10	.	.	.	.	8
<i>Taraxacum sect. Ruderalia</i>	E1	.	.	38	20	.	.
<i>Angelica sylvestris</i>	E1	.	.	.	.	.	46
<i>Colchicum autumnale</i>	E1	.	.	.	.	.	8
<i>Crocus albiflorus</i>	E1	.	.	.	.	.	8
<i>Poa trivialis</i>	E1	.	.	.	.	.	8
<i>Galium mollugo</i>	E1	.	.	.	.	.	8
<b>Cystopteridion fragilis</b>							
<i>Moehringia muscosa</i>	E1	30	8	63	60	100	23
<i>Pseudofumaria alba</i>	E1	30	.	75	.	.	.
<i>Cystopteris fragilis</i>	E1	10	.	25	.	.	.
<b>Physoplexido-Saxifragion, Potentilletalia caulescentis</b>							
<i>Campanula pyramidalis</i>	E1	10	15	63	.	60	.
<i>Micromeria thymifolia</i>	E1	.	.	.	.	40	.
<i>Primula auricula</i>	E1	.	.	.	.	40	.
<i>Hieracium lasiophyllum</i>	E1	.	.	.	.	20	.
<b>Asplenietea trichomanis</b>							
<i>Asplenium trichomanes</i>	E1	30	46	50	80	80	77
<i>Polypodium vulgare</i>	E1	30	23	13	20	20	38
<i>Polypodium interjectum</i>	E1	10	38	.	.	40	.
<i>Asplenium ruta-muraria</i>	E1	10	.	25	.	40	8
<i>Asplenium adiantum-nigrum</i>	E1	10	.	.	.	.	.
<i>Sedum maximum</i>	E1	.	.	50	.	60	.
<i>Ceterach officinarum</i>	E1	.	.	25	.	.	.
<i>Polypodium australe</i>	E1	.	.	.	.	20	.
<i>Parietaria judaica</i>	E1	.	.	.	.	20	.
<i>Cymbalaria muralis</i>	E1	.	.	.	.	.	15
<i>Phyteuma scheuchzeri</i> subsp. <i>columnae</i>	E1	.	.	.	.	.	8
<b>Mosses and lichens (Mahovi in lišaji)</b>							
<i>Isothecium alopecuroides</i>	E0	80	69	25	80	.	85
<i>Brachythecium rutabulum</i>	E0	80	23	.	.	20	38
<i>Ctenidium molluscum</i>	E0	70	38	63	60	100	85
<i>Neckera crispa</i>	E0	70	15	50	100	80	46
<i>Thamnobryum alopecurum</i>	E0	70	85	.	.	.	31
<i>Plagiomnium undulatum</i>	E0	70	8	.	.	100	31

Successive number (Zaporedna številka)		1	2	3	4	5	6
<i>Homalothecium lutescens</i>	E0	60	15	88	20	40	46
<i>Peltigera canina</i>	E0	50	.	25	.	40	8
<i>Anomodon viticulosus</i>	E0	30	38	63	40	40	38
<i>Neckera complanata</i>	E0	30	23	33	20	20	23
<i>Anomodon attenuatus</i>	E0	30	15	.	.	20	8
<i>Polytrichum formosum</i>	E0	10	.	13	.	.	46
<i>Eurhynchium striatum</i>	E0	10	.	.	.	.	.
<i>Thuidium delicatulum</i>	E0	.	8	.	.	20	.
<i>Conocephalum conicum</i>	E0	.	8	.	.	.	.
<i>Fissidens taxifolius</i>	E0	.	8	.	.	.	.
<i>Schistidium apocarpum</i>	E0	.	.	63	60	20	38
<i>Plagiochila porelloides</i>	E0	.	.	25	.	.	.
<i>Porella platyphylla</i>	E0	.	.	25	.	.	31
<i>Homalothecium sericeum</i>	E0	.	.	13	.	.	8
<i>Mnium sp.</i>	E0	.	.	13	.	.	8
<i>Dicranum scoparium</i>	E0	.	.	.	.	60	.
<i>Thuidium tamariscinum</i>	E0	.	.	.	.	60	8
<i>Hylocomium splendens</i>	E0	.	.	.	.	40	.
<i>Rhytidadelphus triquetrus</i>	E0	.	.	.	.	40	.
<i>Tortella tortuosa</i>	E0	.	.	.	.	20	.
<i>Plagiommium cuspidatum</i>	E0	.	.	.	.	.	46
<i>Homalothecium philippeanum</i>	E0	.	.	.	.	.	31
<i>Brachythecium salebrosum</i>	E0	.	.	.	.	.	15
<i>Atrichum undulatum</i>	E0	.	.	.	.	.	15
<i>Porella arboris-vitae</i>	E0	.	.	.	.	.	8
<i>Fissidens dubius</i>	E0	.	.	.	.	.	8

#### Legend / Legenda

- 1 *Corydalido ochroleucae-Aceretum pseudoplatani veratretosum nigri*
- 2 *Fraxino orni-Aceretum pseudoplatani*
- 3 *Paeonio officinalis-Tilietum platyphylli saxifragetosum rotundifoliae*
- 4 *Paeonio officinalis-Tilietum platyphylli castaneetosum sativae*
- 5 *Paeonio officinalis-Tilietum platyphylli hierochloetosum australis*
- 6 *Lamio orvalae-Tilietum platyphylli*

*Crocus vernus* subsp. *vernus*\* is according to new findings *Crocus heuffelianus* Herb. – Peruzzi (2016)  
*Helleborus multifidus* subsp. *istriacus*\* (incl. *Helleborus dumetorum* subsp. *istriacus*) – Rottensteiner (2016)