

**Lengyel A., Illyés E., Bauer N., Csiky J., Király G., Purger D. & Botta-Dukát Z. (2016):
Classification and syntaxonomical revision of mesic and semi-dry grasslands in Hungary. –
Preslia 88: 201–228**

Electronic Appendix 1. Syntaxa of mesic and semi-dry grasslands according to Borhidi et al. (2012).

Order: *Arrhenatheretalia* Tx. 1931 (in *Molinio–Arrhenatheretea* Tüxen 1937)

1. Alliance: *Arrhenatherion elatioris* Koch 1926
 - 1.1. Association: *Anthoxantho–Festucetum pratensis* Borhidi 2012
 - 1.2. Association: *Pastinaco–Arrhenatheretum* (Knapp 1954) Passarge 1964
 - 1.2.1. Subassociation: *typicum*
 - 1.2.2. Subassociation: *trisetetosum flavescens* Horvatić 1930
 - 1.2.3. Subassociation: *festucetosum rubrae* Jeanplong 1960
 - 1.2.4. Subassociation: *caricetosum tomentosae* Lájér 2002
 - 1.3. Association: *Anthyllido–Festucetum rubrae* (Máthé & Kovács 1960) Soó 1971
 - 1.3.1. Subassociation: *typicum* Borhidi 2012
 - 1.3.2. Subassociation: *agrostetosum tenuis* (Máthé & Kovács 1960) Borhidi 2012
 - 1.3.3. Subassociation: *arrhenatheretosum* (Máthé & Kovács 1960) Borhidi 2012
 - 1.4. Association: *Anthoxantho–Festucetum pseudovinae* Juhász-Nagy 1959
 2. Alliance: *Phyteumo–Trisetion* (Passarge 1969) Ellmauer & Mucina 1993
 - 2.1. Association: *Geranio–Trisetetum flavescens* Knapp ex. Oberd. 1957
 3. Alliance: *Cynosurion cristati* Tüxen 1947
 - 3.1. Association: *Lolio–Cynosuretum* Tüxen 1937
 - 3.2. Association: *Festuco commutatae–Cynosuretum* Tüxen ex Büker 1942
- Order: *Brometalia erecti* Br.-Bl. 1936 (in *Festuco–Brometea* Br.-Bl. & Tüxen ex Klika & Hadač 1944)
1. Alliance: *Bromion erecti* Br.-Bl. 1936
 - 1.1. Association: *Onobrychido viciaefoliae–Brometum erecti* Müller 1966
 - 1.2. Association: *Carlino acaulis–Brometum* Oberdorfer 1957
 2. Alliance: *Cirsio pannonicae–Brachypodium pinnati* Hadač & Klika 1944
 - 2.1. Association: *Euphorbio pannonicae–Brachypodium pinnati* Horváth 2010
 - 2.2. Association: *Polygalo majoris–Brachypodium pinnati* Wagner 1941
 - 2.3. Association: *Sanguisorbo minoris–Brometum erecti* Illyés, Bauer & Botta-Dukát 2009
 - 2.4. Association: *Trifolio medii–Brachypodium pinnati* Illyés, Bauer & Botta-Dukát 2009
 - 2.5. Association: *Lino tenuifolii–Brachypodium pinnati* (Dostál 1933) Soó 1971
 - 2.6. Association: *Poo badensis–Caricetum montanae* Sipos & Varga 1996

Reference

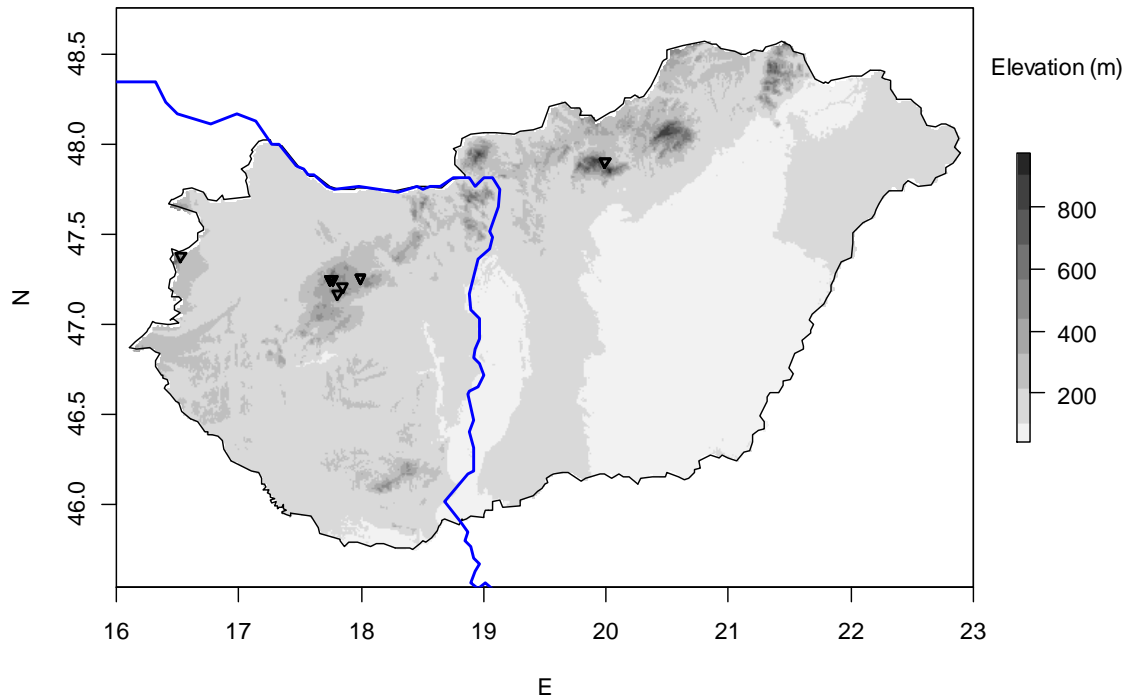
Borhidi, A., Kevey, B. & Lendvai, G. (2012): Plant communities of Hungary. Akadémiai Kiadó, Budapest, 544 pp.

Electronic Appendix 2. Aggregate species applied in the classification of Hungarian mesic and semi-dry meadows. Nomenclature is according to Király (2009).

Achillea millefolium agg.: *A. millefolium*, *A. collina*, *A. pratensis*, *A. asplenifolia*; excl. *A. pannonica*
Agrostis canina agg.: *A. canina*, *A. vinealis*
Agrostis stolonifera agg.: *A. stolonifera*, *A. gigantea*
Arabis hirsuta agg.: *A. hirsuta*, *A. sagittata*
Arenaria serpyllifolia agg.: *A. serpyllifolia*, *A. leptoclados*
Brachypodium pinnatum agg.: *B. pinnatum*, *B. rupestre*
Bromus erectus agg.: *B. erectus*, *B. reptans*, *B. pannonicus*
Bromus racemosus agg.: *B. racemosus*, *B. commutatus*
Carex praecox agg.: *C. curvata*, *C. praecox*
Carex muricata agg.: *C. divulsa*, *C. muricata* (incl. subsp. *lamprocarpa*)
Cerastium brachypetalum agg.: *C. brachypetalum*, *C. tenoreanum*
Cerastium pumilum agg.: *C. glutinosum*, *C. pumilum*
Dianthus pontederiae agg.: *D. giganteiformis*, *D. pontederiae*
Euphrasia rostkoviana agg.: *E. rostkoviana*, *E. kernerii*
Festuca pallens s.lat.: *F. guestfalica*, *F. pallens*, *F. pannonica*
Festuca pratensis agg.: *F. pratensis*, *F. arundinacea*
Festuca rubra agg.: *F. nigrescens*, *F. rubra*
Galium mollugo agg.: *G. mollugo*, *G. album*, *G. lucidum*
Genista tinctoria s.lat.: *G. ovata*, *G. tinctoria*
Helictotrichon adsurgens agg.: *H. adsurgens*, “*H. praeustum*”
Hieracium pilosella agg.: *H. lachenalii*, *H. macranthum*, *H. pilosella*
Hypericum maculatum agg.: *H. maculatum*, *H. dubium*
Jurinea mollis agg.: *J. gycacantha*, *J. mollis*
Koeleria cristata agg.: *K. cristata*, *K. majoriflora*
Leucanthemum vulgare agg.: *L. ircutianum*, *L. margaritae*, *L. vulgare*
Lotus corniculatus agg.: *L. corniculatus*, *L. borbasii*
Luzula campestris agg.: *L. campestris*, *L. divulgata*, *L. multiflora*, “*L. sudetica*”
Molinia caerulea agg.: *M. caerulea*, *M. arundinacea*
Ononis arvensis s.lat.: *O. arvensis*, *O. spinosiformis*
Ornithogalum umbellatum agg.: *O. kochii*, *O. umbellatum*
Phleum pratense agg.: *Ph. bertolonii*, *Ph. pratense*
Poa pratensis agg.: *P. pratensis*, *P. angustifolia*, *P. humilis*
Potentilla argentea agg.: *P. argentea*, *P. inclinata*, *P. neglecta*
Pseudolysimachion spicatum agg.: *P. spicatum*, *P. orchideum*
Ranunculus auricomus agg.: *R. auricomus*, *R. cassubicus*
Ranunculus polyanthemos agg.: *R. polyanthemos*, *R. polyanthemoides*
Rumex acetosa s.lat.: *R. acetosa*, *R. thyrsiflorus*
Scleranthus annuus agg.: *S. annuus*, *S. polycarpus*
Senecio aquaticus agg.: *S. aquaticus*, *S. erraticus*
Thalictrum minus agg.: *Th. minus*, *Th. pseudominus*
Thymus pannonicus agg.: *Th. pannonicus*, *Th. glabrescens*
Veronica chamaedrys agg.: *V. chamaedrys*, *V. vindobonensis*
Vicia sativa agg.: *V. angustifolia*, *V. sativa*.

Electronic Appendix 3. Faithful, constant and dominant species and distribution maps for the 17 associations in *Arrhenatheretalia* and *Brometalia erecti*. Fidelity threshold for faithful species: $\phi > 25$ (on 0 to 100 scale; bolded if $\phi > 50$). Only species with Fisher's exact test $p < 1e-3$ are shown. Frequency threshold for constant species: 40% (frequency $> 80\%$ bolded). Cover threshold for dominant species: 15%. Frequency threshold for dominant species: 10% (cover $> 50\%$ bolded).

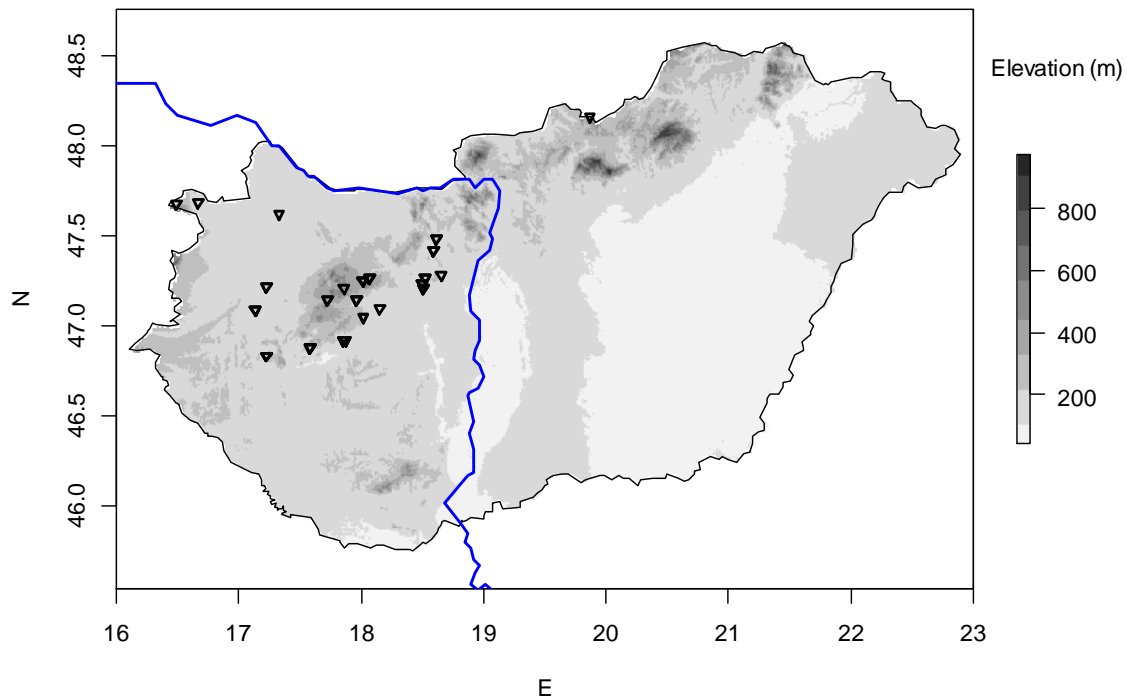
Ranunculo bulbosi-Arrhenatheretum



Number of relevés: 14

Faithful species: *Myosotis arvensis* 45.3, *Rhinanthus minor* 42.0, *Agrimonia eupatoria* 35.8, *Vicia hirsuta* 33.4, *Festuca rubra* agg. 32.3, *Vicia tetrasperma* 30.2, *Cruciata laevipes* 26.9, *Arrhenatherum elatius* 25.2, *Holcus lanatus* 25.1, *Campanula patula* 25.0
 Constant species: ***Arrhenatherum elatius* 100**, ***Galium verum* 93**, ***Agrimonia eupatoria* 93**, ***Rhinanthus minor* 86**, ***Dactylis glomerata* 86**, *Lotus corniculatus* agg. 79, *Festuca rubra* agg. 79, *Vicia hirsuta* 71, *Trifolium pratense* 71, *Ranunculus polyanthemos* agg. 71, *Leucanthemum vulgare* agg. 71, *Anthoxanthum odoratum* 71, *Trisetum flavescens* 64, *Plantago lanceolata* 64, *Holcus lanatus* 64, *Centaurea jacea* agg. 64, *Campanula patula* 64, *Poa pratensis* agg. 57, *Luzula campestris* agg. 57, *Colchicum autumnale* 57, *Briza media* 57, *Vicia sativa* agg. 50, *Salvia pratensis* 50, *Myosotis arvensis* 50, *Knautia arvensis* 50, *Cruciata laevipes* 50, *Bromus erectus* agg. 50, *Tragopogon orientalis* 43, *Galium mollugo* agg. 43, *Clinopodium vulgare* 43, *Achillea millefolium* agg. 43
 Dominant species: ***Arrhenatherum elatius* 93**, *Trisetum flavescens* 21, *Danthonia alpina* 14, *Bromus erectus* agg. 14

Tanaceto-Arrhenatheretum



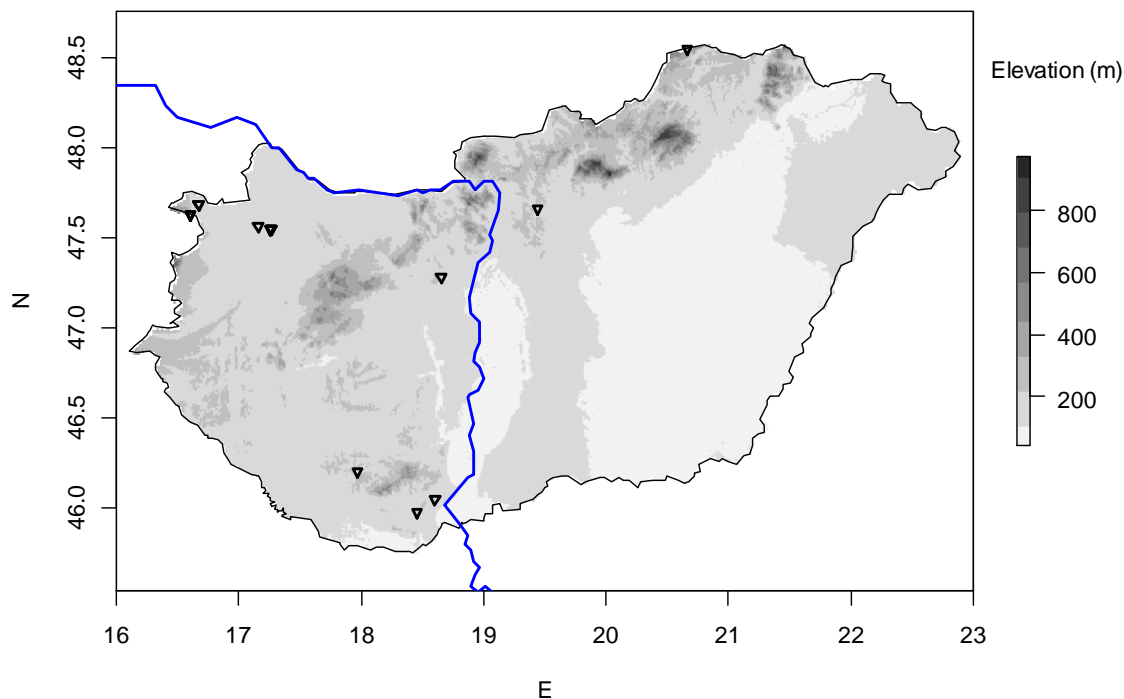
Number of relevés: 53

Faithful species: *Medicago sativa* 51.7, *Salvia nemorosa* 35.8, *Tragopogon dubius* 35.4, *Carduus acanthoides* 30.7, *Convolvulus arvensis* 27.4, *Chondrilla juncea* 26.7, *Arrhenatherum elatius* 25.2

Constant species: *Arrhenatherum elatius* 100, *Dactylis glomerata* 96, *Poa pratensis* agg. 75, *Galium mollugo* agg. 64, *Convolvulus arvensis* 64, *Vicia sativa* agg. 58, *Achillea millefolium* agg. 58, *Trifolium pratense* 57, *Plantago lanceolata* 57, *Galium verum* 43, *Agrimonia eupatoria* 43

Dominant species: *Arrhenatherum elatius* 100

Pastinaco-Arrhenatheretum



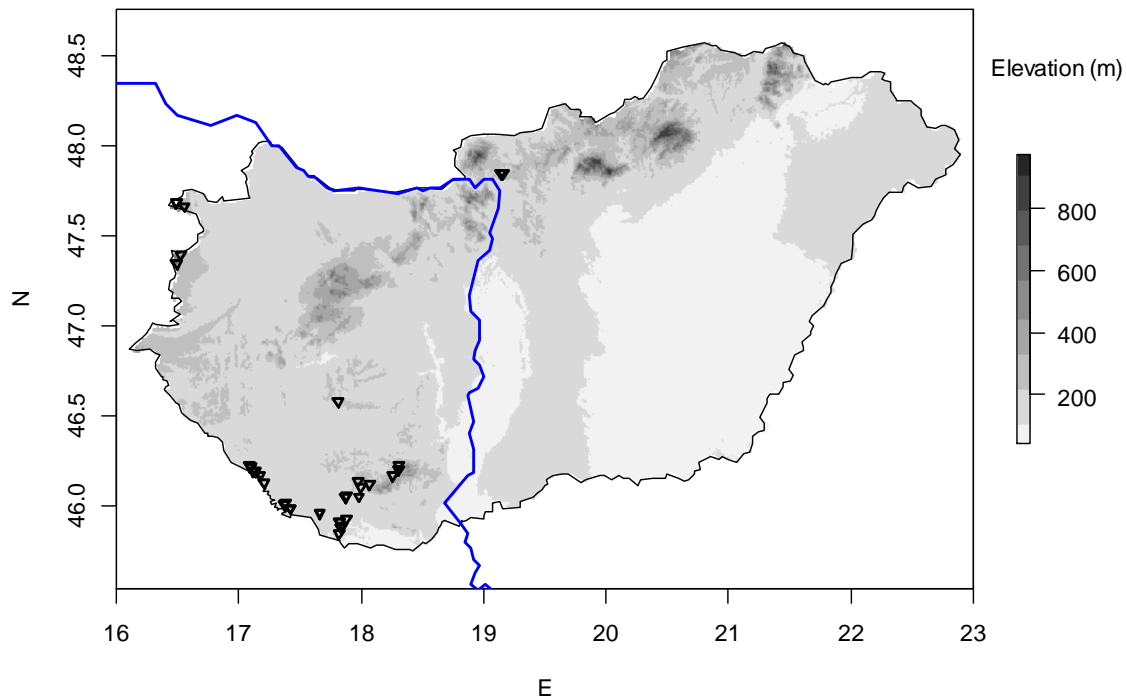
Number of relevés: 18

Faithful species: *Cirsium canum* 43.0, *Galium mollugo* agg. 40.7, *Vicia sativa* agg. 35.5, *Pastinaca sativa* 35.5, *Lathyrus tuberosus* 34.9, *Cirsium arvense* 34.3, *Ranunculus acris* 32.3, *Vicia hirsuta* 26.8, *Arrhenatherum elatius* 25.2

Constant species: ***Ranunculus acris* 100, *Galium mollugo* agg. 100, *Arrhenatherum elatius* 100, *Trifolium pratense* 89, *Festuca pratensis* agg. 89, *Dactylis glomerata* 89, *Vicia sativa* agg. 83, *Vicia hirsuta* 61, *Pastinaca sativa* 61, *Cirsium canum* 61, *Achillea millefolium* agg. 61, *Poa pratensis* agg. 56, *Holcus lanatus* 56, *Alopecurus pratensis* 56, *Cirsium arvense* 50, *Centaurea jacea* agg. 50**

Dominant species: ***Arrhenatherum elatius* 89, *Festuca pratensis* agg. 17, *Bromus erectus* agg. 11, *Anthoxanthum odoratum* 11, *Alopecurus pratensis* 11**

Filipendulo vulgaris-Arrhenatheretum



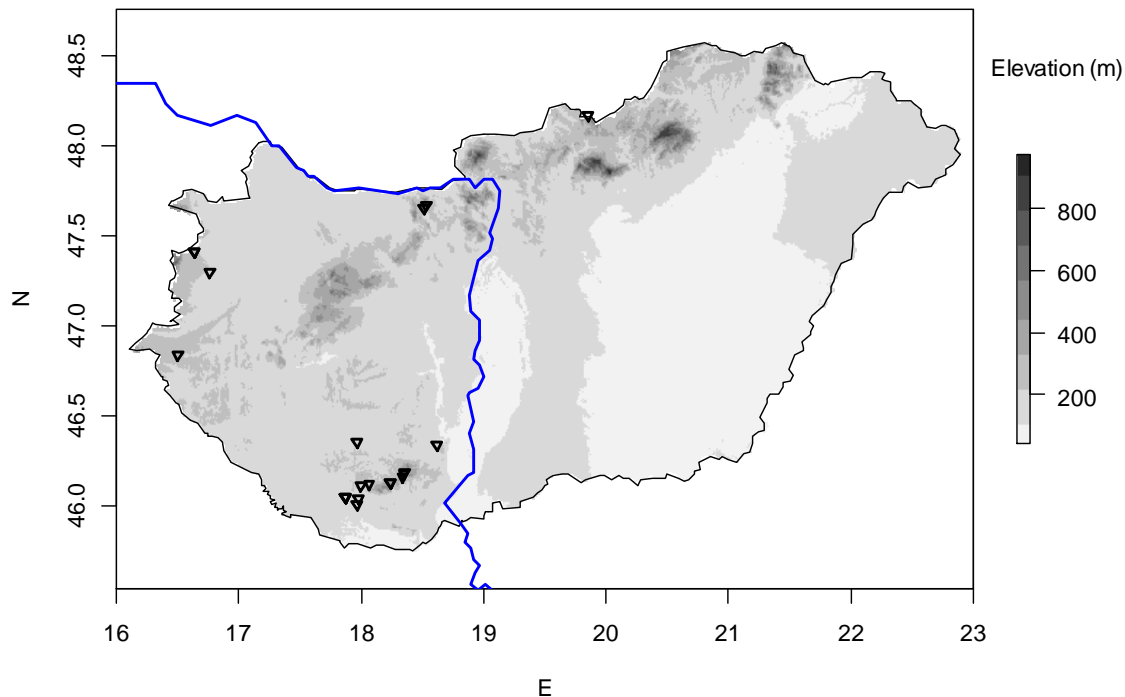
Number of relevés: 44

Faithful species: *Holcus lanatus* 37.0, *Trisetum flavescens* 33.5, *Lathyrus pratensis* 33.5, *Alopecurus pratensis* 33.3, *Euphorbia esula* 32.3, *Myosotis ramosissima* 28.5, *Cruciata laevipes* 26.9, *Rumex acetosa s.lat.* 26.6, *Colchicum autumnale* 26.6, *Betonica officinalis* 25.1

Constant species: *Poa pratensis* agg. 95, *Galium verum* 93, *Rumex acetosa s.lat.* 91, *Trisetum flavescens* 89, *Alopecurus pratensis* 89, *Achillea millefolium* agg. 89, *Centaurea jacea* agg. 86, *Lathyrus pratensis* 84, *Holcus lanatus* 84, *Festuca pratensis* agg. 82, *Dactylis glomerata* 80, *Trifolium pratense* 77, *Ranunculus acris* 75, *Anthoxanthum odoratum* 75, *Veronica chamaedrys* agg. 73, *Plantago lanceolata* 70, *Betonica officinalis* 70, *Colchicum autumnale* 68, *Lotus corniculatus* agg. 66, *Galium mollugo* agg. 64, *Arrhenatherum elatius* 64, *Luzula campestris* agg. 57, *Vicia hirsuta* 50, *Lychnis flos-cuculi* 50, *Glechoma hederacea* 50, *Cruciata laevipes* 50, *Campanula patula* 50, *Carex hirta* 48, *Helictotrichon pubescens* 48, *Festuca rupicola* 45, *Briza media* 45, *Erigeron annuus* 43, *Veronica arvensis* 41, *Potentilla reptans* 41, *Myosotis ramosissima* 41, *Filipendula vulgaris* 41, *Clinopodium vulgare* 41, *Cerastium brachypetalum* agg. 41

Dominant species: *Holcus lanatus* 25, *Alopecurus pratensis* 18, *Poa pratensis* agg. 16, *Anthoxanthum odoratum* 14, *Trisetum flavescens* 11, *Betonica officinalis* 11

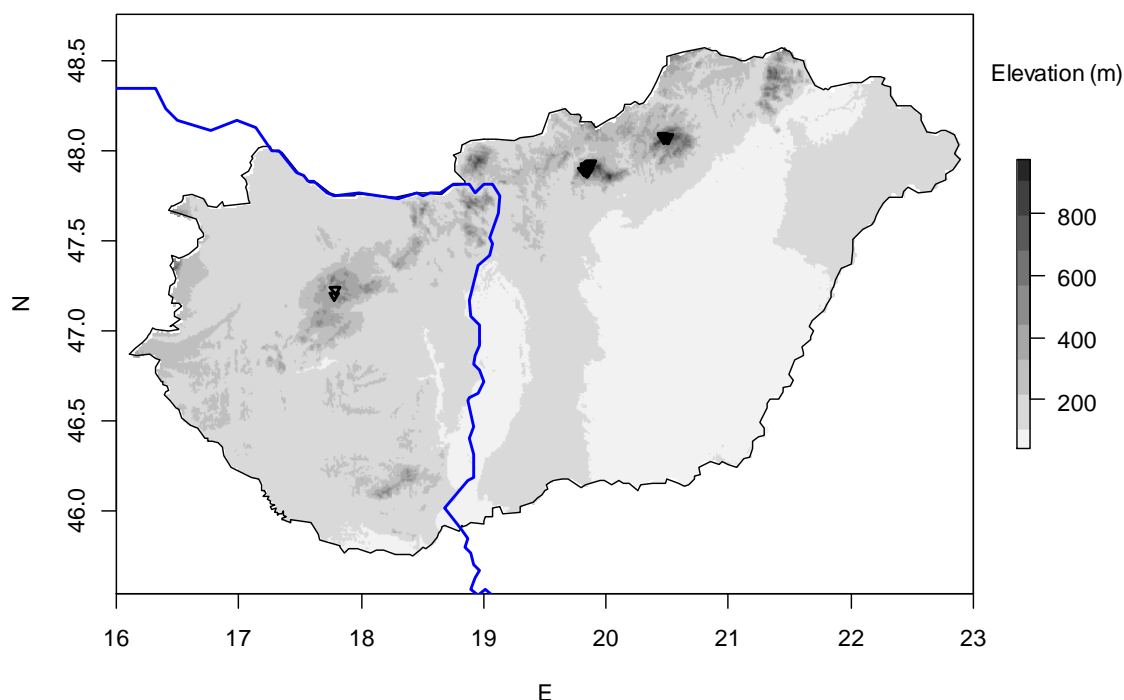
Ranunculo repentis-Alopecuretum pratensis



Number of relevés: 22

Faithful species: *Poa trivialis* 50.6, *Vicia grandiflora* 41.1, *Crepis biennis* 35.8, *Glechoma hederacea* 34.9, *Pimpinella major* 33.1, *Taraxacum officinale* 31.5, *Pastinaca sativa* 30.6, *Veronica chamaedrys* agg. 30.2, *Ranunculus bulbosus* 27.6
Constant species: *Achillea millefolium* agg. 95, *Veronica chamaedrys* agg. 91, *Arrhenatherum elatius* 91, *Taraxacum officinale* 86, *Poa pratensis* agg. 86, *Festuca pratensis* agg. 86, *Plantago lanceolata* 82, *Centaurea jacea* agg. 82, *Trifolium pratense* 77, *Glechoma hederacea* 77, *Trisetum flavescens* 73, *Alopecurus pratensis* 73, *Rumex acetosa* s.lat. 64, *Dactylis glomerata* 64, *Trifolium repens* 59, *Ranunculus acris* 59, *Lotus corniculatus* agg. 59, *Pastinaca sativa* 55, *Galium verum* 55, *Daucus carota* 55, *Convolvulus arvensis* 55, *Cerastium fontanum* agg. 55, *Poa trivialis* 50, *Lathyrus pratensis* 50, *Galium mollugo* agg. 50, *Crepis biennis* 50, *Ranunculus bulbosus* 45, *Potentilla reptans* 45, *Carex hirta* 45, *Vicia sativa* agg. 41, *Vicia grandiflora* 41, *Stellaria graminea* 41
Dominant species: *Alopecurus pratensis* 36, *Trisetum flavescens* 32, *Trifolium pratense* 27, *Festuca pratensis* agg. 27, *Centaurea jacea* agg. 23, *Arrhenatherum elatius* 23, *Poa pratensis* agg. 18, *Dactylis glomerata* 18, *Poa trivialis* 14

Diantho deltoideis-Arrhenatheretum



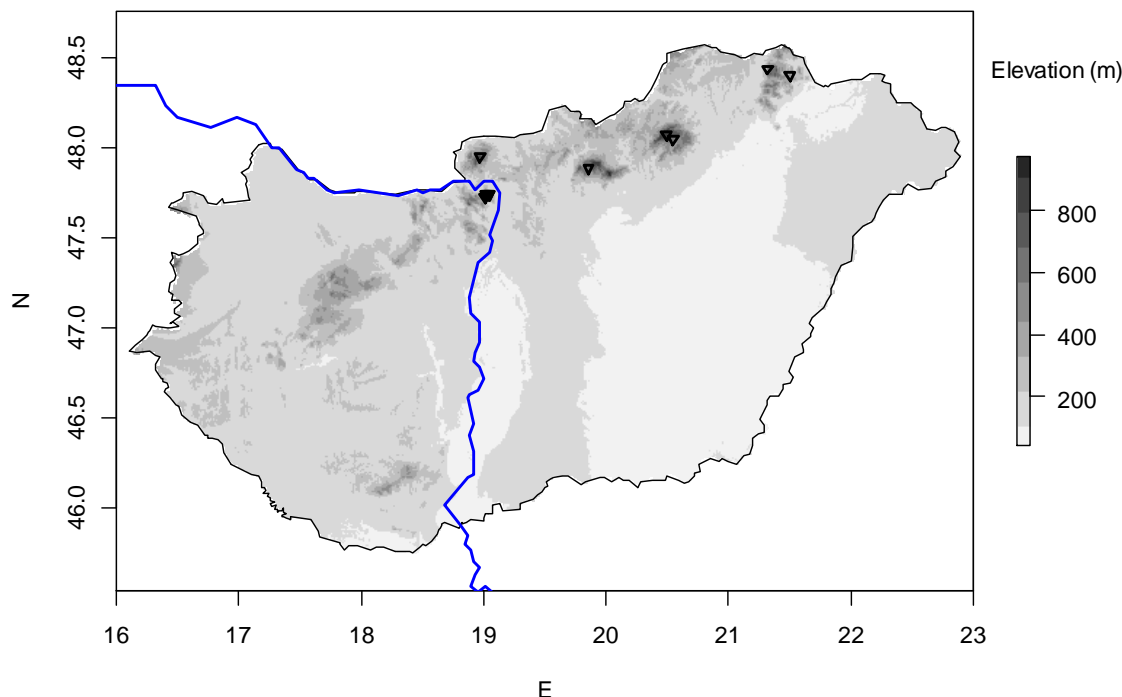
Number of relevés: 17

Faithful species: *Thymus pulegioides* 47.4, *Alchemilla* sp. 43.0, *Seseli libanotis* 40.7, *Cruciata glabra* 39.1, *Helictotrichon pubescens* 38.9, *Primula veris* 38.6, *Agrostis capillaris* 36.7, *Viola canina* 35.0, *Selinum carvifolia* 35.0, *Festuca rubra* agg. 34.5, *Galium boreale* 34.1, *Carex tomentosa* 33.6, *Hypericum perforatum* 33.4, *Hypericum hirsutum* 33.4, *Aegopodium podagraria* 33.4, *Luzula luzuloides* 32.8, *Allium scorodoprasum* 32.3, *Trifolium ochroleucon* 31.1, *Nardus stricta* 30.1, *Fragaria viridis* 28.7, *Potentilla heptaphylla* agg. 28.3, *Briza media* 27.8, *Arrhenatherum elatius* 25.2

Constant species: *Arrhenatherum elatius* 100, *Dactylis glomerata* 94, *Briza media* 94, *Helictotrichon pubescens* 94, *Achillea millefolium* agg. 88, *Luzula campestris* agg. 82, *Galium verum* 82, *Festuca rubra* agg. 82, *Agrostis capillaris* 82, *Veronica chamaedrys* agg. 76, *Hypericum perforatum* 76, *Fragaria viridis* 76, *Rumex acetosa* s.lat. 71, *Pimpinella saxifraga* 71, *Viola canina* 65, *Ranunculus polyanthemus* agg. 65, *Primula veris* 65, *Lotus corniculatus* agg. 65, *Festuca pratensis* agg. 65, *Cruciata glabra* 65, *Leontodon hispidus* 59, *Centaurea jacea* agg. 59, *Betonica officinalis* 59, *Poa pratensis* agg. 53, *Carex tomentosa* 53, *Anthoxanthum odoratum* 53, *Allium scorodoprasum* 53, *Plantago media* 47, *Leucanthemum vulgare* agg. 47, *Lathyrus pratensis* 47, *Festuca rupicola* 47, *Colchicum autumnale* 47, *Carex pallescens* 47, *Trifolium montanum* 41, *Thymus pulegioides* 41, *Stellaria graminea* 41, *Ranunculus acris* 41, *Filipendula vulgaris* 41

Dominant species: *Arrhenatherum elatius* 47, *Fragaria viridis* 24, *Galium boreale* 18, *Briza media* 18, *Galium verum* 12, *Festuca rupicola* 12, *Festuca rubra* agg. 12

Anthoxantho-Festucetum pratensis



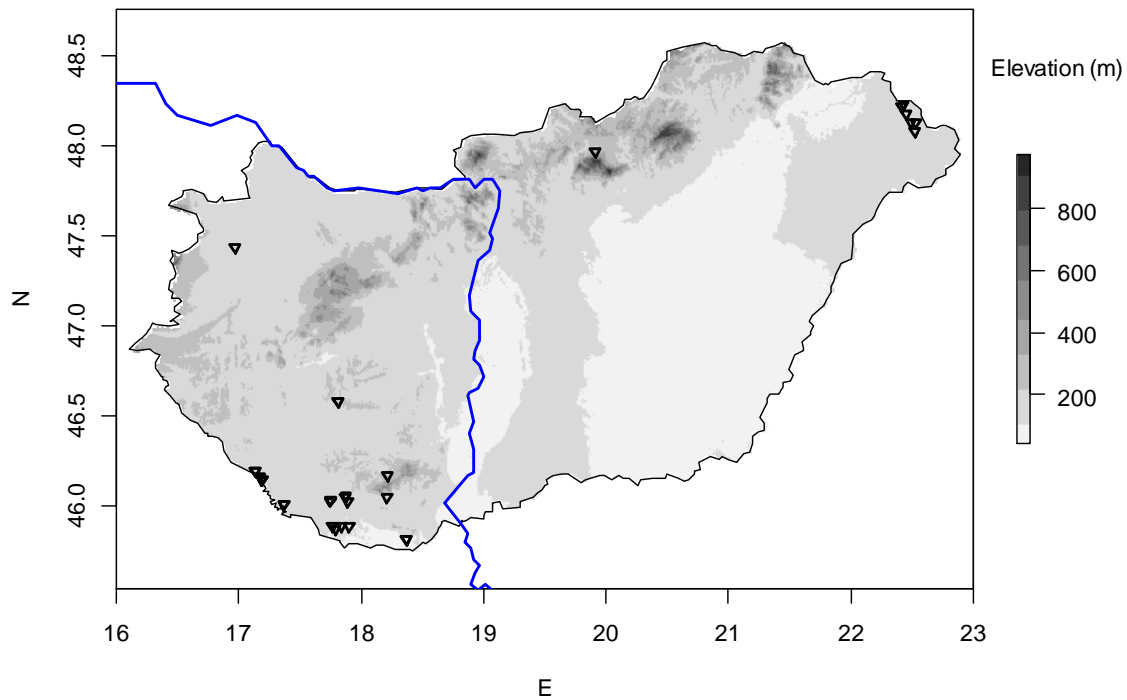
Number of relevés: 13

Faithful species: *Ranunculus auricomus* agg. 61.9, *Dianthus deltoides* 60.8, *Phleum pratense* agg. 50.2, *Carex pallescens* 50.2, *Agrostis capillaris* 47.4, *Lysimachia nummularia* 44.0, *Juncus tenuis* 44.0, *Festuca rubra* agg. 40.3, *Peucedanum carvifolia* 39.9, *Orobanche gracilis* 39.7, *Prunella vulgaris* 38.6, *Lathyrus pratensis* 38.2, *Galium boreale* 37.7, *Stellaria graminea* 35.9, *Carex panicea* 34.6, *Ajuga reptans* 34.6, *Cynosurus cristatus* 34.5, *Ranunculus acris* 32.3, *Polygala vulgaris* 30.8, *Trifolium repens* 30.7, *Ranunculus repens* 29.1, *Festuca pratensis* agg. 28.6, *Colchicum autumnale* 27.3

Constant species: *Ranunculus acris* 100, *Festuca pratensis* agg. 100, *Agrostis capillaris* 100, *Lathyrus pratensis* 92, *Festuca rubra* agg. 92, *Carex pallescens* 92, *Trifolium repens* 85, *Stellaria graminea* 85, *Plantago lanceolata* 85, *Dactylis glomerata* 85, *Centaurea jacea* agg. 85, *Achillea millefolium* agg. 85, *Luzula campestris* agg. 77, *Lotus corniculatus* agg. 77, *Dianthus deltoides* 77, *Briza media* 77, *Veronica chamaedrys* agg. 69, *Ranunculus auricomus* agg. 69, *Prunella vulgaris* 69, *Poa pratensis* agg. 69, *Leontodon hispidus* 69, *Colchicum autumnale* 69, *Trifolium pratense* 62, *Rumex acetosa* s.lat. 62, *Ranunculus polyanthemos* agg. 62, *Lysimachia nummularia* 62, *Holcus lanatus* 62, *Galium verum* 62, *Anthoxanthum odoratum* 62, *Alopecurus pratensis* 62, *Taraxacum officinale* 54, *Rhinanthus minor* 54, *Leucanthemum vulgare* agg. 54, *Glechoma hederacea* 54, *Fragaria viridis* 54, *Filipendula vulgaris* 54, *Cynosurus cristatus* 54, *Campanula patula* 54, *Viola canina* 46, *Trisetum flavescens* 46, *Leontodon autumnalis* 46, *Cerastium fontanum* agg. 46, *Carex hirta* 46, *Helictotrichon pubescens* 46, *Ajuga reptans* 46

Dominant species: *Festuca pratensis* agg. 38, *Agrostis capillaris* 31

Colchico autumnalis-Festucetum rupicolae



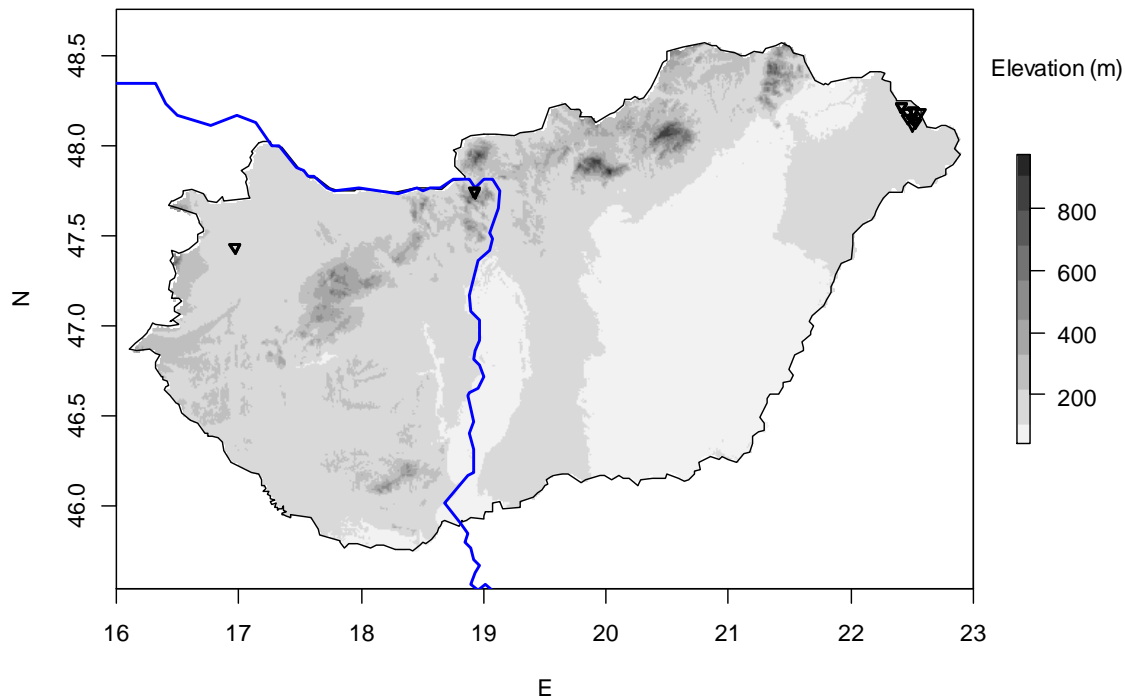
Number of relevés: 33

Faithful species: *Rumex acetosella* 35.9, *Ononis arvensis* s.lat. 33.4, *Trifolium hybridum* 33.1, *Festuca rupicola* 31.3, *Moenchia mantica* 30.1

Constant species: ***Festuca rupicola* 100, *Plantago lanceolata* 85, *Galium verum* 79, *Centaurea jacea* agg. 70, *Anthoxanthum odoratum* 70, *Achillea millefolium* agg. 64, *Trisetum flavescens* 61, *Rumex acetosa* s.lat. 61, *Poa pratensis* agg. 58, *Trifolium pratense* 55, *Luzula campestris* agg. 55, *Lotus corniculatus* agg. 55, *Dactylis glomerata* 55, *Colchicum autumnale* 55, *Briza media* 52, *Filipendula vulgaris* 48, *Festuca pratensis* agg. 48, *Ononis arvensis* s.lat. 45, *Leucanthemum vulgare* agg. 45, *Lathyrus pratensis* 42, *Campanula patula* 42, *Betonica officinalis* 42**

Dominant species: ***Festuca rupicola* 73, *Briza media* 12, *Anthoxanthum odoratum* 12**

Anthoxantho-Festucetum pseudovinae



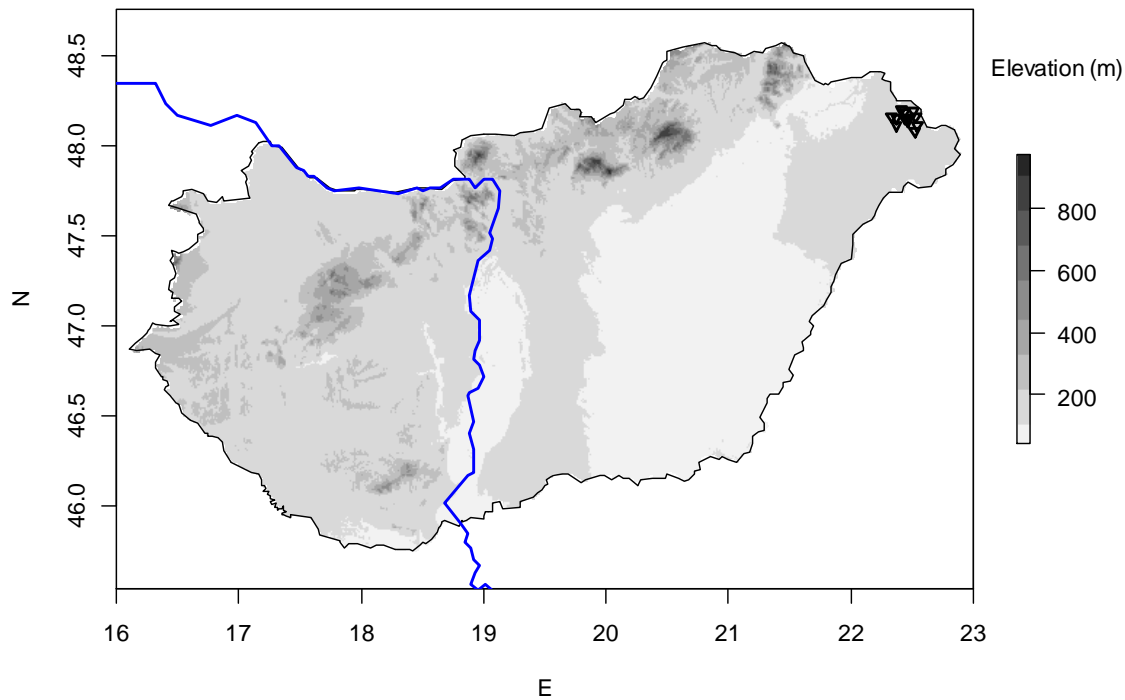
Number of relevés: 17

Faithful species: *Viola pumila* 64.5, *Fragaria vesca* 62.2, *Hieracium auriculoides* 60.6, *Myosotis stricta* 56.2, *Polygala comosa* 54.1, *Stellaria palustris* 47.4, *Festuca pseudovina* 44.7, *Hieracium bauhinii* agg. 43.7, *Sedum sexangulare* 42.4, *Lychnis viscaria* 40.7, *Orchis morio* 40.6, *Cichorium intybus* 37.6, *Sanguisorba officinalis* 35.0, *Potentilla argentea* agg. 34.9, *Ononis arvensis* s.lat. 34.9, *Leucanthemum vulgare* agg. 33.5, *Hieracium caespitosum* 33.3, *Galium rubioides* 33.3, *Hieracium pilosella* agg. 33.0, *Silene latifolia* 32.6, *Rhinanthus serotinus* 32.5, *Luzula campestris* agg. 31.9, *Daucus carota* 31.4, *Ajuga genevensis* 31.1, *Centaureum erythraea* 30.8, *Veronica serpyllifolia* 30.4, *Viola arvensis* 29.9, *Linum catharticum* 29.6, *Anthoxanthum odoratum* 28.6, *Hieracium umbellatum* 28.2, *Carex praecox* agg. 26.3

Constant species: *Luzula campestris* agg. 100, *Achillea millefolium* agg. 100, *Lotus corniculatus* agg. 94, *Leucanthemum vulgare* agg. 94, *Anthoxanthum odoratum* 94, *Galium verum* 88, *Fragaria vesca* 88, *Rumex acetosa* s.lat. 82, *Ranunculus acris* 82, *Polygala comosa* 82, *Centaurea jacea* agg. 82, *Leontodon hispidus* 76, *Festuca pseudovina* 76, *Daucus carota* 76, *Cichorium intybus* 76, *Trifolium pratense* 71, *Plantago lanceolata* 71, *Filipendula vulgaris* 65, *Pimpinella saxifraga* 59, *Myosotis stricta* 59, *Hieracium bauhinii* agg. 59, *Potentilla argentea* agg. 53, *Poa pratensis* agg. 53, *Glechoma hederacea* 53, *Campanula patula* 53, *Viola pumila* 47, *Prunella vulgaris* 47, *Ononis arvensis* s.lat. 47, *Lychnis flos-cuculi* 47, *Hieracium pilosella* agg. 47, *Carex praecox* agg. 47, *Carex hirta* 47, *Briza media* 47, *Trifolium repens* 41, *Tragopogon orientalis* 41, *Sanguisorba officinalis* 41, *Linum catharticum* 41, *Hieracium auriculoides* 41, *Alopecurus pratensis* 41, *Agrimonia eupatoria* 41

Dominant species: *Anthoxanthum odoratum* 65, *Festuca pseudovina* 41, *Poa pratensis* agg. 18, *Leucanthemum vulgare* agg. 12

Alopecuro-Festucetum pseudovinae



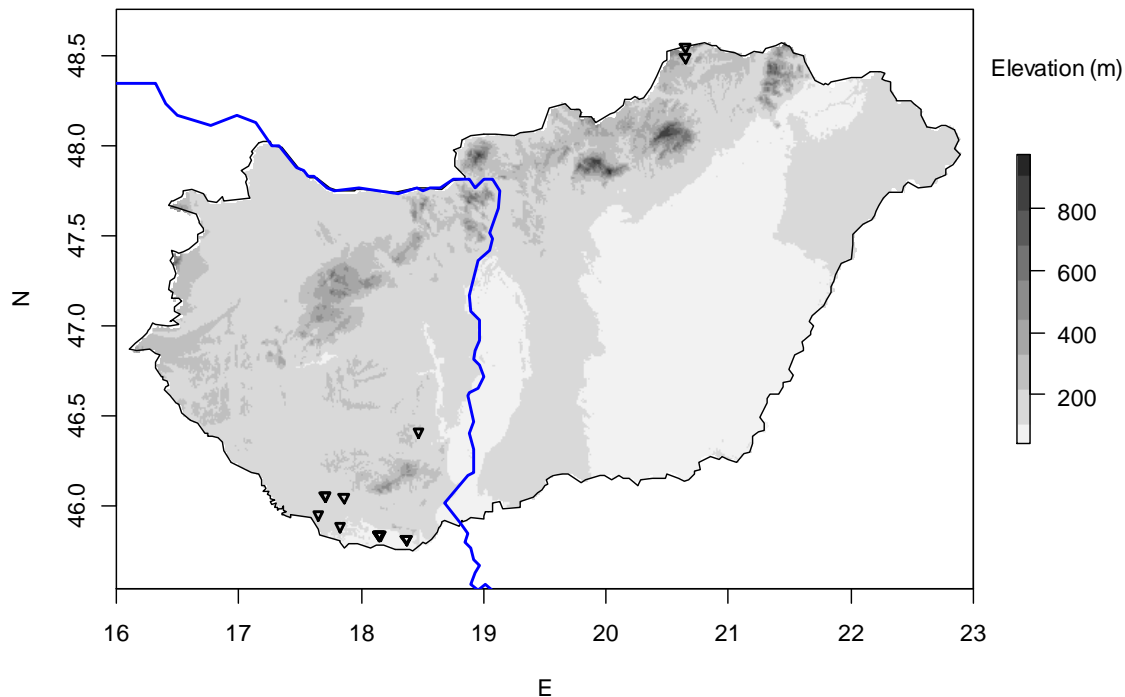
Number of relevés: 13

Faithful species: *Erophila verna* 83.7, *Inula britannica* 63.8, *Cerastium dubium* 63.6, *Festuca pseudovina* 61.5, *Ranunculus sardous* 60.9, *Anthemis arvensis* 60.9, *Veronica serpyllifolia* 57.8, *Poa compressa* 54.9, *Cichorium intybus* 52.8, *Leontodon autumnalis* 48.8, *Veronica arvensis* 47.4, *Euphorbia platyphyllos* 46.9, *Capsella bursa-pastoris* 45.9, *Medicago minima* 45.8, *Potentilla reptans* 42.9, *Polygonum aviculare* 41.0, *Trifolium repens* 39.2, *Taraxacum officinale* 39.0, *Tripleurospermum inodorum* 38.2, *Galega officinalis* 38.2, *Alopecurus pratensis* 35.3, *Myosotis stricta* 34.6

Constant species: *Trifolium repens* 100, *Taraxacum officinale* 100, *Lotus corniculatus* agg. 100, *Festuca pseudovina* 100, *Cichorium intybus* 100, *Achillea millefolium* agg. 100, *Veronica arvensis* 92, *Potentilla reptans* 92, *Alopecurus pratensis* 92, *Leontodon autumnalis* 85, *Trifolium pratense* 77, *Erophila verna* 77, *Plantago lanceolata* 69, *Veronica serpyllifolia* 62, *Leontodon hispidus* 62, *Cerastium dubium* 62, *Galium verum* 54, *Poa compressa* 46, *Medicago minima* 46, *Inula britannica* 46, *Festuca pratensis* agg. 46, *Euphorbia cyparissias* 46, *Convolvulus arvensis* 46

Dominant species: *Festuca pseudovina* 69, *Trifolium repens* 15

Cynosuro-Lolietum perennis



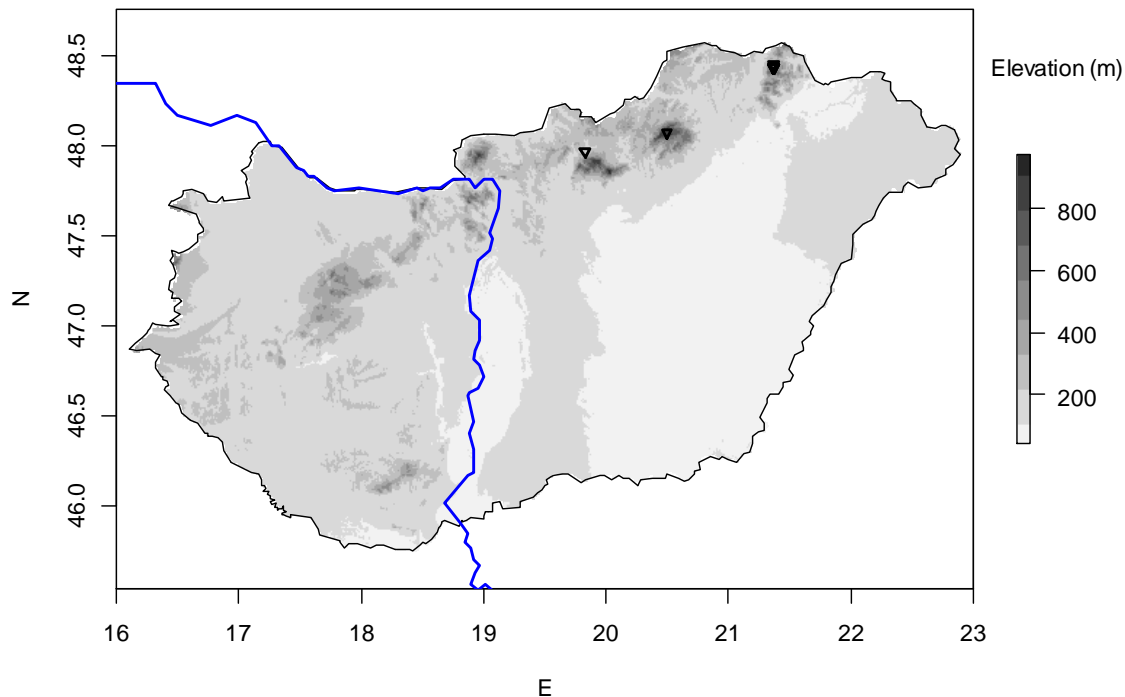
Number of relevés: 16

Faithful species: *Ambrosia artemisiifolia* 63.7, *Bromus racemosus* agg. 62.6, *Lolium perenne* 61.0, *Poa annua* 60.1, *Verbena officinalis* 57.6, *Cynodon dactylon* 56.9, *Bellis perennis* 46.6, *Cynosurus cristatus* 46.4, *Lotus tenuis* 42.2, *Bromus hordeaceus* 41.9, *Carex distans* 39.7, *Agrostis stolonifera* agg. 39.2, *Plantago major* 38.5, *Hordeum secalinum* 33.7, *Medicago lupulina* 32.9, *Erigeron annuus* 32.8, *Trifolium repens* 32.3, *Ononis spinosa* 30.8, *Elymus repens* 30.0, *Odontites rubra* agg. 29.0, *Ranunculus bulbosus* 26.2, *Festuca pratensis* agg. 25.5

Constant species: *Festuca pratensis* agg. 94, *Achillea millefolium* agg. 94, *Trifolium repens* 88, *Poa pratensis* agg. 81, *Trifolium pratense* 75, *Plantago lanceolata* 75, *Galium verum* 75, *Lolium perenne* 69, *Cynosurus cristatus* 69, *Cynodon dactylon* 69, *Bromus racemosus* agg. 69, *Taraxacum officinale* 62, *Medicago lupulina* 62, *Daucus carota* 62, *Dactylis glomerata* 62, *Bromus hordeaceus* 62, *Erigeron annuus* 56, *Cerastium fontanum* agg. 56, *Centaurea jacea* agg. 56, *Ambrosia artemisiifolia* 56, *Ranunculus acris* 50, *Potentilla reptans* 50, *Lotus corniculatus* agg. 50, *Cichorium intybus* 50, *Vicia sativa* agg. 44, *Veronica chamaedrys* agg. 44, *Verbena officinalis* 44, *Trisetum flavescens* 44, *Ranunculus bulbosus* 44, *Plantago major* 44, *Elymus repens* 44

Dominant species: *Trifolium repens* 56, *Cynodon dactylon* 38, *Cynosurus cristatus* 25, *Bromus hordeaceus* 19, *Poa pratensis* agg. 12, *Lolium perenne* 12, *Festuca pratensis* agg. 12, *Carex distans* 12, *Bromus racemosus* agg. 12

Brachypodio pinnati-Molinietum arundinaceae



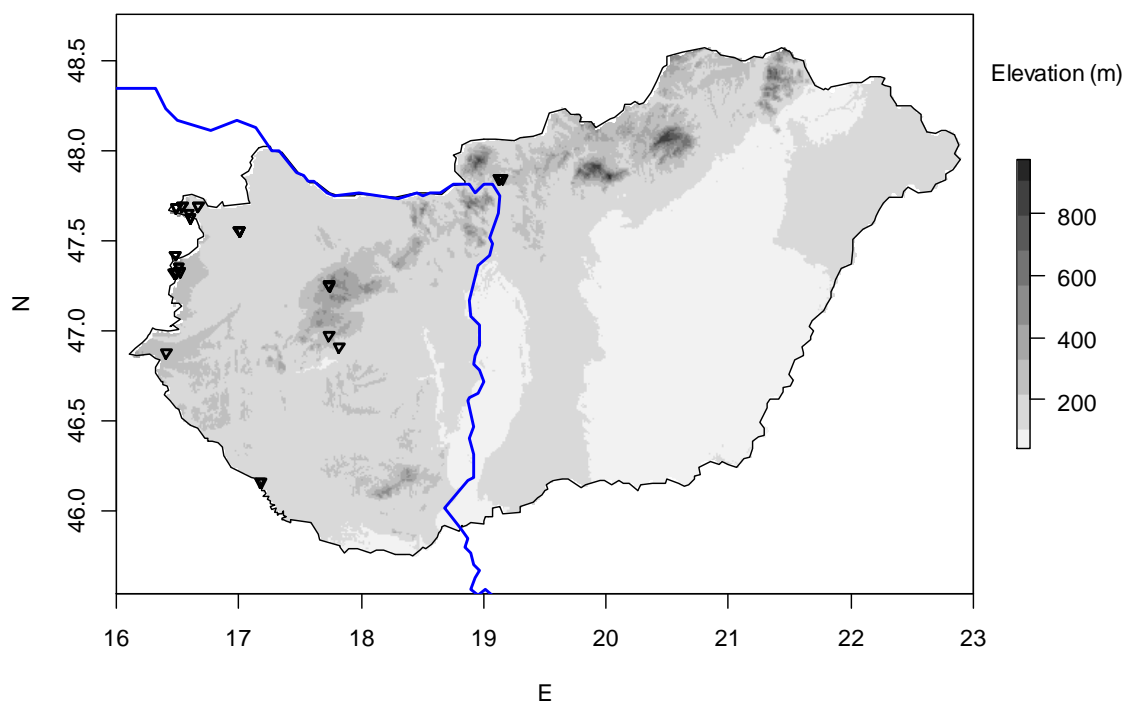
Number of relevés: 8

Faithful species: *Calamagrostis arundinacea* 85.9, *Potentilla erecta* 73.7, *Convallaria majalis* 66.7, *Cruciata glabra* 65.6, *Potentilla alba* 64.7, *Gladiolus imbricatus* 64.3, *Molinia caerulea* agg. 64.2, *Succisa pratensis* 64.0, *Symphytum tuberosum* agg. 60.1, *Genista germanica* 60.1, *Carlina acaulis* 58.9, *Astrantia major* 58.2, *Carex montana* 56.3, *Digitalis grandiflora* 55.7, *Primula veris* 55.6, *Peucedanum oreoselinum* 49.7, *Vicia sepium* 46.5, *Pulmonaria mollis* 43.5, *Luzula luzuloides* 43.2, *Viola canina* 42.2, *Cirsium pannonicum* 40.5, *Carex pallescens* 38.7, *Stellaria graminea* 37.6, *Agrostis capillaris* 32.2

Constant species: *Cruciata glabra* 100, *Stellaria graminea* 88, *Primula veris* 88, *Potentilla erecta* 88, *Potentilla alba* 88, *Dactylis glomerata* 88, *Brachypodium pinnatum* agg. 88, *Viola canina* 75, *Luzula campestris* agg. 75, *Carex pallescens* 75, *Calamagrostis arundinacea* 75, *Agrostis capillaris* 75, *Veronica chamaedrys* agg. 62, *Succisa pratensis* 62, *Pimpinella saxifraga* 62, *Peucedanum oreoselinum* 62, *Lotus corniculatus* agg. 62, *Hypericum perforatum* 62, *Helianthemum ovatum* 62, *Filipendula vulgaris* 62, *Carlina acaulis* 62, *Carex montana* 62, *Betonica officinalis* 62, *Vicia sepium* 50, *Vicia cracca* 50, *Rumex acetosa* s.lat. 50, *Pulmonaria mollis* 50, *Poa pratensis* agg. 50, *Molinia caerulea* agg. 50, *Lathyrus pratensis* 50, *Gladiolus imbricatus* 50, *Fragaria viridis* 50, *Festuca rubra* agg. 50, *Digitalis grandiflora* 50, *Convallaria majalis* 50, *Cirsium pannonicum* 50, *Centaurea jacea* agg. 50, *Calamagrostis epigejos* 50, *Helictotrichon pubescens* 50

Dominant species: *Brachypodium pinnatum* agg. 50, *Calamagrostis arundinacea* 38, *Potentilla erecta* 25, *Viola hirta* 12, *Viola canina* 12, *Nardus stricta* 12, *Molinia caerulea* agg. 12, *Euphorbia lucida* 12

Filipendulo vulgaris-Brometum erecti



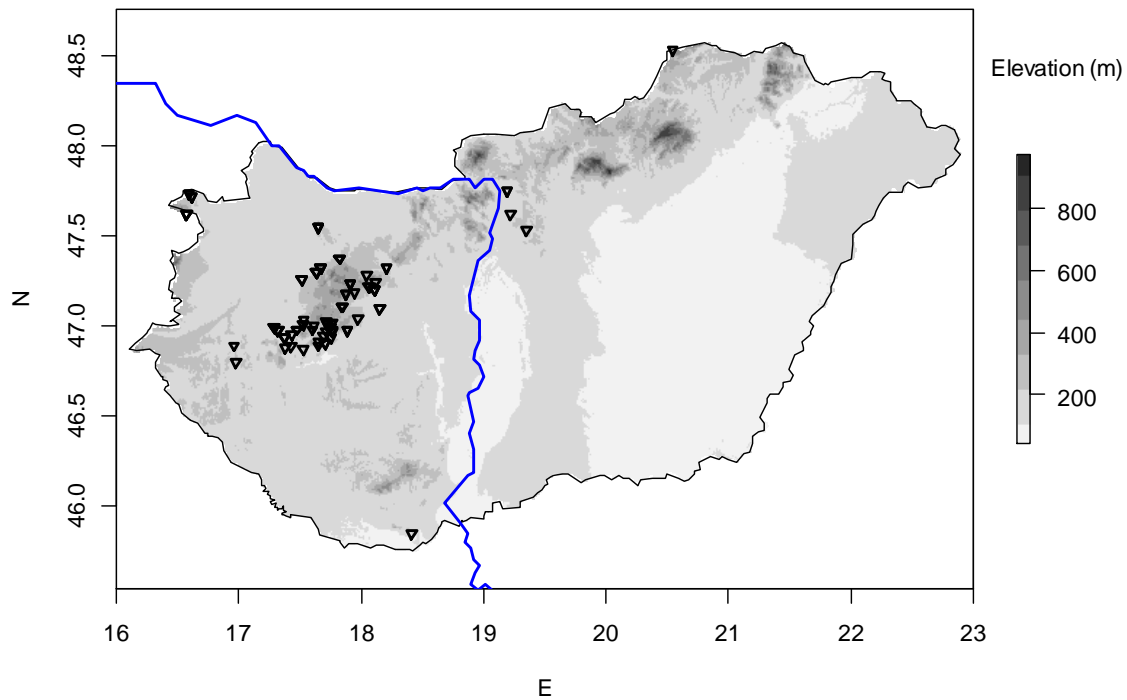
Number of relevés: 35

Faithful species: *Bromus erectus* agg. 47.6, *Carex flacca* 40.5, *Dianthus carthusianorum* agg. 36.6, *Sesleria uliginosa* 32.9, *Festuca rupicola* 29.8, *Trifolium campestre* 28.0

Constant species: ***Bromus erectus* agg. 100**, *Festuca rupicola* 97, ***Achillea millefolium* agg. 86**, ***Galium verum* 83**, *Briza media* 80, *Plantago lanceolata* 77, *Luzula campestris* agg. 74, *Lotus corniculatus* agg. 74, *Centaurea jacea* agg. 71, *Arrhenatherum elatius* 71, *Anthoxanthum odoratum* 69, *Dactylis glomerata* 66, *Trifolium pratense* 63, *Leucanthemum vulgare* agg. 63, *Leontodon hispidus* 63, *Poa pratensis* agg. 60, *Pimpinella saxifraga* 60, *Rumex acetosa* s.lat. 51, *Fragaria viridis* 51, *Helictotrichon pubescens* 51, *Knautia arvensis* 49, *Betonica officinalis* 49, *Trisetum flavescens* 46, *Trifolium campestre* 46, *Rhinanthus minor* 46, *Plantago media* 43, *Holcus lanatus* 43, *Cerastium brachypetalum* agg. 43, *Agrimonia eupatoria* 43

Dominant species: ***Bromus erectus* agg. 91**, *Festuca rupicola* 11

Sanguisorbo minoris-Brometum erecti



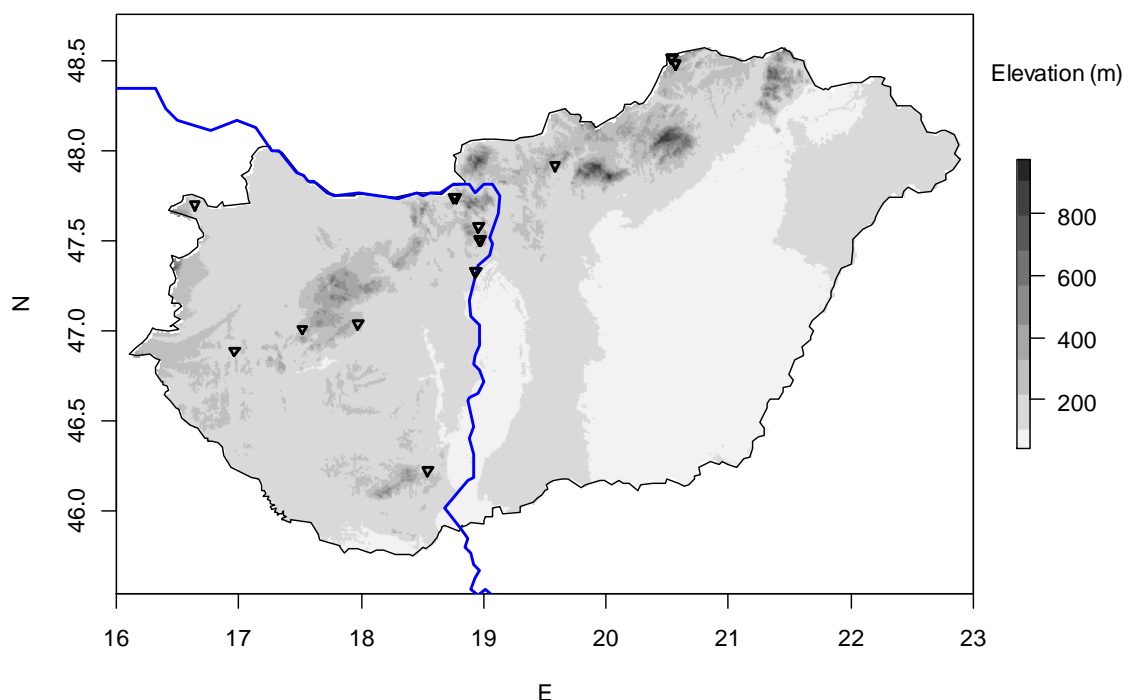
Number of relevés: 89

Faithful species: *Bromus erectus* agg. 47.6, *Acinos arvensis* 40.4, *Teucrium chamaedrys* 40.0, *Festuca valesiaca* 36.9, *Potentilla arenaria* Borkh. 34.6, *Erysimum odoratum* 33.6, *Anthyllis vulneraria* 32.9, *Medicago falcata* 30.1, *Sanguisorba minor* 27.3, *Thymus pannonicus* agg. 26.5, *Eryngium campestre* 26.3, *Dianthus ponederae* s.lat. 25.0

Constant species: ***Bromus erectus* agg. 100**, *Teucrium chamaedrys* 73, *Salvia pratensis* 62, *Galium verum* 54, *Medicago falcata* 53, *Thymus pannonicus* agg. 52, *Dianthus ponederae* s.lat. 51, *Euphorbia cyparissias* 47, *Sanguisorba minor* 45, *Plantago media* 44, *Eryngium campestre* 44, *Festuca valesiaca* 42

Dominant species: ***Bromus erectus* agg. 96**

Polygalo majoris-Brachypodietum pinnati



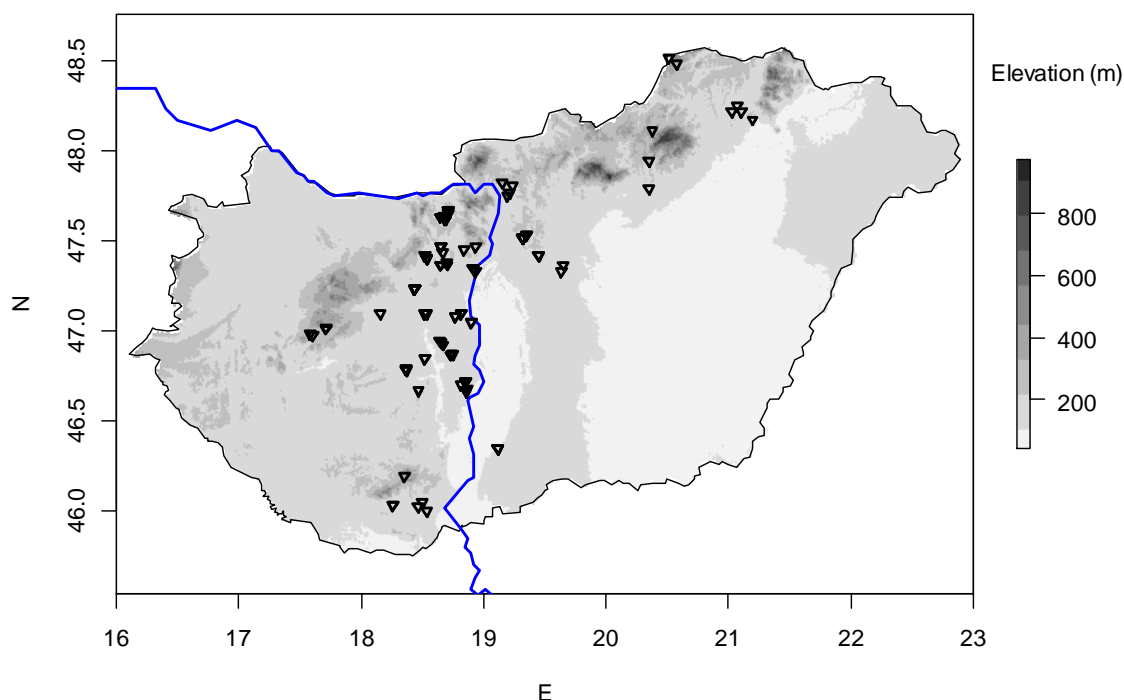
Number of relevés: 25

Faithful species: *Inula ensifolia* 72.0, *Polygala major* 66.2, *Anthericum ramosum* 62.4, *Pulsatilla grandis* 61.4, *Peucedanum cervaria* 61.1, *Campanula glomerata* 58.5, *Dorycnium germanicum* 52.6, *Sanguisorba minor* 52.3, *Aster amellus* 51.5, *Scorzonera hispanica* 50.6, *Centaurea scabiosa* agg. 50.1, *Onobrychis arenaria* 48.6, *Cirsium pannonicum* 46.2, *Brachypodium pinnatum* agg. 45.6, *Linum flavum* 45.5, *Chamaecytisus hirsutus* 43.9, *Lembotropis nigricans* 43.6, *Carex halleriana* 43.6, *Linum tenuifolium* 43.4, *Campanula sibirica* 40.6, *Carex michelii* 40.0, *Hippocrepis comosa* 39.8, *Corothamnus procumbens* 39.0, *Anthyllis vulneraria* 38.7, *Scabiosa ochroleuca* 38.6, *Bupleurum falcatum* 37.9, *Teucrium montanum* 36.4, *Globularia punctata* 36.3, *Thesium linophyllum* 36.2, *Cuscuta epithymum* 35.8, *Origanum vulgare* 35.4, *Helianthemum ovatum* 34.8, *Anemone sylvestris* 34.5, *Carex montana* 33.7, *Crepis praemorsa* 32.1, *Allium flavum* 31.6, *Chamaecytisus ratisbonensis* 31.1, *Orchis purpurea* 30.6, *Tanacetum corymbosum* agg. 30.1, *Seseli osseum* 29.4, *Asperula cynanchica* 28.7, *Geranium sanguineum* 27.2, *Solidago virgaurea* 25.8, *Bromus erectus* agg. 25.7

Constant species: *Brachypodium pinnatum* agg. 96, *Centaurea scabiosa* agg. 92, *Peucedanum cervaria* 88, *Inula ensifolia* 80, *Anthericum ramosum* 80, *Sanguisorba minor* 76, *Campanula glomerata* 76, *Festuca rupicola* 72, *Briza media* 72, *Thesium linophyllum* 68, *Salvia pratensis* 64, *Bromus erectus* agg. 64, *Helianthemum ovatum* 60, *Dorycnium germanicum* 60, *Polygala major* 56, *Cirsium pannonicum* 56, *Pulsatilla grandis* 52, *Dactylis glomerata* 52, *Carex michelii* 52, *Plantago media* 48, *Leontodon hispidus* 48, *Asperula cynanchica* 48, *Scabiosa ochroleuca* 44, *Aster amellus* 44

Dominant species: *Brachypodium pinnatum* agg. 40, *Inula ensifolia* 20, *Bromus erectus* agg. 12

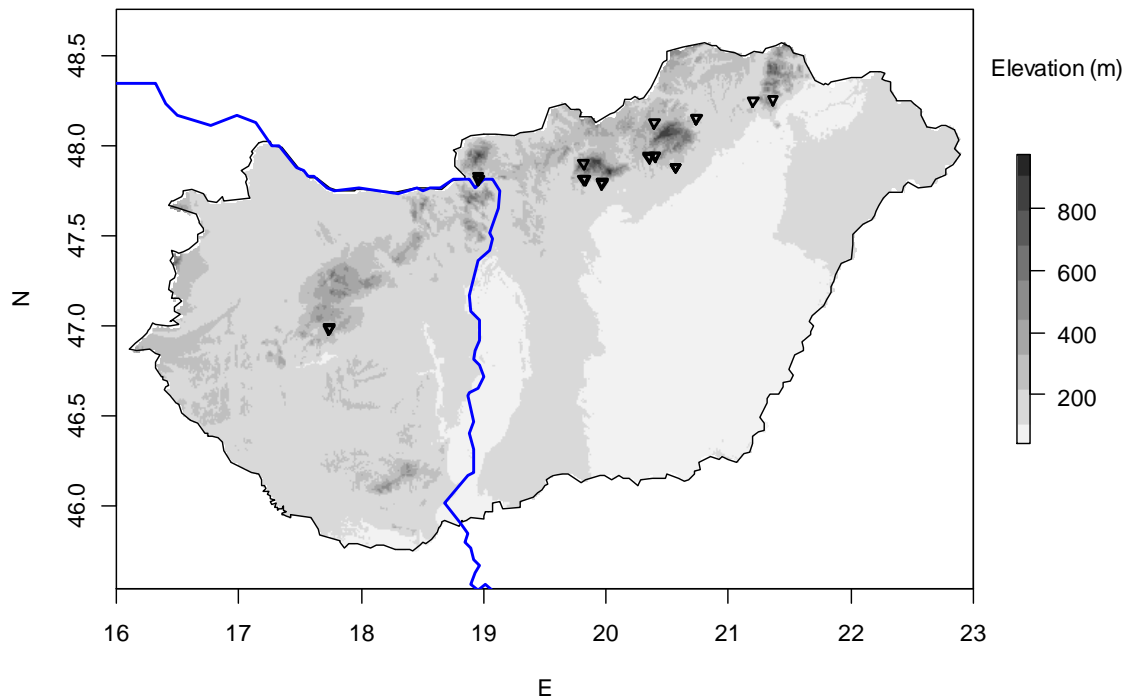
Euphorbia pannonicae-Brachypodium pinnati



Number of relevés: 130

Faithful species: *Euphorbia glareosa* 75.5, *Elymus hispidus* 52.7, *Brachypodium pinnatum* agg. 47.6, *Thalictrum minus* agg. 46.6, *Chamaecytisus austriacus* 39.7, *Galium glaucum* 35.4, *Centaurea scabiosa* agg. 34.9, *Viola ambigua* 34.7, *Teucrium chamaedrys* 32.0, *Campanula rotundifolia* agg. 30.4, *Medicago falcata* 30.3, *Festuca rupicola* 28.9, *Peucedanum alsaticum* 28.5, *Campanula glomerata* 28.4, *Helictotrichon adsurgens* agg. 27.5, *Achillea pannonica* 27.1, *Adonis vernalis* 26.3, *Phleum phleoides* 25.8, *Seseli annuum* 25.1
Constant species: *Brachypodium pinnatum* agg. 99, *Festuca rupicola* 95, *Filipendula vulgaris* 82, *Euphorbia glareosa* 79, *Centaurea scabiosa* agg. 69, *Salvia pratensis* 68, *Teucrium chamaedrys* 62, *Galium verum* 62, *Dactylis glomerata* 62, *Poa pratensis* agg. 58, *Elymus hispidus* 58, *Knautia arvensis* 57, *Medicago falcata* 53, *Pimpinella saxifraga* 47, *Seseli annuum* 45, *Agrimonia eupatoria* 43, *Ranunculus polyanthemus* agg. 42, *Plantago media* 42, *Campanula glomerata* 42
Dominant species: *Brachypodium pinnatum* agg. 94, *Festuca rupicola* 28

Trifolio medii-Brachypodietum pinnati



Number of relevés: 25

Faithful species: *Danthonia alpina* 72.2, *Dorycnium herbaceum* 57.2, *Eryngium campestre* 52.0, *Helictotrichon adsurgens* agg. 49.2, *Pseudolysimachion spicatum* agg. 45.2, *Aster linosyris* 39.6, *Rosa gallica* 36.2, *Thymus pannonicus* agg. 35.2, *Asperula cynanchica* 35.0, *Dianthus pontederæ* s.lat. 34.5, *Thesium linophyllum* 33.4, *Seseli varium* 33.0, *Inula hirta* 33.0, *Koeleria cristata* agg. 32.9, *Achillea pannonica* 31.1, *Echium maculatum* 30.9, *Trifolium alpestre* 30.5, *Peucedanum cervaria* 29.3, *Filipendula vulgaris* 28.7, *Festuca pseudodalmatica* 28.7, *Arenaria procera* 28.6, *Trifolium montanum* 27.7

Constant species: *Filipendula vulgaris* 92, *Danthonia alpina* 88, *Eryngium campestre* 76, *Trifolium montanum* 64, *Thymus pannonicus* agg. 64, *Thesium linophyllum* 64, *Festuca rupicola* 64, *Dianthus pontederæ* s.lat. 64, *Briza media* 60, *Helictotrichon adsurgens* agg. 60, *Pseudolysimachion spicatum* agg. 56, *Galium verum* 56, *Asperula cynanchica* 56, *Plantago media* 52, *Achillea millefolium* agg. 52, *Viola hirta* 48, *Peucedanum cervaria* 48, *Fragaria viridis* 48, *Euphorbia cyparissias* 48, *Trifolium alpestre* 44, *Seseli annuum* 44, *Koeleria cristata* agg. 44, *Dorycnium herbaceum* 44

Dominant species: *Danthonia alpina* 76, *Helictotrichon adsurgens* agg. 20, *Festuca rupicola* 16, *Peucedanum cervaria* 12, *Brachypodium pinnatum* agg. 12

