



## Data Request Form

To obtain data from the European Vegetation Archive (EVA), please first make an enquiry to the EVA database administrator Ilona Knollová (ikuzel@sci.muni.cz) whether the data meeting your needs are available. If they are, please fill in the form below and submit it to Milan Chytrý (chytry@sci.muni.cz) or another member of the EVA Coordinating Board.

- Applicant's name:

Ricarda Pätsch, Milan Chytrý

- Applicant's institutional address:

Department of Botany and Zoology, Masaryk University, Kotlářská 2, Brno, Czech Republic

- Applicant's e-mail:

[ricarda.paetsch@gmail.com](mailto:ricarda.paetsch@gmail.com)

- Project title:

Formalized typology of plant-diversity patterns in European salt-affected grasslands

- Brief description of aims and methods of the study:

Refined definitions and descriptions of vegetation types facilitate the identification of geographic patterns in the communities studied, as well as the main driving factors of species composition (e.g. Rodríguez-Rojo et al. 2017; Willner et al. 2017, 2019; Marcenò et al. 2018; Landucci et al. 2020. Although numerous descriptions and classifications of salt-affected grasslands at the local and few on transnational levels have been published (e.g. Eliáš Jr et al. 2013; Stevanović et al. 2016; Pätsch et al. 2019b), a formalized classification at the continental scale is still missing. Thus, the overall aim of this project is to explore macro-ecological plant-community patterns of inland and coastal salt-affected grasslands at the European scale.

Specifically, we will:

Jointly classify pan-European inland and coastal salt-affected vegetation, and

Develop a formalized classification system down to the syntaxonomical level of associations

- Will someone else be involved in data editing or analysis in addition to the applicant?

Viktoria Wagner, Zuzana Dítě, Daniel Dítě, Corrado Marcenò, John Janssen, Joop Schaminée, Daniel Sánchez Mata, Ilona Knollová, Erwin Bergmeier

- Estimated time of delivery of results (e.g. manuscript submission):

1-2 years

- Geographic area needed (e.g. countries or range of geographic coordinates):

Europe



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- Do you need plots to be georeferenced? If so, what is the minimum accuracy of plot location (in metres or kilometres) needed for your project?

No

- Vegetation types needed (syntaxa):

*EVC-classes Festuco-Puccinellietea & Juncetea maritimi (Syntaxa follow Mucina et al. 2016) and typically transitional classes to be integrated in the analysis as outgroups.*

- Other data selection criteria:

**We kindly ask to select relevés based on the following criteria:**

**Relevés should be included if relevés contain at least one of the following species:**

Achillea aspleniifolia, Achillea collina, Achillea salicifolia, Aeluropus littoralis, Agropyron cristatum, Agropyron cristatum subsp. pectinatum, Agrostis gigantea, Agrostis gigantea subsp. maeotica, Agrostis gigantea subsp. pontica, Agrostis pontica, Agrostis stolonifera, Alhagi maurorum, Alhagi pseudalhagi, Allium guttatum, Allium obtusiflorum, Allium pervestitum, Allium regelianum, Alopecurus arundinaceus, Alopecurus bulbosus, Alopecurus pratensis, Althaea officinalis, Alyssum turkestanicum, Anthyllis vulneraria, Anthyllis vulneraria subsp. iberica, Apium graveolens, Armeria maritima, Armeria maritima subsp. maritima, Artemisia austriaca, Artemisia caerulescens, Artemisia caerulescens subsp. caerulescens, Artemisia caerulescens subsp. cretacea, Artemisia caerulescens subsp. gallica, Artemisia laciniata, Artemisia maritima, Artemisia nitrosa, Artemisia pauciflora, Artemisia rupestris, Artemisia santonicum, Arthrocnemum macrostachyum, Arthrocnemum fruticosum, Atraphaxis replicata, Atriplex tatarica, Atriplex cana, Atriplex littoralis, Atriplex longipes, Atriplex patens, Atriplex prostrata, Atriplex prostrata agg., Bassia hirsuta, Bassia hyssopifolia, Bassia prostrata, Bassia sedoides, Beckmannia eruciformis, Blysmus rufus, Bolboschoenus maritimus, Bryum calophyllum, Bryum marratii, Bryum salinum, Bryum subapiculatum, Bryum warneum, Bupleurum tenuissimum, Camphorosma annua, Camphorosma monspeliaca, Camphorosma monspeliaca subsp. monspeliaca, Camphorosma songorica, Capparis spinosa agg., Cardopatum corymbosum, Carex diluta, Carex distans, Carex divisa, Carex extensa, Carex glareosa, Carex halophila, Carex hordeistichos, Carex lainzii, Carex mackenziei, Carex melanostachya, Carex paleacea, Carex praecox, Carex recta, Carex salina, Carex secalina, Carex subspathacea, Carex ursina, Carex vacillans, Catapodium balearicum, Catapodium marinum, Centaurea thracica, Centaurium littorale, Centaurium pulchellum, Centaurium tenuiflorum, Cerastium anomalum, Cerastium diffusum, Cerastium diffusum subsp. subtetrandrum, Cerastium dubium, Cirsium alatum, Cirsium brachycephalum, Cirsium esculentum, Climacoptera brachiata, Cochlearia anglica, Cochlearia danica, Cochlearia officinalis, Conardia compacta, Cotula coronopifolia, Cochl, Crypsis alopecuroides, Crypsis schoenoides, Cynodon dactylon, Cynomorium coccineum, Dianthus guttatus, Dianthus guttatus subsp. guttatus, Dianthus pallidiflorus, Dichodon viscidum, Dodartia orientalis, Eleocharis palustris, Eleocharis uniglumis, Elymus uralensis, Elytrigia atherica, Elytrigia curvifolia, Elytrigia elongata, Elytrigia repens, Entosthodon hungaricus, Eremopyrum triticeum, Eryngium planum, Festuca pseudodalatica, Festuca rubra, Festuca rubra ssp. pruinosa, Festuca rubra subsp. juncea, Festuca valesiaca, Festuca valesiaca subsp. parviflora, Frankenia boissieri, Frankenia corymbosa, Frankenia hirsuta, Frankenia laevis, Frankenia pulverulenta, Galatella cana, Galatella linosyris, Galatella linosyris subsp. armoricana,



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Galatella sedifolia, Galatella villosa, Galium humifusum, Gentianella detonsa, Geranium collinum, Gladiolus communis, Glaucium flavum, Glaux maritima, Glycyrrhiza echinata, Glycyrrhiza glabra, Glycyrrhiza korshinskii, Goniolimon rubellum, Gratiola officinalis, Gypsophila tomentosa, Hainardia cylindrica, Halimione pedunculata, Halimione portulacoides, Halimione verrucifera, Halocnemum strobilaceum, Hedysarum coronarium, Hordeum geniculatum, Hordeum marinum, Hornungia procumbens, Imperata cylindrica, Inula britannica, Iris halophila, Iris spuria, Iris spuria subsp. halophylla, Iris spuria subsp. maritima, Iris spuria subsp. spuria, Jacobaea auricula, Jacobaea maritima, Juncus acutus, Juncus compressus, Juncus gerardi, Juncus heldreichianus, Juncus littoralis, Juncus maritimus, Juncus subulatus, Kosteletzkya pentacarpos, Krascheninnikova ceratoides, Lactuca tatarica, Lappula marginata, Lappula patula, Lepidium cartilagineum, Lepidium crassifolium, Lepidium latifolium, Lepidium perfoliatum, Lepidium ruderales, Ligusticum scoticum, Limbarda crithmoides, Limbarda crithmoides subsp. longifolia, Limbarda crithmoides subsp. crithmoides, Limoniastrum monopetalum, Limonium algarvense, Limonium alutaceum, Limonium angustebracteatum, Limonium antonii-llorensii, Limonium aragonense, Limonium artruchium, Limonium auriculaeursifolium, Limonium balearicum, Limonium bellidifolium, Limonium biflorum, Limonium binervosum, Limonium boirae, Limonium bulgaricum, Limonium bungei, Limonium caesium, Limonium caprariense, Limonium carpetanicum, Limonium carregadorese, Limonium catalaunicum, Limonium cavanillesii, Limonium cofrentanum, Limonium companyonis, Limonium confusum, Limonium cordovillense, Limonium cossonianum, Limonium costae, Limonium cymuliferum, Limonium danubiale, Limonium daveaui, Limonium delicatulum, Limonium densiflorum, Limonium densissimum, Limonium dichotomum, Limonium dictyocladum, Limonium diffusum, Limonium dodartii, Limonium dragonericum, Limonium dufourii, Limonium ebusitanum, Limonium emarginatum, Limonium erectum, Limonium etruscum, Limonium ferulaceum, Limonium fontqueri, Limonium furfuraceum, Limonium geronense, Limonium gibertii, Limonium girardianum, Limonium glomeratum, Limonium gmelinii, Limonium grosii, Limonium gymnesicum, Limonium heterospicatum, Limonium hibericum, Limonium humile, Limonium hypanicum, Limonium insigne, Limonium latebracteatum, Limonium latifolium, Limonium legrandii, Limonium lobetanum, Limonium lychnidifolium, Limonium magallufianum, Limonium majoricum, Limonium malacitanum, Limonium marisolia, Limonium meyeri, Limonium migjornense, Limonium minoricense, Limonium minus, Limonium minutum, Limonium multiflorum, Limonium muradense, Limonium narbonense, Limonium oleifolium, Limonium ovalifolium, Limonium parvibracteatum, Limonium pinillense, Limonium plurisquamatum, Limonium portopetranum, Limonium pseudarticulatum, Limonium pseudebusitanum, Limonium pseudodictyocladum, Limonium quesadense, Limonium retirameum, Limonium retusum, Limonium revolutum, Limonium ruizii, Limonium santapolense, Limonium sareptanum, Limonium saxicola, Limonium scorpioides, Limonium serotinum, Limonium soboliferum, Limonium squarrosus, Limonium supinum, Limonium tomentellum, Limonium tschurjukiense, Limonium viciosoi, Limonium virgatum, Limonium vulgare, Limonium wiedmannii, Linum maritimum, Lomatogonium rotatum, Lotus angustissimus, Lotus preslii, Lotus tenuis, Lythrum virgatum, Melilotus dentatus, Melilotus messanensis, Mentha arvensis, Mentha pulegium, Microcnemum coralloides, Milium vernale, Myosurus minimus, Myriolimon ferulaceum, Odontites verna, Odontites verna subsp. serotina, Oenanthe globulosa, Oenanthe lachenalii, Oenanthe silaifolia, Ononis mitissima, Palimbia rediviva, Palimbia turgaica, Parapholis filiformis, Parapholis incurva, Parapholis marginata, Parapholis strigosa, Petrosimonia brachiata, Petrosimonia oppositifolia, Petrosimonia triandra, Peucedanum latifolium, Peucedanum officinale, Pholiurus pannonicus, Phragmites australis, Plantago cornutii, Plantago coronopus, Plantago crassifolia, Plantago major, Plantago major



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subsp. winteri, *Plantago maritima*, *Plantago maritima* subsp. borealis, *Plantago maritima* subsp. ciliata, *Plantago maritima* subsp. maritima, *Plantago maritima* subsp. serpentina, *Plantago schwarzenbergiana*, *Plantago tenuiflora*, *Plantago weldenii*, *Poa angustifolia*, *Poa bulbosa*, *Podospermum canum*, *Podospermum laciniatum*, *Polygonum arenarium*, *Polygonum bellardii*, *Potentilla anserina*, *Potentilla anserina* subsp. groenlandica, *Primula nutans*, *Puccinellia caespitosa*, *Puccinellia distans*, *Puccinellia distans* ssp. limosa, *Puccinellia distans* subsp. borealis, *Puccinellia distans* subsp. distans, *Puccinellia distans* subsp. limosa, *Puccinellia dolicholepis*, *Puccinellia dolicholepis* subsp. fominii, *Puccinellia fasciculata*, *Puccinellia fasciculata* subsp. pungens, *Puccinellia festuciformis*, *Puccinellia festuciformis* ssp. convoluta, *Puccinellia festuciformis* ssp. lagascana, *Puccinellia festuciformis* subsp. festuciformis, *Puccinellia gigantea*, *Puccinellia hispanica*, *Puccinellia iberica*, *Puccinellia intermedia*, *Puccinellia maritima*, *Puccinellia nutkaensis*, *Puccinellia peisonis*, *Puccinellia phryganodes*, *Puccinellia rupestris*, *Puccinellia tenuifolia*, *Puccinellia tenuissima*, *Pulicaria vulgaris*, *Ranunculus lateriflorus*, *Ranunculus pedatus*, *Ranunculus polyphyllus*, *Ranunculus polyrhizos*, *Ranunculus sardous*, *Rhaponticum repens*, *Rhaponticum serratuloides*, *Rorippa brachycarpa*, *Rumex pseudonatronatus*, *Sagina maritima*, *Salicornia* (all species), *Salsola soda*, *Salsola tamariscina*, *Samolus valerandii*, *Sarcocornia fruticosa*, *Sarcocornia perennis*, *Sarcocornia* (al species), *Saussurea salsa*, *Schedonorus arundinaceus*, *Schedonorus arundinaceus* subsp. corsicus, *Schedonorus arundinaceus* subsp. orientalis, *Schoenoplectus lacustris*, *Schoenoplectus lacustris* subsp. glaucus, *Schoenoplectus litoralis*, *Schoenoplectus pungens*, *Schoenoplectus tabernaemontani*, *Scorzonera parviflora*, *Senecio cineraria*, *Senecio doria*, *Senecio doria* subsp. doria, *Seseli dichotomum*, *Sibbaldianthe bifurca*, *Silene multiflora*, *Silene sedoides*, *Silene viscosa*, *Sonchus crassifolius*, *Sonchus maritimus*, *Spergularia azorica*, *Spergularia bocconeii*, *Spergularia marina*, *Spergularia media*, *Spergularia salina*, *Spirobassia hirsuta*, *Stellaria humifusa*, *Suaeda acuminata*, *Suaeda altissima*, *Suaeda confusa*, *Suaeda corniculata*, *Suaeda heterophylla*, *Suaeda maritima*, *Suaeda pannonica*, *Suaeda prostrata*, *Suaeda salsa*, *Suaeda splendens*, *Suaeda vera*, *Tanacetum achilleifolium*, *Taraxacum bessarabicum*, *Tephroses helenitis*, *Tephroses helenitis* subsp. candida, *Trifolium angulatum*, *Trifolium fragiferum*, *Trifolium fragiferum* subsp. bonannii, *Trifolium ornithopodioides*, *Trifolium resupinatum*, *Trifolium retusum*, *Trifolium strictum*, *Triglochin barrelieri*, *Triglochin bulbosa* subsp. laxiflora, *Triglochin laxiflora*, *Triglochin maritima*, *Tripolium pannonicum*, *Tripolium pannonicum* subsp. pannonicum, *Tripolium pannonicum* subsp. tripolium, *Zingeria biebersteiniana*, *Zingeria pisidica*, *Zygophyllum fabago*

**Relevés should be included if relevés are allocated to the following syntaxonomical units:**

AEL/Aeluropodetea littoralis, CAK/Cakiletea maritimae, CRI/Crithmo-Staticetea, CRY/Crypsietea aculeatae, FEP/Juncetea maritimi, JUN/Festuco-Puccinellietea, KAL/Kalidietea foliosi, SAG/Saginetea maritimae, SAL/Salicornietea fruticosae, THE/Thero-Salicornietea, COR-01C /Sedo-Cerastion arvensis, COR-01D/Armerion elongatae, FES-02/Festucetalia valesiaca, FES-03/Helictotricho desertorum-Stipetalia, FES-04/Tanaceto achilleifolii-Stipetalia lessingiana, PHR/Phragmito-Magnocaricetea, MOL/Molinio-Arrhenatheretea, MOL-01/Arrhenatheretalia elatioris, MOL-02/Galietalia veri, MOL-05/Molinietalia caeruleae, MOL-06/Trifolio Hordeetalia, MOL-07/Holoschoenetalia, MOL-08/Filipendulo ulmariae-Lotetalia uliginosi, MOL-09/Althaeetalia officinalis, MOL-10/Potentillo-Polygonetalia avicularis, SCH-01/Caricetalia davalliana, POL/Polygono-Poetea annuae, ART-01/Dauco-Melilotion, ART-02/Polygono-Artemisietalia austriaca, ART-04/Onopordion castellani, ART-05/Elytrigio repentis-Dittrichietalia viscosae, EPI-03/Arctio lappae-Artemisietalia vulgaris, EPI-05/Convolvuletalia sepium, BID/Bidentetea, BUL/Poetalia bulbosae, PEG/Pegano harmalae-



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Salsolitea vermiculatae, LER/Artemisietea lerschiana, DIG-02/Euphorbietalia prostratae, SIS-01/Sisymbrietalia sophiae, CHE-01/Brometalia rubenti-tectorum, CHE-02/Chenopodietalia

**Relevés should be included if relevés are allocated to the following EUNIS codes (2019):**

MA211 (Arctic coastal saltmarsh), MA221 (Atlantic saltmarsh driftline), MA222 (Atlantic upper saltmarsh), MA223 (Atlantic upper-mid saltmarsh and saline and brackish reed, rush and sedge bed), MA224 (Atlantic mid-low saltmarsh), MA225 (Atlantic pioneer saltmarsh), MA232 (Baltic coastal meadow), MA241 (Black Sea littoral saltmarsh), MA251 (Mediterranean upper saltmarsh), MA252 (Mediterranean upper-mid saltmarsh and saline and brackish reed, rush and sedge bed), MA253 (Mediterranean mid-low saltmarsh), N11 (Atlantic, Baltic and Arctic sand beach), N12 (Mediterranean and Black Sea sand beach), N13 (Atlantic and Baltic shifting coastal dune), N14 (Mediterranean, Macaronesian and Black Sea shifting coastal dune), N1H (Atlantic and Baltic moist and wet dune slack), N1J (Mediterranean and Black Sea moist and wet dune slack), N21 (Atlantic, Baltic and Arctic coastal shingle beach), N22 (Mediterranean and Black Sea coastal shingle beach), Q41 (Alkaline, calcareous, carbonate-rich small-sedge spring fen), Q42 (Extremely rich moss-sedge fen), Q46 (Carpathian travertine fen with halophytes), Q51 (Tall-helophyte bed), Q52 (Small-helophyte bed), Q53 (Small-sedge bed), Q54 (Inland saline or brackish helophyte bed), R19 (Dry steppic submediterranean pasture of the Amphi-Adriatic region), R1B (Continental dry grassland (true steppe)), R1C (Desert steppe), R1D (Mediterranean closely grazed dry grassland), R21 (Mesicpermanent pastures of lowlands and mountains), R22 (Low and medium altitude haymeadow), R31 (Mediterranean tall humid inland grassland), R32 (Mediterranean short moist grasslands of lowlands), R34 (Submediterranean moist meadow), R35 (Moist or wet mesotrophic to eutrophic hay meadow), R37 (Temperate and boreal moist or wet oligotrophic grassland), R55 (Lowland moist or wet tall-herb and fern fringe), R61 (Mediterranean inland salt steppe), R62 (Continental inland salt steppe), R63 (Temperate inland salt marsh), R64 (Semi-desert salt pan), R65 (Continental subsaline alluvial pasture and meadow), S66 (Mediterranean halo-nitrophilous scrub), S67 (Aralo-Caspian semi-desert), S68 (Semi-desert sand dune with sparse scrub), V34 (Trampled xeric grassland with annuals), V35 (Trampled mesophilous grassland with annuals), V38 (Dry perennial anthropogenic herbaceous vegetation), V39 (Mesic perennial anthropogenic herbaceous vegetation)

- Envisaged publications:

1-3

- Data deposition. Some journals require data used for the analysis to be stored in a public repository to ensure the repeatability of the analysis. According to EVA Rules, you are not allowed to store the original vegetation-plot data obtained from EVA. However, if you plan to publish in such a journal, you may deposit a reduced EVA-derived dataset that (1) would make it possible to repeat the analysis published in the paper and (2) does not contain any information not used in the analysis. For example, such a dataset can contain only a subset of species (e.g., only angiosperms or only neophytes), or replace species names with codes, or replace species cover values with presences/absences, or remove all the header data, or replace the exact plot coordinates by coarse grid-cell coordinates etc. If you plan to deposit reduced information from vegetation plots, please describe here what might be deposited. If the project developed so that you needed to deposit more information than specified here, you would need to ask specific permission from the Custodians of the EVA databases used in your analysis before the dataset is deposited.

We do not plan data deposition.



## Data Request Form

- Plant trait data from the TRY consortium. If you plan to combine your analysis of vegetation-plot data with plant trait data, you can also request for a dataset of 18 gap-filled traits for a large number of plant taxa prepared by the TRY consortium. These traits include Leaf area, Specific leaf area, Leaf fresh mass, Leaf dry matter content, Leaf C, Leaf N, Leaf P, Leaf N per area, Leaf N:P ratio, Leaf delta15N, Seed mass, Seed length, Seed number per reproductive unit, Dispersal unit length, Plant height, Stem specific density, Stem conduit density, and Conduit element length. This dataset can be provided to you from the EVA manager together with the vegetation-plot data. If you use this dataset, you must inform about your project the TRY data contributors who might be potentially interested and invite them as potential co-authors, assuming they will make an intellectual contribution to your paper. The list of the TRY data contributors will be sent to you together with the gap-filled trait dataset.

No

- Specification of the co-authorship arrangements in publications based on the requested data. Note that the EVA Rules recommend that co-authorship is offered to a representative of each database providing data that are particularly important for the project (e.g. unique vegetation types, under-represented geographic areas) or make up more than 10% of the final dataset (5% threshold can be considered too). These database representatives should be experts in the topic of the project (they do not need to be the custodians or deputy custodians) and they should contribute to the project more than just by providing the existing data, e.g. by intellectual contribution to the concept of the paper, preparation of new data, or helping with data analysis, interpretation of the results or writing parts of the paper (see the IAVS Code of Professional Ethics: <http://iavs.org/Governance/Code-of-Professional-Ethics.aspx>). The project leader should enable active participation by regularly informing potential co-authors about the progress of the project from its early stage. The project leader should also make final co-authorship arrangements based on the real input of the individual contributors.

One representative of each EVA database will be invited as a co-author provided (1) s/he expresses an interest in this study by registering in the online EVA form; (2) the database will provide either at least 1% of the plots of total dataset or plots from a large area where almost no other plots are available. To be included on the final author list, the invited potential co-authors will need to contribute intellectually beyond the delivery of the data, e.g., by checking the species list and species alien status for their region and/or commenting on the concept of the analyses, interpretation of the results or the text of the manuscript.

- Eligibility of the applicant to receive EVA data. Specify to which EVA database the applicant has contributed; if the applicant is not the custodian or deputy custodian of an EVA database, give a name of a custodian or deputy custodian who supports this data request.

Ricarda Pättsch, Custodian of GrassVeg.DE

I agree with the terms of EVA Data Property and Governance Rules as approved on 26 May 2012 (<http://euroveg.org/download/eva-rules.pdf>).

Klein Schneen, 10.2.2021,

Ricarda Pättsch