

Supporting Information to the paper Biurrun I. et al. Benchmarking plant diversity of Palaearctic grasslands and other open habitats. *Journal of Vegetation Science*.

**Appendix S1.** Datasets with GrassPlot code, representatives of each dataset (contact persons in bold), number of plots used for benchmark calculations and references.  $N_{all}$  = total number of plots;  $N_{ind}$  = number of independent observations. Datasets from EDGG Field Workshops are administered through the EDGG Field Workshop Coordinator, so no contact person is indicated.

Dataset ID	Short dataset name	Representatives	$N_{all}$	$N_{ind}$	References
AM_A	Dembicz Armenia	<b>Iwona Dembicz</b>	13	7	
AM_B	EDGG_FW_Armenia	Alla Aleksanyan, Beata Cykowska-Marzencka, George Fayvush, Helmut Mayrhofer, Idoia Biurrun, Jürgen Dengler, Marine Oganessian	430	256	Aleksanyan et al. (2020)
AT_A	Jentsch HerbDivNet Pitztal Austria	<b>Anke Jentsch</b>	408	12	Fraser et al. (2015)
AT_B	GLORIA Schrankogel	<b>Harald Pauli</b> , Manfred Bardy-Durchhalter, Manuela Winkler	1055	1055	Gottfried et al. (1999; 2011); Pauli et al. (2007)
AT_C	GLORIA Hochswab	<b>Harald Pauli</b> , Manfred Bardy-Durchhalter, Manuela Winkler	5964	123	Gottfried et al. (2012); Pauli et al. (2012); Winkler et al. (2016)
AT_D	Essl, Austria old plots	<b>Franz Essl</b>	29	29	
AT_E	EDGG Austria	Elías Afif, Christian Berg, Philipp Kirschner, Martin Magnes, Ermin Mašić, Helmut Mayrhofer	232	142	Magnes et al. (2020)
AT_F	Mayer_Obergurgl	<b>Roland Mayer</b> , Brigitta Erschbamer	216	216	Mayer et al. (2009; 2017)
AZ_A	Etzold Caucasus	<b>Jonathan Etzold</b> , Tobias Dahms, Michael Manthey, Jan Peters	1013	1013	Etzold et al. (2016)
AZ_B	Peper Gobustan	<b>Jan Peper</b> , Michael Manthey	1020	1020	Peper et al. (2010a; 2010b)
BE_A	Van Meerbeek_Flanders	<b>Koenraad Van Meerbeek</b>	90	90	Van Meerbeek et al. (2014)
BG_A	EDGG Bulgaria	Iva Apostolova, Steffen Boch, Jürgen Dengler, Anna Ganeva, Hristo Pedashenko, Kiril Vassilev	263	173	Pedashenko et al. (2013)

BG_B	BioBio_Bulgaria	<b>Idoia Biurrun</b>	68	68	Lüscher et al. (2016)
BY_A	Dembicz Belarus	<b>Iwona Dembicz</b>	9	9	
CH_A	Jeschke Merishausener Gräte	<b>Michael Jeschke</b> , Kathrin Kiehl	92	12	Jeschke & Kiehl (2008)
CH_B	Bergamini Switzerland	<b>Ariel Bergamini</b> , Steffen Boch, Klaus Ecker	4779	4779	Bergamini et al. (2013; 2016); Tillé & Ecker (2014); Boch et al. (2018; 2019a; 2019b)
CH_C	Dengler Wädenswil	<b>Jürgen Dengler</b> , Stefan Widmer	227	125	Dengler & Widmer (2018)
CH_D	EDGG_Switzerland_2018-2019	Jürgen Dengler, Beata Cykowska-Marzencka, Iwona Dembicz, Jamyra Gehler, Manuel Babbi, Miro Bergauer, Steffen Boch	578	374	Dengler et al. (2019; 2020)
CH_E	Dengler Alp Glivers	<b>Jürgen Dengler</b> , Daniel Hepenstrick, Stefan Widmer	39	21	Hepenstrick et al. (2018)
CH_F	BioBio_Switzerland	<b>Philippe Jeanneret</b>	65	65	Lüscher et al. (2016)
CH_G	Meier Switzerland	<b>Eliane Meier</b>	540	540	Meier & Hofer (2016)
CH_H	Dengler_Summer School 2019	<b>Jürgen Dengler</b> , Iwona Dembicz, Patryk Czortek, Regula Billeter	116	68	Dengler (2020)
CH_I	Vladimir Onychpenko_Davos	<b>Vladimir Onipchenko</b>	350	110	Onipchenko & Semenova (1995)
CH_J	Dengler_Zürich - Wollishofen	<b>Jürgen Dengler</b>	22	22	Brenneisen et al. (2019)
CH_K	Dengler_Grisons_Preda	<b>Jürgen Dengler</b> , Jamyra Gehler	21	21	Hochreutener et al. (2019); Dengler et al. (2020)
CH_L	Dengler_Grison_AlpGlivers	<b>Jürgen Dengler</b> , Stefan Widmer	24	24	
CH_M	Dengler & Zürcher_Fribourg	Rahel Zürcher, <b>Jürgen Dengler</b> , Jamyra Gehler	71	47	Zürcher (2019)
CH_N	Dengler & Büchler_Zurich	Marc-Olivier Büchler, <b>Jürgen Dengler</b>	81	81	Büchler (2019)
CN_A	Wang Tibet	<b>Yun Wang</b> , Karsten Wesche	173	173	Wang et al. (2017; 2018)

CN_B	Baranova Qilian mountains	<b>Alina Baranova</b>	64	64	Baranova et al. (2016)
CN_C	Zhang Tibet	<b>Hui Zhang</b>	110	3	Zhang (2013)
CN_D	Deng_Mu Us desert	<b>Lei Deng</b>	36	36	Deng et al. (2014)
CN_E	Deng_Loess Plateau	<b>Lei Deng</b>	330	330	Deng et al. (2016)
CN_F	Li_Mongolian Plateau	<b>Frank Yonghong Li, Wenhong Ma, Lu Wen, Liqing Zhao</b>	26	26	
CN_G	Riccardo & Frank_Inner Mongolia	<b>Riccardo Guarino, Frank Yonghong Li</b>	18	18	Guarino & Li (2019)
CN_H	Vladimir Onychpenko_Sichuan	<b>Vladimir Onipchenko</b>	180	60	Onipchenko et al. (2014)
CN_I	Jianshuang_Tibet	<b>Jianshuang Wu</b>	45	45	Zhou et al. (2016)
CZ_A	Dengler White Carpathians	<b>Jürgen Dengler</b>	7	7	
CZ_B	Hajek Hute Nature Reserve	<b>Michal Hájek</b>	47	47	Hájek et al. (2017)
CZ_C	Roleček White Carpathians	<b>Jan Roleček, Zuzana Plesková</b>	21	21	Roleček et al. (2012)
CZ_D	Hajek Klimes	<b>Michal Hájek</b>	168	56	Klimeš (1997)
CZ_E	Milan_Central Bohemia	<b>Kristina Merunková, Milan Chytrý</b>	24	24	Merunková et al. (2014); Palpurina et al. (2017); Wagner et al. (2017)
CZ_F	Milan_Northern Bohemia	<b>Zdenka Preislerová, Milan Chytrý</b>	28	28	Merunková et al. (2014); Palpurina et al. (2017); Wagner et al. (2017)
CZ_G	Milan_Southern Moravia	<b>Kristina Merunková, Zdenka Preislerová, Milan Chytrý</b>	66	66	Merunková et al. (2012); Palpurina et al. (2017); Wagner et al. (2017)
CZ_H	Milan_White Carpathians	<b>Zdenka Preislerová, Kristina Merunková, Milan Chytrý</b>	82	82	Merunková et al. (2012); Palpurina et al. (2017); Wagner et al. (2017)
CZ_I	Leps Southern Bohemia	<b>Jan Lepš</b>	312	24	Lepš (2014)
CZ_J	Dolezal Sumava	<b>Jiri Dolezal</b>	150	30	Maskova et al. (2009); Dolezal et al. (2011)

CZ_K	Dolezal_Benesov	<b>Jiri Dolezal</b> , Jan Lepš	60	60	Lepš et al. (2007)
DE_A	Dengler Upper Franconia	<b>Jürgen Dengler</b>	13	7	Hopp & Dengler (2015)
DE_B	Dengler BR Schorfheide-Chorin	<b>Jürgen Dengler</b>	700	70	Dengler et al. (2004)
DE_C	Dengler Wadden Sea	<b>Jürgen Dengler</b> , Kai Jensen	695	395	
DE_D	Dengler Lenzen	<b>Jürgen Dengler</b> , Kai Jensen	243	135	Jensen et al. (2013)
DE_E	Dengler BR Middle Elbe	<b>Jürgen Dengler</b> , Oliver Schuhmacher	194	116	Schuhmacher & Dengler (2013)
DE_F	Dengler Bayreuth	<b>Jürgen Dengler</b>	234	126	Dengler (2016)
DE_G	Kiehl Hamburger Hallig salt marshes	<b>Kathrin Kiehl</b>	235	235	Wanner et al. (2014)
DE_H	Langer Bayreuth	<b>Nancy Langer</b> , Julia Went	286	154	Langer (2016); Went (2016)
DE_I	Jeschke Garching Heide	<b>Michael Jeschke</b> , Kathrin Kiehl	296	88	Kiehl & Jeschke (2005); Jeschke & Kiehl (2006); Jeschke (2008)
DE_J	Jeschke Kissinger Heide	<b>Michael Jeschke</b> , Kathrin Kiehl	80	24	Jeschke (2008)
DE_K	Allers Lüneburg	<b>Marc-Andre Allers</b>	110	74	Dengler & Allers (2006); Allers (2007)
DE_L	Dengler Uckermark	<b>Jürgen Dengler</b> , Franziska Hauch, Nancy Langer	322	184	Langer et al. (2017)
DE_M	Dengler Brodowin	<b>Jürgen Dengler</b>	68	28	Dengler & Allers (2006)
DE_N	Diekmann Lower Saxony	<b>Martin Diekmann</b> , Cecilia Dupré	125	125	Diekmann et al. (2014)
DE_O	Conradi Southern Bavaria	<b>Timo Conradi</b>	296	296	Conradi & Kollmann (2016); Conradi et al. (2017)
DE_P	Hobohm Lower Saxony	<b>Carsten Hobohm</b>	30	30	Hobohm (1998)
DE_Q	Hüllbusch Gabower Hänge	<b>Elisabeth M. Hüllbusch</b>	16	16	Hüllbusch et al. (2016)

DE_R	Suchrow Wadden Sea	<b>Sigrid Suchrow</b> , Kai Jensen, Marin Stock	2691	2691	Suchrow & Jensen (2010); Suchrow et al. (2012; 2015); Wanner et al. (2014)
DE_S	BioBio CSR Germany	<b>Sebastian Wolfrum</b>	41	41	Lüscher et al. (2016)
DE_T	Manthey Greifswald	<b>Michael Manthey</b>	913	498	
DK_A	Bruun Denmark	<b>Hans Henrik Bruun</b>	84	8	Bruun (1998)
EE_A	Boch Saaremaa	<b>Steffen Boch</b>	496	112	Boch (2005); Boch & Dengler (2006); Dengler & Boch (2008)
EE_B	Helm Alvar restoration	<b>Aveliina Helm</b> , Nele Ingerpuu	124	124	Helm (2017); Prangel (2017)
ES_A	EDGG Navarre	Itziar García-Mijangos, Asun Berastegi, Idoia Biurrun, Jürgen Dengler, Javier Etayo, Ute Jandt, Rayna Natcheva	504	294	Biurrun et al. (2014)
ES_B	Rodriguez-Rojo SW Iberian System	<b>Maria Pilar Rodríguez-Rojo</b>	141	141	Rodríguez-Rojo et al. (2012; 2013)
ES_C	Chocarro Pyrenees	<b>Cristina Chocarro</b>	160	160	Reiné et al. (2014); Chocarro et al. (2010)
ES_D	Campos Dunes Bizkaia	Daniel García-Magro, <b>Juan Antonio Campos</b>	660	660	Herrera et al. (2016)
ES_E	Campos Gorbea	<b>Juan Antonio Campos</b> , Daniel García-Magro, Itziar García-Mijangos	60	60	García-Mijangos et al. (2016)
ES_F	Biurrun Life Tremedal	<b>Idoia Biurrun</b> , Juan Antonio Campos	159	159	Campos & Biurrun (2015)
ES_G	Luzuriaga Aranjuez	<b>Arantzazu L. Luzuriaga</b> , Adrián Escudero, Ana María Sánchez	300	12	Luzuriaga et al. (2012); Peralta et al. (2016)
ES_H	Luzuriaga Belinchon	<b>Arantzazu L. Luzuriaga</b> , Adrián Escudero, Ana María Sánchez	500	500	Luzuriaga et al. (2018)
ES_I	Luzuriaga Titulcia-Ocaña	<b>Arantzazu L. Luzuriaga</b> , Adrián Escudero, Jose M. González	910	70	Luzuriaga et al. (2015)
ES_J	GLORIA Ordesa	<b>José Luis Benito Alonso</b> , Luis Villar	6464	128	Gottfried et al. (2012); Pauli et al. (2012); Winkler et al. (2016)
ES_K	GLORIA South Pyrenees	<b>José Luis Benito Alonso</b> , Luis Villar	64	64	Gottfried et al. (2012); Pauli et al. (2012); Winkler et al. (2016)
ES_L	GLORIA Moncayo	<b>José Luis Benito Alonso</b> , Luis Villar	64	64	Winkler et al. (2016)

ES_M	GLORIA Sistema Central	<b>Rosario G. Gavilán</b>	3248	80	Gottfried et al. (2012); Pauli et al. (2012); Winkler et al. (2016)
ES_N	GLORIA Sierra Nevada East	<b>Maria Rosa Fernández Calzado</b> , Joaquín Molero Mesa	6464	128	Gottfried et al. (2012); Pauli et al. (2012); Winkler et al. (2016)
ES_O	GLORIA Sierra Nevada North	<b>Maria Rosa Fernández Calzado</b> , Joaquín Molero Mesa	6464	128	Gottfried et al. (2012); Pauli et al. (2012); Winkler et al. (2016)
ES_P	Alfaro Picos de Europa	<b>Borja Jiménez-Alfaro</b> , Alvaro Bueno, Corrado Marcenò	1616	32	Jímenez-Alfaro et al. (2010)
ES_Q	Löbel Tenerife	<b>Swantje Löbel</b> , Jürgen Dengler	18	18	
ES_R	de Bello NE Spain	<b>Francesco de Bello</b> , Maria Teresa Sebastià, Jan Lepš	300	300	de Bello et al. (2007)
ES_S	Biurrun Urumea	<b>Idoia Biurrun</b>	34	34	Aramburu (2017)
ES_T	Campos Zalama	<b>Juan Antonio Campos</b>	24	24	
ES_U	Pladevall Pyrenean fens	<b>Eulàlia Pladevall-Izard</b> , Aaron Pérez-Haase	859	859	
ES_V	Biurrun DarkDiv Gorbeia	<b>Idoia Biurrun</b> , Juan Antonio Campos, Itziar García-Mijangos, Daniel García-Magro, Diego Liendo	201	147	
EU_A	Hajek West Carpathian fens	<b>Zuzana Fajmonová</b> , Michal Hájek, Petra Hájková	106	106	Rozbrojová (2005); Rozbrojová & Hájek (2008)
EU_B	Hajek White Carpathian grasslands	<b>Zuzana Fajmonová</b> , Michal Hájek	50	50	Fajmonová & Hájek (2011)
EU_C	Hajek spring fen nested series	<b>Eva Šmerdová</b> , Zuzana Fajmonová, Michal Hájek, Petra Hájková, Zuzana Plesková	74	74	Hájková & Hájek (2003); Náhlíková (2009)
EU_D	Reitalu Baltic Sea Region	<b>Triin Reitalu</b> , Karin Bengtsson, Aveliina Helm, Meelis Pärtel, Honor C. Prentice, Ejvind Rosén, Sergey Znamenskiy	1223	1223	Bengtsson et al. (1988); Znameskiy et al. (2006); Reitalu et al. (2014)
EU_E	Roleček Hungary-Romania	<b>Jan Roleček</b> , Pavel Dřevojan, Michal Hájek	5	5	Roleček et al. (2016); Roleček et al. (2019)
EU_F	Torca Bay of Biscay dunes	<b>Juan Antonio Campos</b> , Mercedes Herrera, Marta Torca	3272	998	Torca et al. (2019a; 2019b)
EU_G	Palpurina Bulgaria and Romania	<b>Salza Palpurina</b> , Irena Axmanová, Milan Chytrý, Jiří Danihelka, Rossen Tzonev	329	329	Palpurina et al. (2015; 2017); Wagner et al. (2017)
EU_H	Virtanen Svalbard and Lapland	<b>Risto Virtanen</b>	30	30	Virtanen (2018)

EU_I	Pätsch Baltic Sea salt marshes	<b>Ricarda Pätsch</b>	81	81	Pätsch (2014)
EU_J	Janišová Carpathians	<b>Monika Janišová</b> , Martin Magnes	204	119	
EU_K	Essl Europe	<b>Franz Essl</b>	1430	1430	
EU_L	Perez Haase_Pyrenean mires	<b>Aaron Pérez-Haase</b> , Josep Maria Ninot	376	376	
EU_M	Iwona_Norway and Sweden	<b>Iwona Dembicz</b> , Łukasz Kozub, Marta Czarnocka-Ciaciura	39	39	
FR_A	Gillet Jura	<b>François Gillet</b> , Leslie Mauchamp	816	192	Mauchamp et al. (2014; 2016)
FR_B	Van Mechelen_Languedoc	<b>Carmen Van Mechelen</b>	253	253	Van Mechelen et al. (2014)
GR_A	EDGG Greece	Ioannis Tsiripidis, Steffen Boch, Jürgen Dengler, Georgios Fotiadis, Chrisoula Pirini	185	101	Dengler & Demina (2012)
GR_B	Milan_Crete	<b>Milan Chytrý</b> , Ching-Feng Li, Lubomír Tichý, David Zelený	112	112	Chytrý et al. (2010)
HR_A	Vitasovic Croatia	<b>Ivana Vitasović Kosić</b>	98	98	Vitasović Kosić & Britvec (2014); Vitasović Kosić et al. (2011; 2012; 2014)
HU_A	Tölgyesi Central Hungary	<b>Csaba Tölgyesi</b>	520	520	Tölgyesi et al. (2016)
HU_B	Bartha Hungary sandy grasslands	<b>Sándor Bartha</b>	780	30	Bartha (2016)
HU_C	Török Hortobágy-Kiskunság National Parks	<b>Orsolya Valkó</b> , Balázs Deák, András Kelemen, Péter Török, Béla Tóthmérész	568	568	Török et al. (2010; 2014); Deák et al. (2014; 2015); Valkó et al. (2016; 2017)
HU_D	Török nested series	András Kelemen, <b>Orsolya Valkó</b> , Balázs Deák, Péter Török, Béla Tóthmérész	60	60	Godó et al. (2017)
HU_E	Molnár Kiskunsag	<b>Zsolt Molnár</b>	1078	1078	Fekete et al. (2002)
HU_F	BioBio_Hungary	<b>Idoia Biurrun</b>	79	79	Lüscher et al. (2016)
HU_G	Bátori Hungarian dolines	<b>Zoltán Bátori</b> , Tünde Farkas, András Vojtkó	356	356	Bátori et al. (2017)
HU_H	Sonkoly_dry sand grassland nested	<b>Judit Sonkoly</b> , Péter Török	65	35	

HU_I	Török_loess grasslands	<b>Péter Török</b> , Balázs Teleki	225	225	
IL_A	Giladi Southern Judea	<b>Itamar Giladi</b> , Florian Jeltsch, Felix May, Yaron Ziv	489	82	Giladi et al. (2011)
IN_A	Dolezal Ladakh unpublished	<b>Jiri Dolezal</b>	369	369	Dvorský et al. (2011)
IN_B	Dolezal Ladakh nested	<b>Jiri Dolezal</b>	384	384	
IR_A	Naqinezhad Central Alborz	<b>Alireza Naqinezhad</b> , Amir Talebi	405	216	Talebi (2017)
IR_B	Noroozi Alborz	<b>Jalil Noroozi</b>	155	155	Noroozi et al. (2010; 2014; 2017); Noroozi (2013)
IR_C	GLORIA Alborz	<b>Jalil Noroozi</b>	6464	128	Gottfried et al. (2012); Pauli et al. (2012); Winkler et al. (2016)
IR_D	Moradi_Central Alborz	<b>Halime Moradi</b> , Jens Oldeland	798	798	Moradi et al. (2020)
IR_E	Essl Iran	<b>Franz Essl</b>	76	76	
IR_F	Sanaei_Alborz	<b>Anvar Sanaei</b> , Arshad Ali, Sahar Ghafari, Parvaneh Ashouri, Mansoureh Kargar, Zuoqiang Yuan	1493	1493	Sanaei et al. (2018)
IR_G	Rahmanian_Khorasan	<b>Soroor Rahmanian</b> , Hamid Ejtehadi, Mohammad Farzam, Farshid Mermariani	200	200	Rahmanian et al. (2020)
IT_A	EDGG Sicily	Riccardo Guarino, Thomas Becker, Iwona Dembicz, Jürgen Dengler, Christian Dolnik, Gian Pietro Giusso del Galdo	298	172	Guarino et al. (2012)
IT_B	Filibeck Abruzzo	<b>Goffredo Filibeck</b> , Laura Cancellieri	567	243	Filibeck et al. (2015); Cancellieri et al. (2017)
IT_C	Baumann Gran Paradiso	<b>Esther Baumann</b> , Jürgen Dengler, Anke Jentsch, Frank Weiser	182	98	Baumann et al. (2016)
IT_D	Dengler Aosta	<b>Jürgen Dengler</b>	26	14	Wiesner et al. (2015)
IT_E	Terzi Alta Murgia	<b>Massimo Terzi</b> , Mariano Fracchiolla	70	20	Ciani et al. (2012)
IT_F	Maccherini Monte Labbro	<b>Simona Maccherini</b>	29	29	Maccherini et al. (2007)



IT_G	Maccherini Maremma	<b>Simona Maccherini</b> , Ilaria Bonini	56	56	Maccherini et al. (2013)
IT_H	Chiarucci Parco della Chiusa	<b>Alessandro Chiarucci</b> , Chiara Lelli	78	42	Suanno (2017)
IT_I	Chiarucci Radicondoli	<b>Alessandro Chiarucci</b> , Daniele Viciani	15	6	Chiarucci et al. (2006)
IT_J	Maccherini Crete Senesi	<b>Simona Maccherini</b>	111	111	Maccherini et al. (2011); Torri et al. (2013)
IT_K	Viciani Tuscan Apennines	<b>Daniele Viciani</b> , Lorenzo Lastrucci, Lorenzo Lazzaro	60	60	Lazzaro et al. (2020)
IT_L	EDGG Apennines	Michele Aleffi, Laura Cancellieri, Goffredo Filibeck, Giovanna Potenza, Leonardo Rosati, Marta Gaia Sperandii	317	197	Filibeck et al. (2018)
IT_M	Conti Lazio dunes	<b>Luisa Conti</b> , Alicia Acosta, Marta Carboni	168	42	Conti et al. (2017)
IT_O	GLORIA Dolomites	<b>Brigitta Erschbamer</b>	6060	120	Erschbamer et al. (2011); Gottfried et al. (2012); Pauli et al. (2012); Winkler et al. (2016)
IT_P	Chiarucci Siena	<b>Sara Landi</b> , Alessandro Chiarucci	36	36	Chiarucci et al. (2012); Amici et al. (2013)
IT_Q	EGC Sulmona	<b>Giampiero Ciaschetti</b> , Sabina Barrusciano	13	7	Burrascano et al. (2018)
IT_R	Filibeck_Picinisco	<b>Goffredo Filibeck</b> , Laura Cancellieri	83	83	
IT_S	Mugnai_Tuscany	<b>Michele Mugnai</b> , Lorenzo Lazzaro, Daniele Viciani	57	57	
IT_T	Biodiversity Monitoring South Tirol	<b>Simon Stifter</b> , Andreas Hilpold	312	168	
JP_A	Atushi Japan	<b>Atushi Ushimaru</b> , Yuko K. Nagata	90	90	Nagata & Ushimaru (2016)
JP_B	Koyama Japan	<b>Asuka Koyama</b> , Munemitsu Akasaka, Tomoyo F. Koyanagi	328	328	Koyama et al. (2017; 2018)
KG_A	Nowak_Kyrgyzstan	<b>Arkadiusz Nowak</b> , Ewelina Klichowska, Marcin Nobis, Anna Wróbel	91	49	
KZ_A	Deak Kazakhstan	<b>Orsolya Valkó</b> , Zoltán Bátori, Balázs Deák, András Kelemen, Csaba Tölgyesi	200	200	Deák et al. (2017)

KZ_B	Milan_northern Kazakhstan	<b>Milan Chytrý</b> , Jiří Danihelka, Svatava Kubešová, Pavel Dřevojan	164	164	Palpurina et al. (2017)
LV_A	Rusina Latvia	<b>Solvita Rusina</b>	250	250	Rūsiņa (2016)
MA_A	Finckh southern Morocco	<b>Manfred Finckh</b>	32	32	
MN_A	Wesche southern Mongolia	<b>Karsten Wesche</b>	331	331	Wesche et al. (2005); von Wehrden et al. (2009)
MN_B	Kanikuma Bulgan	<b>Kaoru Kakinuma</b>	80	80	Kakinuma et al. (2017)
MN_C	Kanikuma Madalgobi	<b>Kaoru Kakinuma</b>	60	60	Kakinuma et al. (2017)
MN_D	Frank Yonghong_Mongolia	<b>Frank Yonghong Li</b> , Wenhong Ma, Lu Wen, Liqing Zhao	42	42	
NL_A	Peet Limburg	<b>Robert K. Peet</b>	306	9	Willems et al. (1993); Sykes et al. (1994)
NO_A	Grytnes central Norway	<b>John-Arvid Grytnes</b> , Vivian A. Felde, Jutta Kapfer	235	235	Felde et al. (2012); Kapfer et al. (2013)
NO_B	GLORIA Norway	<b>Pieter De Frenne</b> , Bente J. Graae, Magni Olsen Kyrkjeeide, Ottar Michelsen, Thomas Vanneste	6464	128	Gottfried et al. (2012); Pauli et al. (2012); Winkler et al. (2016); Vanneste et al. (2017)
NO_C	Grytnes North Norway	<b>John-Arvid Grytnes</b>	66	66	
NO_D	Grytnes South Norway	<b>John-Arvid Grytnes</b>	20	20	
NO_E	Landscape Monitoring Norway	<b>Wenche Dramstad</b> , Wendy Fjellstad, Jutta Kapfer, Christian Pedersen, Hanne Sickel, Grete Stokstad	569	569	
NP_A	Bhatta Nepal	<b>Kuber Prasad Bhatta</b> , John-Arvid Grytnes, Ole Reidar Vetaas	252	252	Bhatta et al. (2018a; 2018b)
PL_A	EDGG Poland	Zygmunt Kącki, Idoia Biurrun, Marta Czarniecka-Wiera, Iwona Dembicz, Monika Staniaszek-Kik, Grzegorz Swacha, Piotr T. Zaniewski	458	272	
PL_B	Pielech Karkonosze Mts.	<b>Remigiusz Pielech</b> , Marek Malicki	88	88	Malicki & Pielech (2016)
PL_C	Czarniecka Lower Silesia	<b>Marta Czarniecka-Wiera</b> , Zygmunt Kącki	2221	2221	Czarniecka-Wiera et al. (2019; 2020)

PL_D	Pielech nested	<b>Remigiusz Pielech</b> , Marek Malicki	130	70	
PL_E	Kozub Biebrza	<b>Łukasz Kozub</b> , Iwona Dembicz, Katarzyna Skłodowska	195	105	
PT_A	Lomba_Ecochange	<b>Angela Lomba</b> , João Honrado	24	24	
PT_B	Silva_Ribatejo	<b>Vasco Silva</b>	108	36	Silva et al. (2019)
RO_A	EDGG Transylvania	Eszter Ruprecht, Thomas Becker, Jürgen Dengler, Christian Dolnik, Anna Szabó	302	182	Dengler et al. (2009; 2012); Turtureanu et al. (2014)
RO_B	Mardari Moldavian Plateau	<b>Constantin Mardari</b> , Cătălin Tănase	585	315	Mardari & Tănase (2016)
RO_C	Germany southern Transylvania	<b>Markus Germany</b> , Thomas Becker, Ute Becker, Laura M.E. Sutcliffe	102	102	Sutcliffe et al. (2016)
RO_D	Csergő_Transylvania	<b>Anna Mária Csergő</b> , László Demeter	196	196	Csergő & Demeter (2012); Csergő et al. (2013); Maseyk et al. (2017)
RS_A	EDGG Serbia	Zora Stevanovic-Dajic, Svetlana Aćić, Idoia Biurrun, Steffen Boch, Jürgen Dengler, Martin Magnes, Marko Sabovljević	493	301	Krstivojević Ćuk et al. (2015); Aćić et al. (2017)
RU_A	EDGG Khakassia	Nikolai Ermakov, Iwona Dembicz, Jürgen Dengler, Goffredo Filibeck, Monika Janišová, Lukasz Kozub, Mariya A. Polyakova	561	327	Janišová et al. (2013); Polyakova et al. (2016)
RU_B	Milan_Altai	<b>Milan Chytrý</b> , Jiří Danihelka, Martin Kočí, Pavel Lustyk, Philipp Resl	211	211	Chytrý et al. (2017, 2019); Palpurina et al. (2017, 2019); Wagner et al. (2017)
RU_C	Milan_central Yakutia	<b>Milan Chytrý</b> , Irena Axmanová, Martin Kočí, Pavel Lustyk	96	96	Axmanová et al. (2013); Palpurina et al. (2017, 2019); Wagner et al. (2017)
RU_D	Milan_southern Urals	<b>Milan Chytrý</b> , Zdeňka Lososová, Lubomír Tichý	102	102	Palpurina et al. (2017, 2019); Wagner et al. (2017)
RU_E	Milan_W Sayan	<b>Milan Chytrý</b> , Jiří Danihelka, Martin Kočí, Milan Valachovič	138	138	Chytrý et al. (2007); Palpurina et al. (2017); Wagner et al. (2017)
RU_F	Milan_W Siberian Plain	<b>Milan Chytrý</b> , Petra Hájková	36	36	Palpurina et al. (2017, 2019)

RU_G	Dolnik Curonian Spit	<b>Christian Dolnik</b>	312	312	Dolnik (2003; 2006)
RU_H	Milan_Gornaya Shoriya-Salair	<b>Milan Chytrý</b> , Michal Hájek	47	47	Chytrý et al. (2017); Palpurina et al. (2017, 2019); Wagner et al. (2017)
RU_I	Belonovskaya Novgorodskaya	<b>Elena Belonovskaya</b> , Nadezda Tsarevskaya	49	31	Belonovskaya & Tsarevskaya (2017)
RU_J	Reinecke Yakutia	<b>Jennifer Reinecke</b> , Karsten Wesche	185	185	Reinecke et al. (2017)
RU_K	Mirin Belogorie	<b>Denis Mirin</b> , Ekaterina Zlotnikova	26	14	
RU_L	Dolnik South Ural	<b>Christian Dolnik</b>	91	49	
RU_M	Dolezal Kamchatka	<b>Jiri Dolezal</b>	30	30	
RU_N	Vladimir Onychpenko_Teberda	<b>Vladimir Onipchenko</b>	331	112	Onipchenko & Semenova (1995)
RU_O	Vynokurov_Caucasus	<b>Denys Vynokurov</b>	65	35	
SE_A	Löbel Öland	<b>Swantje Löbel</b>	186	186	Löbel (2002); Löbel et al. (2006); Löbel & Dengler (2008)
SE_B	Diekmann Southern Sweden	<b>Martin Diekmann</b> , Cecilia Dupré	989	369	Dupré & Diekmann (2001)
SE_C	Peet Öland	<b>Robert K. Peet</b> , Eddy van der Maarel, Ejvind Rosén	672	24	Sykes et al. (1994); Wilson et al. (1995)
SE_D	Reitalu Öland	<b>Triin Reitalu</b> , Honor C. Prentice, Martin Sykes	13,416	1032	Reitalu et al. (2008; 2009; 2010; 2012)
SE_E	Alatalo Subarctic Sweden	<b>Juha M. Alatalo</b> , Annika Jägerbrand, Ulf Molau	20	20	Alatalo et al. (2014a; 2014b; 2015a; 2015b; 2016; 2017)
SE_F	Walden Sweden restoration	<b>Emelie Waldén</b> , Regina Lindborg	50	50	Walden & Lindborg (2016)
SI_A	Pipenbaher North Adriatic Karst	<b>Nataša Pipenbaher</b> , Branko Bakan, Sonja Škornik	37	37	Batalha et al. (2015)
SJ_A	Kapfer Jan Mayen	<b>Jutta Kapfer</b> , John-Arvid Grytnes	254	254	Kapfer et al. (2012)
SK_A	Milan_Slovakian Carpathians	<b>Kristina Merunková</b> , Zdenka Preislerová, Milan Chytrý	40	40	Merunková et al. (2012); Palpurina et al. (2017); Wagner et al. (2017)

SM_A	Santi_San Marino	<b>Francesco Santi</b> , Alessandro Chiarucci, Fabrizio Buldrini	273	147	Santi (2019)
TJ_A	Nowak_W Tajikistan	<b>Arkadiusz Nowak</b> , Iwona Dembicz, Zygmunt Kaćki, Grzegorz Swacha, Sebastian Świeraszcz	195	105	
TJ_B	Nowak_E Tajikistan	<b>Arkadiusz Nowak</b> , Ewelina Klichowska, Marcin Nobis, Anna Wróbel	65	35	
TR_A	Kavgacı İğneada dunes	<b>Ali Kavgacı</b>	30	30	Kavgacı (2007)
TR_B	Güler Buca İzmir	<b>Behlül Güler</b>	461	281	
UA_A	EDGG Podolia	Anna Kuzemko, Thomas Becker, Jürgen Dengler, Yakiv P. Didukh, Christian Dolnik, Kiril Vassilev	457	331	Kuzemko et al. (2014; 2016)
UA_B	Savchenko Dvorichanskyi	<b>Galina Savchenko</b> , Vladimir Ronkin	57	57	Ronkin & Savchenko (2016)
UA_C	Roleček Chernivtsi	<b>Jan Roleček</b>	4	4	Roleček et al. (2014)
UA_D	Janišová Chywchyny Mts.	<b>Monika Janišová</b> , Vasyl Budzhak, Anna Kuzemko, Ingrid Turisova	65	35	Janišová et al. (2016)
UA_E	Dembicz Kherson region	<b>Iwona Dembicz</b> , Ivan Moysiienko	1034	80	Dembicz et al. (2016)
UA_F	Vasheniak Dniester Canyon	<b>Iuliia Vashenyak</b>	329	329	Vasheniak (2016); Didukh & Vasheniak (2018)
UA_G	Savchenko Velykyi Burluk-Steppe	<b>Galina Savchenko</b> , Vladimir Ronkin	60	60	Ronkin & Savchenko (2016)
UA_H	Kuzemko Byzky Gard	<b>Anna Kuzemko</b> , Hanna Kolomients, Dariia Shyriaieva	26	14	
UA_I	Kuzemko Kreida	<b>Anna Kuzemko</b> , Olga Bezrodnova, Vladimir Ronkin, Galina Savchenko	104	56	
UA_J	Vynokurov Southern Ukraine	<b>Denys Vynokurov</b> , Ivan Moysiienko, Dariia Shyriaieva	242	176	
UA_K	Savchenko Kharkiv & Donetsk	<b>Galina Savchenko</b> , Vladimir Ronkin	143	77	
UA_L	Dembicz nested Ukraine	<b>Iwona Dembicz</b> , Łukasz Kozub, Ivan Moysiienko, Viktor Shapoval	156	84	
UK_A	Archibald Great Britain	<b>Idoia Biurrun</b>	18	18	Archibald (1949)

UK_B	Pakeman Outer Hebrides	<b>Robin J. Pakeman</b> , Hannah White	780	60	White et al. (2018)
UK_C	BioBio_United Kingdom	<b>Idoia Biurrun</b>	108	108	Lüscher et al. (2016)
UK_D	Stevens Sheffield acidic	<b>Carly Stevens</b>	196	196	Stevens et al. (2016)
UK_E	Stevens Sheffield calcareous	<b>Carly Stevens</b> , John Hodgson, Tobias Ceulemans	242	242	Stevens et al. (2016)

## References

- Alčić, S., Dengler, J., Biurrun, I., Becker, T., Becker, U., Berastegi, A. et al. (2017) Biodiversity patterns of dry grasslands at the meeting point of Central Europe and the Balkans: Impressions and first results from the 9<sup>th</sup> EDGG Field Workshop in Serbia. *Bulletin of the Eurasian Dry Grassland Group*, 34, 19–31.
- Alatalo, J. M., Jägerbrand, A. K. & Molau, U. (2014a) Climate change and climatic events: community-, functional- and species level responses of bryophytes and lichens to constant, stepwise and pulse experimental warming in an alpine tundra. *Alpine Botany*, 124, 81–91.
- Alatalo, J. M., Little, C. J., Jägerbrand, A. K. & Molau, U. (2014b) Dominance hierarchies, diversity and species richness of vascular plants in an alpine meadow: contrasting short and medium term responses to simulated global change. *PeerJ*, 2, e406.
- Alatalo, J. M., Jägerbrand, A. K. & Molau, U. (2015a) Testing reliability of short-term responses to predict longer-term responses of bryophytes and lichens to environmental change. *Ecological Indicators*, 58, 77–85.
- Alatalo, J. M., Little, C. J., Jägerbrand, A. K. & Molau, U. (2015b) Vascular plant abundance and diversity in an alpine heath under observed and simulated global change. *Scientific Reports*, 5, 10197.
- Alatalo, J. M., Jägerbrand, A. K. & Molau, U. (2016) Impacts of different climate change regimes and extreme climatic events on an alpine meadow community. *Scientific Reports*, 6, 21720.
- Alatalo, J. M., Jägerbrand, A. K., Juhanson, J., Michelsen, A. & Ľuptáčík, P. (2017) Impacts of twenty years of experimental warming on soil carbon, nitrogen, moisture and soil mites across alpine/subarctic tundra communities. *Scientific Reports*, 7, 44489.
- Aleksanyan, A., Biurrun, I., Belonovskaya, E., Cykowska-Marzencka, B., Berastegi, A., Hilpold, A. et al. (2020) Biodiversity of dry grasslands in Armenia: First results from the 13<sup>th</sup> EDGG Field Workshop in Armenia. *Palaeoartctic Grasslands*, 46, 12–51.
- Allers, M.-A. (2007) *Plant diversity on different spatial scales using the example of the map sheet 2728/Lüneburg* (German). Diplom thesis in Environmental Sciences. Lüneburg: University of Lüneburg.

- Amici, V., Santi, E., Filibeck, G., Diekmann, M., Geri, F., Landi, S. et al. (2013) Influence of secondary forest succession on plant diversity patterns in a Mediterranean landscape. *Journal of Biogeography*, 40, 2335–2347.
- Aramburu, S. (2017) *Invasion of the alien grass Muhlenbergia schreberi in the Urumea stream (Basque)*. Bachelor thesis. Leioa: University of the Basque Country UPV/EHU.
- Archibald, E. E. A. (1949) The specific character of plant communities: I. herbaceous communities. *Journal of Ecology*, 37, 260–273.
- Axmanová, I., Chytrý, M., Danihelka, J., Lustyk, P., Kočí, M., Kubešová, S. et al. (2013) Plant species richness–productivity relationships in a low-productive boreal region. *Plant Ecology*, 214, 207–219.
- Baranova, A., Schickhoff, U., Wang, S. & Jin, M. (2016) Mountain pastures of Qilian Shan: plant communities, grazing impact and degradation status (Gansu province, NW China). *Hacquetia*, 15, 21–35.
- Baranova, A., Oldeland, J., Wang, S. & Schickhoff, U. (2019) Grazing impact on forage quality and macronutrient content of rangelands in Qilian Mountains, NW China. *Journal of Mountain Science*, 16, 43–53.
- Bartha, S. (2016) *Unpublished data from the project NKFI 105608 "Diversity, regulation and reliability – fine-scale functional organization in vegetation, 2013-2017", Objective #1 (Comparing the efficiency of different sampling designs for representing fine-scale spatial organization in grasslands)*. Vácrátót: MTA Centre for Ecological Research.
- Batalha, M.A., Pipenbahr, N., Bakan, B., Kaligarič, M. & Škornik, S. (2015) Assessing community assembly along a successional gradient in the North Adriatic Karst with functional and phylogenetic distances. *Oecologia*, 178, 1205–1214.
- Bátori, Z., Vojtkó, A., Farkas, T., Szabó, A., Havadtóti, K., Vojtkó, A. E. et al. (2017) Large- and small-scale environmental factors drive distributions of cool-adapted plants in karstic microrefugia. *Annals of Botany*, 119, 301–309.
- Baumann, E., Weiser, F., Chiarucci, A., Jentsch, A. & Dengler, J. (2016) Diversity and functional composition of alpine grasslands along an elevational transect in the Gran Paradiso National Park (NW Italy). *Tuexenia*, 36, 337–358.
- Belonovskaya, E. and Tsarevskaya, N. (2017) *Unpublished data from the Annual report of the Laboratory of Biogeography «Revealing of biotic indicators of sustainability and land-use optimization and creating of the natural conservation biogeographical background»*. Moscow: Institute of Geography, RAS.
- Bengtsson, K., Prentice, H. C., Rosén, E., Moberg, R. & Sjögren, E. (1988) The dry alvar grasslands of Öland: Ecological amplitudes of plant species in relation to vegetation composition. *Acta Phytogeographica Suecica*, 76, 21–46.
- Bergamini, A., Ginzler, C., Schmidt, B. R., Küchler, M. & Holderegger, R. (2013) Monitoring the effectiveness of habitat conservation: Making changes visible. *Hotspot*, 28, 18–19.
- Bergamini, A., Ginzler, C., Schmidt, B. R., Küchler, M. & Holderegger, R. (2016) The effectiveness control of Biotope Protection Switzerland (WBS) in the routine phase (German). *N + L Inside*, 2, 21–24.
- Bhatta, K. P., Grytnes, J.-A. & Vetaas, O. R. (2018a) Downhill shift of alpine plant assemblages under contemporary climate and land-use changes. *Ecosphere*, 9, e02084.

- Bhatta, K. P., Grytnes, J.-A. & Vetaas, O. R. (2018b) Scale sensitivity of the relationship between alpha and gamma diversity along an alpine elevation gradient in central Nepal. *Journal of Biogeography*, 45, 804–814.
- Biurrun, I., García-Mijangos, I., Berastegi, A., Ambarli, D., Dembicz, I., Filibeck, G. et al. (2014) Diversity of dry grasslands in Navarre (Spain). *Bulletin of the European Dry Grassland Group*, 24, 4–21.
- Boch, S. (2005) *Plant diversity, characterization and syntaxonomy of the dry grasslands in Saaremaa (Estonia)* (German). Diplom thesis. Lüneburg: Institute of Ecology and Environmental Chemistry, University of Lüneburg.
- Boch, S. & Dengler, J. (2006) Floristic and ecological characterization as well as plant diversity of dry grasslands in the island of Saaremaa (Estonia) (German). *Arbeitsausdem Institut für Landschaftsökologie Münster*, 15, 55–71.
- Boch, S., Ginzler, C., Schmidt, B. R., Bedolla, A., Ecker, K. T., Graf, U. et al. (2018) Does the protection of biotopes work? A programme for the monitoring of biotopes of national importance in Switzerland (German). *ANLiegen Natur*, 40, 39–48.
- Boch, S., Bedolla, A., Ecker, K. T., Ginzler, C., Graf, U., Küchler, H. et al. (2019a) Threatened and specialist species suffer from increased wood cover and productivity in Swiss steppes. *Flora*, 258, 151444.
- Boch, S., Bedolla, A., Ecker, K. T., Graf, U., Küchler, H., Küchler, H. et al. (2019b) Mean indicator values suggest decreasing habitat quality in Swiss dry grasslands and are robust to relocation error. *Tuexenia*, 39, 315–334.
- Brenneisen, S., Dengler, J., Babbi, M., Gehler, J., Schneider, R. & Achtnich, L. (2019) *Floristic and vegetation-ecological analyses of the roof greening at the Seewasserwerk Moos, Wollishofen, Zurich. Report assessing the current state and as a basis for a success check after the renovations* (German). Unpublished Report for Grün Stadt Zürich. Wädenswill: ZHAW.
- Bruun, H. H. (1998) *Patterns of species richness in dry grassland patches: effects of spatial patch arrangement and landscape utilisation history*. PhD thesis. Copenhagen, University of Copenhagen.
- Burrascano, S., Ciaschetti, G., Vrahnakis, M. and Dengler, J. (2018) Report on the 15<sup>th</sup> Eurasian Grassland Conference in Sulmona, Italy. *Palaearctic Grasslands*, 38, 12–24.
- Büchler, M.-O. (2019) *Optimum soil conditions for species-rich lean meadows*. BSc. thesis. Wädenswill: Institut für Umwelt und Natürliche Ressourcen, ZHAW.
- Campos, J. A. & Biurrun, I. (2015) *Unpublished data from the project “TREMEDAL - Inland wetlands of Northern Iberian Peninsula: management and restoration of mires and wet environments”*. Technical report for LIFE11 NAT/ES/000707. Leioa: University of the Basque Country UPV/EHU.
- Cancellieri, L., Mancini, L. D., Sperandii, M. G. & Filibeck, G. (2017) In and out: effects of shoot- vs. rooted-presence sampling methods on plant diversity measures in mountain grasslands. *Ecological Indicators*, 72, 315–321.
- Chiarucci, A., Viciani, D., Winter, C. & Diekmann, M. (2006) Effects of productivity on species-area curves in herbaceous vegetation: evidence from experimental and observational data. *Oikos*, 115, 475–483.



- Chiarucci, A., Bacaro, G., Filibeck, G., Landi, S., Maccherini, S. & Scoppola, A. (2012) Scale dependence of plant species richness in a network of protected areas. *Biodiversity and Conservation*, 21, 503–516.
- Chocarro, C., Juarez, A., Barrantes, O. & Reiné, R. (2010) Floristic diversity in semi-natural mountain grasslands included in the natural habitat types of community interest. *Options Méditerranéennes. Série A, Séminaires Méditerranéens*, 92, 257–260.
- Chytrý, M., Danihelka, J., Ermakov, N., Hájek, M., Hájková, P., Kočí, M. et al. (2007) Plant species richness in continental southern Siberia: effects of pH and climate in the context of the species pool hypothesis. *Global Ecology and Biogeography*, 16, 668–678.
- Chytrý, M., Danihelka, J., Axmanová, I., Božková, J., Hettenbergerová, E., Li, C.-F. et al. (2010) Floristic diversity of an eastern Mediterranean dwarf shrubland: the importance of soil pH. *Journal of Vegetation Science*, 21, 1125–1137.
- Chytrý, M., Horsák, M., Syrovátka, V., Danihelka, J., Ermakov, N., German, D. A. et al. (2017) Refugial ecosystems in central Asia as indicators of biodiversity change during the Pleistocene–Holocene transition. *Ecological Indicators*, 77, 357–367.
- Chytrý, M., Horsák, M., Danihelka, J., Ermakov, N., German, D. A., Hájek, M. et al. (2019) A modern analogue of the Pleistocene steppe-tundra ecosystem in southern Siberia. *Boreas*, 48, 36–56.
- Ciani, E., Tedone, L., Terzi, M., De Cillis, F. M., Castellana, E. & Fracchiolla, M. (2012) Characterization of plant diversity of pastures and volatile organic compound analysis in ewe's milk from a typical farm system in the Alta Murgia national Park (southern Italy): opportunities for a sustainable land use. *Italian Journal of Agronomy*, 7, e19.
- Conradi, T. & Kollmann, J. (2016) Species pools and environmental sorting control different aspects of plant diversity and functional trait composition in recovering grasslands. *Journal of Ecology*, 104, 1314–1325.
- Conradi, T., Temperton, V. M. & Kollmann, J. (2017) Beta diversity of plant species in human-transformed landscapes: Control of community assembly by regional productivity and historical connectivity. *Perspectives in Plant Ecology, Evolution and Systematics*, 24, 1–10.
- Conti, L., de Bello, F., Lepš, J., Acosta, A. T. R. & Carboni, M. (2017) Environmental gradients and micro-heterogeneity shape fine scale plant community assembly on coastal dunes. *Journal of Vegetation Science*, 28, 762–773.
- Csergő, A. M. & Demeter, L. (2012) *Plant species diversity and traditional management in Eastern Carpathian grasslands*. Derventside: European Forum on Nature Conservation and Pastoralism.
- Csergő, A. M., Demeter, L. & Turkington, R. (2013) Declining diversity in abandoned grasslands of the Carpathian Mountains: do dominant species matter? *PLoS ONE*, 8(8), e73533.
- Czarniecka-Wiera, M., Kącki, Z., Chytrý, M. & Palpurina, S. (2019) Diversity loss in grasslands due to the increasing dominance of alien and native competitive herbs. *Biodiversity and Conservation*, 28, 2781–2796.
- Czarniecka-Wiera, M., Szymura, T.H. & Kącki, Z. (2020) Understanding the importance of spatial scale in the patterns of grassland invasions. *Science of The Total Environment*, 727, 138669.

- de Bello, F., Leps, J. & Sebastià, M.-T. (2007) Grazing effects on the species-area relationship: Vegetation along a climatic gradient in NE Spain. *Journal of Vegetation Science*, 18, 25–34.
- Deák, B., Valkó, O., Török, P. & Tóthmérész, B. (2014) Solonetz meadow vegetation (*Beckmannion eruciformis*) in East-Hungary – an alliance driven by moisture and salinity. *Tuexenia*, 34, 187–203.
- Deák, B., Valkó, O., Török, P., Kelemen, A., Miglécz, T., Szabó, S. et al. (2015) Micro-topographic heterogeneity increases plant diversity in old stages of restored grasslands. *Basic and Applied Ecology*, 16, 291–299.
- Deák, B., Tölgyesi, C., Kelemen, A., Bátori, Z., Gallé, R., Bragina, T. M. et al. (2017) The effects of micro-habitats and grazing intensity on the vegetation of burial mounds in the Kazakh steppes. *Plant Ecology and Diversity*, 10, 509–520.
- Dembicz, I., Moysiyenko, I. I., Shaposhnikova, A., Vynokurov, D., Kozub, Ł. & Sudnik-Wójcikowska, B. (2016) Isolation and patch size drive specialist plant species density within steppe islands: a case study of kurgans in southern Ukraine. *Biodiversity and Conservation*, 25, 2289–2307.
- Deng, L., Sweeney, S. & Shangguan, Z.-P. (2014) Grassland responses to grazing disturbance: plant diversity changes with grazing intensity in a desert steppe. *Grass and Forage Science*, 69, 524–533.
- Deng, L., Wang, K., Li, J., Zhao, G. & Shangguan, Z. (2016) Effect of soil moisture and atmospheric humidity on both plant productivity and diversity of native grasslands across the Loess Plateau, China. *Ecological Engineering*, 94, 525–531.
- Dengler, J. (2016) *Unpublished data from the BSc. practical course in plant ecology 2016, Group A1 (Plant diversity in mesic grasslands dependent on land use)*. Bayreuth: University of Bayreuth.
- Dengler, J. (ed.) (2020) *Report from the International Master Summer School "Biodiversity Monitoring", Preda, Parc Ela, Switzerland, 14–25 August 2019*. Wädenswill: Institute of Natural Resource Sciences (IUNR), Zurich University of Applied Sciences.
- Dengler, J. & Allers, M. A. (2006) Plant species richness of the central European landscape on different spatial scales measured with a new approach. *Verhandlungen der Gesellschaft für Ökologie*, 36, 159.
- Dengler, J. & Boch, S. (2008) Sampling-design effects on properties of species-area curves – A case study from Estonian dry grassland communities. *Folia Geobotanica*, 43, 289–304.
- Dengler, J. & Demina, O. (2012) 5th EDGG Research Expedition to Northern Greece, May 2012. *Bulletin of the European Dry Grassland Group*, 16, 18–20.
- Dengler, J. & Widmer, S. (2018) *EDGG biodiversity plots sampled in lawns and meadows of the Campus Grüental in Wädenswil of the Zurich University of Applied Sciences (ZHAW), Switzerland*. Unpublished data from the BSc. module "Vegetation analysis". Wädenswill: ZHAW.
- Dengler, J., Bedall, P., Bruchmann, I., Hoeft, I. & Lang, A. (2004) Species-area relationships in drought-affected dry grasslands, taking into account micro-areas – a new method and initial results (German). *Kieler Notizen zur Pflanzenkunde in Schleswig-Holstein und Hamburg*, 32, 20–25.
- Dengler, J., Ruprecht, E., Szabó, A., Turtureanu, D., Beldean, M., Ugurlu, E. et al. (2009) EDGG Cooperation on syntaxonomy and biodiversity of *Festuco-Brometea* communities in Transylvania (Romania): Report and preliminary results. *Bulletin of the European Dry Grassland Group*, 4, 13–19.

- Dengler, J., Becker, T., Ruprecht, E., Szabó, A., Becker, U., Beldean, M. et al. (2012) *Festuco-Brometea* communities of the Transylvanian Plateau (Romania): a preliminary overview on syntaxonomy, ecology, and biodiversity. *Tuexenia*, 32, 319–359.
- Dengler, J., Dembicz, I., Babbi, M., Billeter, R., Boch, S., Hepenstrick, D. et al. (2019) Unpublished data “Vegetation plots and nested-plot series in dry grasslands of Ausserberg (Valais, Switzerland)”. Wädenswil: ZHAW.
- Dengler, J., Guarino, R., Moysiyanenko, I., Vynokurov, I., Boch, S., Cykowska-Marzencka, B. et al. (2020) On the trails of Josias Braun-Blanquet II: First results from the 12th EDGG Field Workshop studying the dry grasslands of the inneralpine dry valleys of Switzerland. *Palaeoartctic Grasslands*, 45, 59–89
- Didukh, Y. P. and Vasheniak, Y. A. (2018) Vegetation of limestone outcrops in Western and Central Podillia (Ukraine). *Tuexenia*, 38, 419–444.
- Diekmann, M., Jandt, U., Alard, D., Bleeker, A., Corcket, E., Gowing, D. J. et al. (2014) Long-term changes in calcareous grassland vegetation in North-western Germany – No decline in species richness, but a shift in species composition. *Biological Conservation*, 172, 170–179.
- Doležal, J., Maskova, Z., Leps, J., Steinbachová, D., de Bello, F., Klimesová, K. et al. (2011) Positive long-term effect of mulching on species and functional trait diversity in a nutrient-poor mountain meadow in Central Europe. *Agriculture, Ecosystems & Environment*, 145, 10–28.
- Dolnik, C. (2003) Species-area relations of forest and open habitats – A contribution to the recording of plant biodiversity with special attention to lichens and mosses using the example of the National Park Kurische Nehrung (Russia) (German). *Mitteilungen der Arbeitsgemeinschaft Geobotanik in Schleswig-Holstein und Hamburg*, 62, 1–183.
- Dolnik, C. (2006) Species richness in coastal sandy dry grasslands of the Curonian Spit and the Samland on different spatial scales (German). *Arbeiten aus dem Institut für Landschaftsökologie Münster*, 15, 83–95.
- Dupré, C. & Diekmann, M. (2001) Differences in species richness and life-history traits between grazed and abandoned grasslands in southern Sweden. *Ecography*, 24, 275–286.
- Dvorský, M., Doležal, J., de Bello, F., Klimešova, J. & Klimeš, L. (2011) Vegetation types of East Ladakh: species and growth form composition along main environmental gradients. *Applied Vegetation Science*, 14, 132–147.
- Erschbamer, B., Unterluggauer, P., Winkler, E. & Mallaun, M. (2011) Changes in plant species diversity revealed by long-term monitoring on mountain summits in the Dolomites (northern Italy). *Preslia*, 83, 387–401.
- Etzold, J., Münzner, F. & Manthley, M. (2016) Subalpine and alpine grassland communities in the northeastern Greater Caucasus of Azerbaijan. *Applied Vegetation Science*, 19, 316–335.
- Fajmonová, Z. & Hájek, M. (2011) Unpublished data from the study “Diversity of grasslands related to soil conditions”. Brno: Masaryk University.
- Fekete, G., Molnár, Z., Kun, A. & Botta-Dukát, Z. (2002) On the structure of the Pannonian forest steppe: grasslands on sand. *Acta Zoologica Academiae Scientiarum Hungaricae*, 48, 137–150.
- Felde V. A., Kapfer J. & Grytnes J. A. (2012) Upward shift in elevational plant species ranges in Sikkilsdalen, central Norway. *Ecography*, 35, 922–932.

- Filibeck, G., Cancellieri, L., Mancini, L. D. & Sperandii, M. G. (2015) *Unpublished data collected from 2013 to 2015 (Assessment of biodiversity patterns within montane and subalpine dry grassland, in relation to grazing management and physical variables)*. Abruzzo region: Abruzzo Lazio & Molise National Park.
- Filibeck, G., Cancellieri, L., Sperandii, M. G., Belonovoskaya, E., Sobolev, N., Tsarevskaya, N. et al. (2018) Biodiversity patterns of dry grasslands in the Central Apennines (Italy) along a precipitation gradient: Experiences from the 10<sup>th</sup> EDGG Field Workshop. *Bulletin of the Eurasian Dry Grassland Group*, 36, 25–41.
- Fraser, L. H., Pither, J., Jentsch, A., Sternberg, M., Zobel, M., Askarizadeh, D. et al. (2015) Worldwide evidence of unimodal relationship between productivity and plant species richness. *Science*, 349, 302–305.
- García-Mijangos, I., Loidi, J., Herrera, M., Biurrun, I., Campos, J. A. & García-Magro, D. (2016) *Unpublished data from the project “Monitoring of populations of Ranunculus amplexicaulis L. and Diphasiastrum alpinum (L.) J. Holub in the Natural Park of Gorbeia”*. Technical report for the Provincial Government of Bizkaia. Leioa: University of the Basque Country UPV/EHU.
- Giladi, I., Ziv, Y., May, F. & Jeltsch, F. (2011) Scale-dependent determinants of plant species richness in a semi-arid fragmented agro-ecosystem. *Journal of Vegetation Science*, 22, 983–996.
- Godó, L., Valkó, O., Tóthmérész, B., Török, P., Kelemen, A. & Deák, B. (2017) Scale-dependent effects of grazing on the species richness of alkaline and sand grasslands. *Tuexenia*, 37, 229–246.
- Gottfried, M., Pauli, H., Reiter, K. & Grabherr, G. (1999) A fine-scaled predictive model for changes in species distribution patterns of high mountain plants induced by climate warming. *Diversity and Distributions*, 5, 241–251.
- Gottfried, M., Hantel, M., Maurer, C., Toechterle, R., Pauli, H. & Grabherr, G. (2011) Coincidence of the alpine–nival ecotone with the summer snowline. *Environmental Research Letters*, 6, 014013.
- Gottfried, M., Pauli, H., Futschik, A., Akhalkatsi, M., Barančok, P., Benito Alonso, J. L. et al. (2012) Continent-wide response of mountain vegetation to climate change. *Nature Climate Change*, 2, 111–115.
- Guarino, R. & Li, F. Y. (2019) Report on the International Symposium on Grassland Ecology and Conservation in Hohhot, Inner Mongolia, China. *Palaearctic Grasslands*, 46, 14–18.
- Guarino, R., Becker, T., Dembiczy, I., Dolnik, C., Kački, Z., Kozub, Ł. et al. (2012) Impressions from the 4th EDGG Research Expedition to Sicily: Community composition and diversity of Mediterranean grasslands. *Bulletin of the Eurasian Dry Grassland Group*, 15, 12–22.
- Hájek, M., Dresler, P., Hájková, P., Hetttenbergerová, E., Milo, P., Plesková, Z. & Pavonič, M. (2017) Long-lasting imprint of former glassworks on vegetation pattern in an extremely species-rich grassland: a battle of species pools on mesic soils. *Ecosystems*, 20, 1233–1249.
- Hájková, P. & Hájek, M. (2003) Species richness and above-ground biomass of poor and calcareous spring fens in the flysch West Carpathians, and their relationships to water and soil chemistry. *Preslia*, 75, 271–287.
- Helm, A. (2017) *Unpublished data from the project “Status of biodiversity of alvar grasslands before large-scale restoration activities” Report for the Environmental Investment Centre (contract 8286 3-2\_7/2688-4/2015)*. Tartu: University of Tartu.

- Hepenstrick, D., Widmer, S. & Dengler, J. (2018) *Three EDGG Biodiversity Plots sampled in subalpine communities during a Bachelor field course at Alp Glivers (Grisons, Switzerland)*. Wädenswill: ZHAW.
- Herrera, M., García-Magro, D., Biurrun, I., Campos, J. A., García-Mijangos, I. & Loidi J. (2016) *Unpublished data from the project "Dunas de Astondo SAC (ES2130004): Monitoring of habitats and management proposals. 2010-2016 period"*. Technical report for the Provincial Government of Bizkaia. Leioa: University of the Basque Country UPV/EHU.
- Hobohm, C. (1998) Phytosociology and biodiversity research – revised and extended version of the habilitation paper submitted and accepted at the University of Lüneburg. *Archiv naturwissenschaftlicher Dissertationen*, 5, 1–231.
- Hochreutener, A., Dębska, A. & Isaak, C. (2019) *Plant biodiversity in an alluvial plain in Preda in the Swiss Alps. A modelling approach to determine driving factors influencing species richness. Report within the framework of the summer school «Biodiversity Monitoring 2019»*. Zürich: Zürich University of Applied Sciences.
- Hopp, D. & Dengler, J. (2015) Scale-dependent species diversity in a semi-dry basiphilous grassland (*Bromion erecti*) of Upper Franconia (Germany). *Bulletin of the Eurasian Dry Grassland Group*, 28, 3–8.
- Hüllbusch, E., Brandt, L. M., Ende, P. & Dengler, J. (2016) Little vegetation change during two decades in a dry grassland complex in the Biosphere Reserve Schorfheide-Chorin (NE Germany). *Tuexenia*, 36, 395–412.
- Janišová, M., Becker, T., Becker, U., Demina, O., Dembicz, I., Ermakov, N. et al. (2013) Steppes of Southern Siberia. *Bulletin of the European Dry Grassland Group*, 19, 31–40.
- Janišová, M., Kuzemko, A., Budzhak, V., Chorney, I., Tokariuk, A., Uhliarová, E. et al. (2016) *Unpublished data from the Slovak-Ukrainian expedition to Chywchyny Mountains. July 2016*.
- Jensen, K., Lenzewski, N. & Dengler, J. (2013) Vegetationsentwicklung im Rückdeichungsgebiet Lenzen: Veränderungen zwischen 2009 und 2011. In: Struck, A., Garbe, H. and Felinks, B. (Eds.), *Auenreport Special: The dike relocation at Lenzen. First results of the scientific monitoring* (German). Potsdam: Ministerium für Umwelt, Gesundheit und Verbraucherschutz des Landes Brandenburg, pp. 58–64.
- Jeschke, M. (2008) *Effects of restoration and conservation measures on species diversity of vascular plants and cryptogams in Central European limestone grasslands* (German). PhD thesis. Defended 09.07.2008. Munich: Technical University of Munich.
- Jeschke, M. & Kiehl, K. (2006) Effects of restoration and conservation measures on species diversity of vascular plants and cryptogams in newly created calcareous grasslands (German). *Tuexenia*, 26, 223–242.
- Jeschke, M. & Kiehl, K. (2008) Long-term effects of former management on the diversity of vascular plants, mosses and lichens in a calcareous grassland (German). *Botanica Helvetica*, 118, 95–109.
- Jiménez-Alfaro, B., Obeso, J. R., Abajo Chic, A., Alonso Felpete, J. I., Bueno, A., Fernández-Rodríguez, A. et al. (2010) *Unpublished data from the project "Bases para el seguimiento de los cambios en la flora y vegetación como consecuencia del cambio climático en el Parque Nacional de los Picos de Europa"*. Gijón: Jardín Botánico Atlántico and Oviedo University.

- Kakinuma, K., Terui, A., Sasaki, T., Koyama, A., Jamsran, U., Okuro, T. & Takeuchi, K. (2017) Detection of vegetation trends in highly variable environments after grazing exclusion in Mongolia. *Journal of Vegetation Science*, 28, 965–974.
- Kapfer, J., Virtanen, R. & Grytnes J. A. (2012) Changes in arctic vegetation on Jan Mayen Island over 19 and 80 years. *Journal of Vegetation Science*, 23, 771–781.
- Kapfer, J., Birks, H. J. B., Felde, V. A., Klanderud, K., Martinussen, T., Ross, L. C. et al. (2013) Long-term vegetation stability in northern Europe as assessed by changes in species co-occurrences. *Plant Ecology & Diversity*, 6, 289–302.
- Kavgaci, A. (2007) Sand-dune vegetation of Igneada coast in the Thracian part of Turkey. *Hacquetia*, 6, 171–182.
- Kiehl, K. & Jeschke, M. (2005) Phytodiversity of ancient and newly created calcareous grasslands in the northern Munich gravel plain (German). *Tuexenia*, 25, 445–461.
- Klimeš, L. (1997) Species richness of grasslands in the Bílé Karpaty Mts (Czech). *Sb. Přírodověd. Kl., Uherské Hradiště*, 2, 31–42.
- Koyama, A., Koyanagi, T. F., Akasaka, M., Takada, M. & Okabe, K. (2017) Combined burning and mowing for restoration of abandoned semi-natural grasslands. *Applied Vegetation Science*, 20, 40–49.
- Koyama, A., Koyanagi, T. F., Akasaka, M., Kusumoto, Y., Hiradate, S., Takada, M. & Okabe, K. (2018) Partitioning the plant diversity of semi-natural grasslands across Japan. *Oryx*, 52, 471–478.
- Krstivojević Ćuk, M., Šoštarić, I. & Dengler, J. (2015) Scale-dependent species diversity in a sandy dry grassland (*Festucion vaginatae*) of Vojvodina (Serbia). *Bulletin of the Eurasian Dry Grassland Group*, 28, 16–22.
- Kuzemko, A. A., Becker, T., Didukh, Y. P., Ardelean, I. V., Becker, U., Beldean, M. et al. (2014) Dry grassland vegetation of Central Podolia (Ukraine): a preliminary overview of its syntaxonomy, ecology and biodiversity. *Tuexenia*, 34, 391–430.
- Kuzemko, A. A., Steinbauer, M. J., Becker, T., Didukh, Y. P., Dolnik, C., Jeschke, M. et al. (2016) Patterns and drivers of phytodiversity in steppe grasslands of Central Podolia (Ukraine). *Biodiversity and Conservation*, 25, 2233–2250.
- Langer, N. (2016) *Scale-dependent patterns of vascular plant diversity along the hydrological gradient in Central European grasslands*. BSc. thesis in Biology. Bayreuth: University of Bayreuth.
- Langer, N., Pieruschka, E., Tchokothe, T., Hauch, F., Kohler, P., Hohlrüther, F. & Dregelies, M. (2017) Betrachtung der Artenvielfaltentlang eines Feuchtegradienten und pflanzensoziologische Betrachtungen. In: Dengler, J. (Ed.), *Reader zur Uckermark-Geländeübung 2016*. Bayreuth: University of Bayreuth.
- Lazzaro, L., Lastrucci, L., Viciani, D., Benesperi, R., Gonnelli, V. & Coppi, A. (2020) Patterns of change in  $\alpha$  and  $\beta$  taxonomic and phylogenetic diversity in the secondary succession of semi-natural grasslands in the Northern Apennines. *PeerJ*, 8(1), e8683.
- Lepš, J. (2014) Scale- and time-dependent effects of fertilization, mowing and dominant removal on a grassland community during a 15-year experiment. *Journal of Applied Ecology*, 51, 978–987.
- Lepš, J., Doležal, J., Bezemer, T. M., Brown, V. K., Hedlund, K., Igual Arroyo, M. et al. (2007) Long-term effectiveness of sowing high and low diversity seed mixtures to enhance plant community development on ex-arable fields. *Applied Vegetation Science*, 10, 97–100.

- Löbel, S. (2002) *Dry grasslands in Öland: syntaxonomy - ecology - biodiversity* (German). Diplom thesis. Lüneburg: Institute of Ecology and Environmental Chemistry, University of Lüneburg.
- Löbel, S. & Dengler, J. (2002) Phytodiversität und Soziologie von Federbuschgesellschaften im Anaga-Gebirge. In: Löbel, S., Conradt, F., Meier, B. and Boch, S. (Eds.), *Report on the Tenerife Excursion from 9 to 23 February 2002 – Daily minutes and project reports* (German). Lüneburg: Institut für Ökologie und Umweltchemie, pp. 74–82.
- Löbel, S. & Dengler, J. (2008) Dry grassland communities on southern Öland: phytosociology, ecology, and diversity. *Acta Phytogeographica Suecica*, 88, 13–31.
- Löbel, S., Dengler, J. & Hobohm, C. (2006) Species richness of vascular plants, bryophytes and lichens in dry grasslands: The effects of environment, landscape structure and competition. *Folia Geobotanica*, 41, 377–393.
- Luzuriaga, A. L., Sánchez, A. M., Maestre, F. T. & Escudero, A. (2012) Assemblage of a semi-arid annual plant community: abiotic and biotic filters act hierarchically. *PLoS ONE*, 7, e41270.
- Luzuriaga, A. L., González, J. M. & Escudero, A. (2015) Annual plant community assembly in edaphically heterogeneous environments. *Journal of Vegetation Science*, 26, 866–875.
- Luzuriaga, A. L., Sánchez, A. M., López-Angulo, J. & Escudero, A. (2018) Habitat fragmentation determines diversity of annual plant communities at landscape and fine spatial scales. *Basic and Applied Ecology*, 29, 12–19.
- Lüscher, G., Ammari, Y., Andriets, A., Angelova, S., Arndorfer, M., Bailey, D. et al. (2016) Farmland biodiversity and agricultural management on 237 farms in 13 European and two African regions. *Ecology*, 97, 1625.
- Maccherini, S., Marignani, M., Castagnini, P. & van den Brink, P.J. (2007) Multivariate analysis of the response of overgrown semi-natural calcareous grasslands to restorative shrub cutting. *Basic and Applied Ecology*, 8, 332–342.
- Maccherini, S., Marignani, M., Gioria, M., Renzi, M., Rocchini, D., Santi, E. et al. (2011) Determinants of plant community composition of remnant biancane badlands: a hierarchical approach to quantify species-environment relationships. *Applied Vegetation Science*, 14, 378–387.
- Maccherini, S., Santi, E., Bonini, I., Amici, V., Pruscini, S., Palazzo, D. & Selva, F.C. (2013) The impact of land abandonment on the plant diversity of olive groves. *Biodiversity and Conservation*, 22, 3067–3083.
- Magnes, M., Kirschner, P., Janišová, M., Mayrhofer, H., Berg, C., Mora, A. et al. (2020) On the trails of Josias Braun-Blanquet – changes in the grasslands of the inneralpine dry valleys during the last 70 years. First results from the 11thEDGG Field Workshop in Austria. *Palaearctic Grasslands*, 45, 34–58.
- Malicki, M. & Pielech, R. (2016) *Unpublished data from the monitoring of mountain grassland in the Karkonosze National Park*. Wrocław: KPN, Jelenia Góra.
- Mardari, C. & Tănase, C. (2016) Plant diversity-environment relationships in xeric grasslands of North-Eastern Romania. *Applied Ecology and Environmental Research*, 14, 47–75.
- Maseyk, F. J. F., Demeter, L., Csergő, A. M. & Buckley, Y. M. (2017) Effect of management on natural capital stocks underlying ecosystem service provision: a 'provider group' approach. *Biodiversity and Conservation*, 26, 3289–3305.

- Mašková, Z., Doležal, J., Květ, J. & Zemek, F. (2009) Long-term functioning of a species-rich mountain meadow under different management regimes. *Agriculture, Ecosystems & Environment*, 132, 192–202.
- Mauchamp, L., Mouly, A., Badot, P. M. & Gillet, F. (2014) Impact of management type and intensity on multiple facets of grassland biodiversity in the French Jura Mountains. *Applied Vegetation Science*, 17, 645–657.
- Mauchamp, L., Mouly, A., Badot, P. M. & Gillet, F. (2016) Impact of nitrogen inputs on multiple facets of plant biodiversity in mountain grasslands: does nutrient source matter? *Applied Vegetation Science*, 19, 206–217.
- Mayer, R. & Erschbamer, B. (2017) Long-term effects of grazing on subalpine and alpine grasslands in the central Alps, Austria. *Basic and Applied Ecology*, 24, 9–18.
- Mayer, R., Kaufmann, R., Vorhauser, K. & Erschbamer, B. (2009) Effects of grazing exclusion on species composition in high altitude grasslands. *Basic and Applied Ecology*, 10, 447–455.
- Meier, E. S. & Hofer, G. (2016) Effects of plot size and their spatial arrangement on estimates of alpha, beta and gamma diversity of plants in alpine grassland. *Alpine Botany*, 126, 167–176.
- Merunková, K., Preislerová, Z. & Chytrý, M. (2012) White Carpathian grasslands: can local ecological factors explain their extraordinary species richness. *Preslia*, 84, 311–325.
- Merunková, K., Preislerová, Z. & Chytrý, M. (2014) Environmental drivers of species composition and richness in dry grasslands of northern and central Bohemia, Czech Republic. *Tuexenia*, 34, 447–466.
- Moradi, H., Fattorini, S. & Oldeland, J. (2020) Influence of elevation on the species–area relationship. *Journal of Biogeography*, 47, 2019–2041.
- Nagata, Y. K. & Ushimaru, A. (2016) Traditional burning and mowing practices support high grassland plant diversity by providing intermediate levels of vegetation height and soil pH. *Applied Vegetation Science*, 19, 567–577.
- Náhlíková, T. (2009) *Unpublished data from the Diploma thesis “Effect of plot size to the occurrence of diagnostic species of spring fens”*. Brno: Masaryk University.
- Noroozi, J. (2013) *Unpublished data from the PhD thesis. Comparative analysis of high-alpine and subnival vegetation of mountain ecosystems in Iran (Alborz and NW-Iran) and assessing the impacts of climate change and land-use (defended 2013.10.15)*. Vienna: University of Vienna.
- Noroozi, J., Akhiani, H. & Willner, W. (2010) Phytosociological and ecological study of the high alpine vegetation of Tupal Mountains (Central Alborz, Iran). *Phytocoenologia*, 40, 293–321.
- Noroozi, J., Willner, W., Pauli, H. & Grabherr, G. (2014) Phytosociology and ecology of the high-alpine to subnival scree vegetation of N and NW Iran (Alborz and Azerbaijan Mts.). *Applied Vegetation Science*, 17, 142–161.
- Noroozi, J., Hülber, K. & Willner, W. (2017) Phytosociological and ecological description of the high alpine vegetation of NW Iran. *Phytocoenologia*, 47, 233–259.
- Onipchenko, V. G. & Semenova, G. V. (1995) Comparative analysis of the floristic richness of alpine communities in the Caucasus and the Central Alps. *Journal of Vegetation Science*, 6, 299–304.



- Onipchenko, V. G., Shulakov, A. A., Zernov, A. S., Elumeeva, T. G., Wu, Y., Wang, Q. & Werger, M. J. A. (2014) Contrasting floristic richness of alpine plant communities on the Eastern Qinghai-Tibetan Plateau. *Botanica Pacifica*, 3(1), 33–37.
- Palpurina, S., Chytrý, M., Tzonev, R., Danihelka, J., Axmanová, I., Merunková, K. et al. (2015) Patterns of fine-scale plant species richness in dry grasslands across the eastern Balkan Peninsula. *Acta Oecologica*, 63, 36–46.
- Palpurina, S., Wagner, V., von Wehrden, H., Hájek, M., Horsák, M., Brinkert, A. et al. (2017) The relationship between plant species richness and soil pH vanishes with increasing aridity across Eurasian dry grasslands. *Global Ecology and Biogeography*, 26, 425–434.
- Palpurina, S., Chytrý, M., Hölzel, N., Tichý, L., Wagner, V., Horsák, M. et al. (2019) The type of nutrient limitation affects the plant species richness–productivity relationship: Evidence from dry grasslands across Eurasia. *Journal of Ecology*, 107, 1038–1050.
- Pauli, H., Gottfried, M., Reiter, K., Klettner, C. & Grabherr, G. (2007) Signals of range expansions and contractions of vascular plants in the high Alps: observations (1994–2004) at the GLORIA master site Schrankogel, Tyrol, Austria. *Global Change Biology*, 13, 147–156.
- Pauli, H., Gottfried, M., Dullinger, S., Abdaladze, O., Akhalkatsi, M., Benito Alonso, J. L. et al. (2012) Recent plant diversity changes on Europe’s mountain summits. *Science*, 336, 353–355.
- Pätsch, R. (2014) *Habitats between land and sea — Salt meadows along the southern and eastern Baltic Sea coast*. PhD thesis. Göttingen: University of Göttingen.
- Pedashenko, H., Apostolova, I., Boch, S., Ganeva, A., Janišová, M., Sopotlieva, D. et al. (2013) Dry grasslands of NW Bulgarian mountains: first insights into diversity, ecology and syntaxonomy. *Tuexenia*, 33, 309–346.
- Peper, J., Jabbarov, A. S. & Manthey, M. (2010a) Short-time effects of grazing abandonment on semi arid rangelands in Azerbaijan. *Annals of Agrarian Science*, 8, 14–19.
- Peper, J., Pietzsch, D. & Manthey, M. (2010b) Semi-arid rangeland vegetation of the Greater Caucasus foothills in Azerbaijan and its driving environmental conditions. *Phytocoenologia*, 40, 73–90.
- Peralta, A. L., Sánchez, A. M., Luzuriaga, A. L. & Escudero, A. (2016) Factors driving species assemblage in Mediterranean soil seed banks: from the large to the fine scale. *Annals of Botany*, 117, 1221–1228.
- Polyakova, M. A., Dembicz, I., Becker, T., Becker, U., Demina, O., Ermakov, N. et al. (2016) Scale- and taxon-dependent patterns of plant diversity in steppes of Khakassia, South Siberia (Russia). *Biodiversity and Conservation*, 25, 2251–2273.
- Prangel, E. (2017) *Unpublished data from the Master thesis “The provisioning of ecosystem services on open and successional alvar grasslands”*. Tartu: University of Tartu.
- Rahmanian, S., Hejda, M., Ejtehadi, H., Farzam, M., Pyšek, P. & Memariani, F. (2020) Effects of livestock grazing on plant species diversity vary along a climatic gradient in northeastern Iran. *Applied Vegetation Science*, 23, 551–561. <https://doi.org/10.1111/avsc.12512>
- Reiné, R., Barrantes, O., Chocarro, C., Juárez Escario, A., Broca, A., Maestro, M. & Ferrer, C. (2014) Pyrenean meadows in Natura 2000 network: grass production and plant biodiversity conservation. *Spanish Journal of Agricultural Research*, 12, 61–77.

- Reinecke, J., Troeva, E. & Wesche, K. (2017) Extrazonal steppes and other temperate grasslands of northern Siberia– Phytosociological classification and ecological characterization. *Phytocoenologia*, 47, 167–196.
- Reitalu, T., Prentice, H. C., Sykes, M. T., Lönn, M., Johansson, L. J. & Hall, K. (2008) Plant species segregation on different spatial scales in semi-natural grasslands. *Journal of Vegetation Science*, 19, 407–416.
- Reitalu, T., Sykes, M. T., Johansson, L. J., Lönn, M., Hall, K., Vandewalle, M. & Prentice, H. C. (2009) Small-scale plant species richness and evenness in semi-natural grasslands respond differently to habitat fragmentation. *Biological Conservation*, 142, 899–908.
- Reitalu, T., Johansson, L. J., Sykes, M. T., Hall, K. & Prentice, H. C. (2010) History matters: village distances, grazing and grassland species diversity. *Journal of Applied Ecology*, 47, 1216–1224.
- Reitalu, T., Purschke, O., Johansson, L. J., Hall, K., Sykes, M. T. & Prentice, H. C. (2012) Responses of grassland species richness to local and landscape factors depend on spatial scale and habitat specialization. *Journal of Vegetation Science*, 23, 41–51.
- Reitalu, T., Helm, A., Pärtel, M., Bengtsson, K., Gerhold, P., Rosén, E. et al. (2014) Determinants of fine-scale plant diversity in dry calcareous grasslands within the Baltic Sea region. *Agriculture, Ecosystems & Environment*, 182, 59–68.
- Rodríguez-Rojo, M. P., Crespo, G., Madrigal, J. & Fernández-González, F. (2012) Contribution to the knowledge of some rare plant communities from the southwestern Iberian System. *Lazaroa*, 33, 27–42.
- Rodríguez-Rojo, M. P., Sardinero, S. & Fernández-González, F. (2013) Patterns of community and species diversity in grassland vegetation of the southwestern Iberian System (Spain). *Lazaroa*, 34, 219–236.
- Roleček, J., Plesková, Z., Dřevojan, P., Prokešová, H., Novák, P., Daněk, P. et al. (2012) *Unpublished data from HoVNoPro field sampling course in White Carpathians, Czech Republic*. Brno: The Czech Academy of Sciences.
- Roleček, J., Čornej, I. I. & Tokarjuk, A. I. (2014) Understanding the extreme species richness of semi-dry grasslands in east-central Europe: a comparative approach. *Preslia*, 86, 5–27.
- Roleček, J., Hájek, M., Dřevojan, P., Prokešová, H., Fajmon, K., Hájková, P. & Těšitel, J. (2016) *Unpublished data from steppe meadow field trip to Hungary and Romania*. Brno: Masaryk University.
- Roleček, J., Dřevojan, P., Hájková, P. & Hájek, M. (2019) Report of new maxima of fine-scale vascular plant species richness recorded in East-Central European semi-dry grasslands. *Tuexenia*, 39, 423–431.
- Ronkin, V. & Savchenko, G. (2016) Flora and vegetation of dry grasslands of Northeastern Ukraine, and problems of diversity conservation. *Hacquetia*, 15, 49–62.
- Rozbrojová, Z. (2005) *Unpublished data from the Diploma thesis “Indication of spring-fen habitat conditions using chemical composition of plants”*. Brno: Masaryk University.
- Rozbrojová, Z. & Hájek, M. (2008) Changes in nutrient limitation of spring fen vegetation along environmental gradients in the West Carpathians. *Journal of Vegetation Science*, 19, 613–620.

- Rūsiņa, S. (2016) *Unpublished data from Latvijas Lauku attīstības programmas 2007-2013. The impact of Rural Development Programme 2007-2013 of Latvia on the biological diversity: botanical diversity of supported EU importance grasslands. Report* (Latvian). Riga: Latvijas Valsts Agrārās ekonomikas institūts.
- Sanaei, A., Zare Chahouki, M. A., Ali, A., Jafari, M. & Azarnivand, H. (2018) Abiotic and biotic drivers of aboveground biomass in semi-steppe rangelands. *Science of the Total Environment*, 615, 895–905.
- Santi, F. (2019) *Unpublished data from the Bachelor thesis "Vegetation analysis of xeric grasslands in the Republic of San Marino, with reference to Habitats Directive", defended on 2019 December 17th*. Bologna: Università di Bologna.
- Schuhmacher, O. & Dengler, J. (2013) *Wood small-reed as a problem type on dry grasslands. Recommendations for action to reduce Calamagrostis epigejos. Results from a practical experiment* (German). Hamburg: NABU Hamburg.
- Silva, V., Catry, F. X., Fernandes, P. M., Rego, F. C., Paes, P., Nunes, L. et al. (2019) Effects of grazing on plant composition, conservation status and ecosystem services of Natura 2000 shrub-grassland habitat types. *Biodiversity and Conservation*, 28, 1205–1224.
- Stevens, C. J., Ceulemans, T., Hodgson, J. G., Jarvis, S., Grime, J. P. & Smart, S. M. (2016) Drivers of vegetation change in grasslands of the Sheffield region, northern England, between 1965 and 2012/13. *Applied Vegetation Science*, 19, 187–195.
- Suanno, C. (2017) *Unpublished data from the Master thesis "Vegetation diversity in a protected area in an urban context. The 'Parco della Chiusa' in Casalecchio di Reno (Bologna)", defended on 2017 March 3rd*. Bologna: Università di Bologna.
- Suchrow, S. & Jensen, K. (2010) Plant species responses to an elevational gradient in German North Sea salt marshes. *Wetlands*, 30, 735–746.
- Suchrow, S., Pohlmann, N., Stock, M. & Jensen, K. (2012) Long-term surface elevation changes in German North Sea salt marshes. *Estuarine, Coastal and Shelf Science*, 98, 71–83.
- Suchrow, S., Stock, M. & Jensen, K. (2015) Patterns of plant species richness along environmental gradients in German North Sea salt marshes. *Estuaries and Coasts*. 38, 296–309.
- Sutcliffe, L. M. E., Germany, M. S., Becker, U. & Becker, T. (2016) How does size and isolation affect patches of steppe-like vegetation on slumping hills in Transylvania, Romania? *Biodiversity and Conservation*, 25, 2275–2288.
- Sykes, M. T., van der Maarel, E., Peet, R. K. & Willems, J. H. (1994) High species mobility in species-rich plant communities: an intercontinental comparison. *Folia Geobotanica*, 29, 439–448.
- Talebi, A. (2017) *Unpublished data from the PhD thesis "Ecology and biodiversity of southern slope of Damavand mountain (Scale-Dependency of ecological drivers and biodiversity patterns)"*. Tehran: University of Tehran.
- Tillé, Y. & Ecker, K. (2014) Complex national sampling design for long-term monitoring of protected dry grasslands in Switzerland. *Environmental and Ecological Statistics*, 21, 453–476.
- Tölgyesi, C., Erdős, L., Körmöczi, L. & Bátor, Z. (2016) Hydrologic fluctuations trigger structural changes in wetland-dry grassland ecotones but have no effect on ecotone position. *Community Ecology*, 17, 188–197.

- Torca, M., Campos, J. A. & Herrera, M. (2019a) Changes in plant diversity patterns along dune zonation in south Atlantic European coasts. *Estuarine, Coastal and Shelf Science*, 218, 207–213.
- Torca, M., Campos, J. A. & Herrera, M. (2019b) Species composition and plant traits of south Atlantic European coastal dunes and other comparative data. *Data in Brief*, 22, 207–213.
- Török, P., Deák, B., Vida, E., Valkó, O., Lengyel, S. & Tóthmérész, B. (2010) Restoring grassland biodiversity: Sowing low-diversity seed mixtures can lead to rapid favourable changes. *Biological Conservation*, 143, 806–812.
- Török, P., Valkó, O., Deák, B., Kelemen, A. & Tóthmérész, B. (2014) Traditional cattle grazing in a mosaic alkali landscape: Effects on grassland biodiversity along a moisture gradient. *PLoS ONE*, 9, e97095.
- Torri, D., Santi, E., Marignani, M., Rossi, M., Borselli, L. & Maccherini, S. (2013) The recurring cycles of biancana badlands: Erosion, vegetation and human impact. *Catena*, 106, 22–30.
- Turtureanu, P. D., Palpurina, S., Becker, T., Dolnik, C., Ruprecht, E., Sutcliffe, L. M. E. et al. (2014) Scale- and taxon-dependent biodiversity patterns of dry grassland vegetation in Transylvania. *Agriculture, Ecosystems & Environment*, 182, 15–24.
- Valkó, O., Deák, B., Magura, T., Török, P., Kelemen, A., Tóth, K. et al. (2016) Supporting biodiversity by prescribed burning in grasslands—A multi-taxa approach. *Science of the Total Environment*, 572, 1377–1384.
- Valkó, O., Deák, B., Török, P., Kelemen, A., Miglécz, T. & Tóthmérész, B. (2017) Filling up the gaps - Passive restoration does work on linear landscape scars. *Ecological Engineering*, 102, 501–508.
- Van Mechelen, C., Dutoit, T. & Hermy, M. (2014) Mediterranean open habitat vegetation offers great potential for extensive green roof design. *Landscape and Urban Planning*, 121, 81–91.
- Van Meerbeek, K., Helsen, K. & Hermy, M. (2014) Impact of land-use intensity on the conservation of functional and phylogenetic diversity in temperate semi-natural plant communities. *Biodiversity and Conservation*, 23, 2259–2272.
- Vanneste, T., Michelsen, O., Graae, B. J., Kyrkjeeide, M. O., Holien, H., Hassel, K. et al. (2017) Impact of climate change on alpine vegetation of mountain summits in Norway. *Ecological Research*, 32, 579–593.
- Vasheniak, I. (2016) *Unpublished data from the project financed by Rufford Small Grant Foundation "Rare Species and Habitats Conservation Occurred in the Limestone Outcrops of Dniester Canyon"*. Kyiv: Khmelnytskyi Institute of Interregional Academy of Personnel Management, Khmelnytskyi, UNCG.
- Virtanen, R. (2018) *Unpublished data sampled in Finland (2013) and in Svalbard (by S. Eurola in 1969)*. Oulu: Botanical Museum. University of Oulu.
- Vitasović Kosić, I., Tardella, F. M., Ruščić, M. & Catorci, A. (2011) Assessment of floristic diversity, functional composition and management strategy of North Adriatic pastoral landscape (Croatia). *Polish Journal of Ecology*, 59, 765–776.
- Vitasović Kosić, I., Tardella, F. & Catorci, A. (2012) Effect of management modification on the coenological composition of the North Adriatic pastoral landscape (Ćićarija, Croatia). *Hacquetia*, 11, 17–46.

- Vitasović Kosić, I. & Britvec, M. (2014) Floristic and vegetation characteristics of forest edges and grasslands of Ćićarija (Croatia) (Croatian). *Šumarski list*, 138, 167–184.
- Vitasović Kosić, I., Tardella, F. M., Grbeša, D., Škvorc, Ž. & Catorci, A. (2014) Effects of abandonment on the functional composition and forage nutritive value of a North Adriatic dry grassland community (Ćićarija, Croatia). *Applied Ecology and Environmental Research*, 12, 285–299.
- Von Wehrden, H., Wesche, K. & Miehe, G. (2009) Plant communities of the southern Mongolian Gobi. *Phytocoenologia*, 39, 331–376.
- Wagner, V., Chytrý, M., Zelený, D., Wehrden, H., Brinkert, A., Danihelka, J. et al. (2017) Regional differences in soil pH niche among dry grassland plants in Eurasia. *Oikos*, 126, 660–670.
- Waldén, E. & Lindborg, R. (2016) Long term positive effect of grassland restoration on plant diversity - success or not? *PLOS One*, 11(5), e0155836.
- Wang, Y., Heberling, G., Görzen, E., Miehe, G., Seeber, E. & Wesche, K. (2017) Combined effects of livestock grazing and abiotic environment on vegetation and soils of grasslands across Tibet. *Applied Vegetation Science*, 20, 327–339.
- Wang, Y., Lehnert, L. W., Holzapfel, M., Schultz, R., Heberling, G., Görzen, E. et al. (2018) Multiple indicators yield diverging results on grazing degradation and climate controls across Tibetan pastures. *Ecological Indicators*, 93, 1199–1208.
- Wanner, A., Suchrow, S., Kiehl, K., Meyer, W., Pohlmann, N., Stock, M. & Jensen, K. (2014) Scale matters: Impact of management regime on plant species richness and vegetation type diversity in Wadden Sea salt marshes. *Agriculture, Ecosystems & Environment*, 182, 69–79.
- Went, J. (2016) *Functional composition of Central European grasslands along the hydrological gradient*. BSc. thesis in Biology. Bayreuth: University of Bayreuth.
- Wesche, K., Miehe, S. & Miehe, G. (2005) Plant communities of the Gobi Gurvan Sayhan National Park (South Gobi Aimag, Mongolia). *Candollea*, 60, 149–205.
- White, H. J., Montgomery, W. I., Pakeman, R. J. & Lennon, J. J. (2018) Spatiotemporal scaling of plant species richness and functional diversity in a temperate semi-natural grassland. *Ecography*, 41, 845–856.
- Wiesner, L., Baumann, E., Weiser, F., Beierkuhnlein, C., Jentsch, A. & Dengler, J. (2015) Scale-dependent species diversity in two contrasting dry grassland types of an inner alpine dry valley (Cogne, Aosta Valley, Italy). *Bulletin of the Eurasian Dry Grassland Group*, 29, 10–17.
- Willems, J. H., Peet, R. K. & Bik, L. (1993) Changes in chalk-grassland structure and species richness resulting from selective nutrient additions. *Journal of Vegetation Science*, 4, 203–212.
- Wilson, J. B., Sykes, M. T. & Peet, R. K. (1995) Time and space in the community structure of a species-rich limestone grassland. *Journal of Vegetation Science*, 6, 729–740.
- Winkler, M., Lamprecht, A., Steinbauer, K., Hülber, K., Theurillat, J. P., Breiner, F. et al. (2016) The rich sides of mountain summits—a pan-European view on aspect preferences of alpine plants. *Journal of Biogeography*, 43, 2261–2273.
- Zhang, H. (2013) *Unpublished data from the project National Natural Science Foundation of China (31400357) "Community assembly in response to grazing across spatial scales, 2013-2017"*. Guangzhou: South China Botanical Garden, Chinese Academy of Sciences.

Zhou, N., Wu, J.-S., Shen, Z.-X., Zhang, X.-Z. & Yang, P.-W. (2016) Species-area relationships within and across functional groups at alpine grasslands on the northern Tibetan Plateau, China. *Journal of Mountain Science*, 13, 265–275.

Znamenskiy, S., Helm, A. & Pärtel, M. (2006) Threatened alvar grasslands in NW Russia and their relationship to alvars in Estonia. *Biodiversity and Conservation*, 15, 1797–1809.

Zürcher, R. (2019) *Unfinische Bachelor thesis*. Wädenswil: Research Group Vegetation Ecology, IUNR, ZHAW.