

**DR. VANESSA MINDEN****PERSONAL DETAILS**

Contacts	Vrije Universiteit Brussel Department of Biology Ecology and Biodiversity Pleinlaan 2 1050 Brussels Belgium  +32 485 326437 vanessa.minden@vub.be
Websites	<a href="http://www.vanessaminden.eu">www.vanessaminden.eu</a> <a href="https://scholar.google.com/citations?user=_wlhZ30AAAAJ&amp;hl=de">https://scholar.google.com/citations?user=_wlhZ30AAAAJ&amp;hl=de</a> <a href="http://www.researchgate.net/profile/Vanessa_Minden">www.researchgate.net/profile/Vanessa_Minden</a>
Birth	14.04.1979, Saarlouis (Germany)
Languages	German, English, French, Dutch
Nationality	German
Gender	Female

**EDUCATION AND ACADEMIC TRAINING**

2006 – 2010	PhD at the University of Oldenburg, Germany Thesis title: Functional traits of salt marsh plants: responses of morphology- and elemental-based traits to environmental constraints, trait-trait relationships and effects on ecosystem properties (summa cum laude)
2005	Diploma thesis 'The effects of the invasion of <i>Hedychium gardnerianum</i> Ker.-Gaw. (Zingiberaceae) on the regeneration dynamics of a montane rainforest on the Island of Hawai'i'
2004	University of Hawai'i, USA Research in Hawai'i Volcanoes National Park (HAVO) with Dieter-Mueller Dombois (Univ. of Hawai'i at Manoa), Jim Jacobi (USGS) and Tim Tunison (HAVO)
1998 – 2005	University of Rostock, Germany Studies in Biology (Diplom). Major subject: Botany, minor subjects: Ecology, Plant Physiology, Philosophy

**PROFESSIONAL EXPERIENCE**

Currently	Postdoc at Vrije Universiteit Brussel, Belgium (FWO project AL996), Title: Within-generational and transgenerational plasticity to nutrient stress in endangered, non-endangered and invasive plants', duration: 02.2021 – 01.2025
2017 - 2020	Assistant Professor (Akad. Rätin a. Z.), Landscape Ecology Group, University of Oldenburg & Guest researcher at Vrije Universiteit Brussel, Belgium

2016 – 2017	Research Fellow (DFG-Grant MI 1365/4-1), Title: Plant traits and species interactions along gradients of N:P:K stoichiometry, duration: 05.2016-04.2017 at Vrije Universiteit Brussel, Belgium
2011 - 2016	Assistant Professor (Akad. Rätin a. Z.), Landscape Ecology Group, University of Oldenburg
2011	Co-Coordinator of the COMTESS project

### LIST OF THIRD-PARTY PROJECTS

2021	'Within-generational and transgenerational plasticity to nutrient stress in endangered, non-endangered and invasive species` Funding agency: Fonds Wetenschappelijk Onderzoek (FWO), Belgium
2019	,Responses of plant functional traits to the environment and their effects on species interactions and ecosystem functions.' German Research Foundation (DFG)
2019	,Transgenerational plasticity to nutrient stress in common, endangered and invasive plants.' Fonds Wetenschappelijk Onderzoek (FWO)
2018	,Nutrient-induced adaptive transgenerational plasticity in common, endangered and invasive plant species – where ecology meets epigenetics.' Funding agency: European Commission-H2020
2018	'Spatial community ecology in highly dynamic landscapes: from island biogeography to metaecosystems (DynaCom)'. Funding agency: German Research Foundation (DFG)
2017	How do antibiotics affect plant communities and tritrophic interactions?' in Cooperation with Univ. of Freiburg and Wurzburg, Germany. Funding agency: German Research Foundation (DFG)
2016	Research Fellowship 'Plant traits and species interactions along gradients of N:P:K stoichiometry', in Cooperation with Univ. of Brussels, Belgium. Funding agency: German Research Foundation (DFG)
2015	'Tidal Bank Science and Services (tibass)', Coordination: Bundesamt für Gewässerkunde (BfG) Koblenz, Germany, in Cooperation with Univ. of Antwerp, Belgium. Funding agency: The German Federal Institute of Hydrology (BfG)
2015	'Effects of antiinfectives from manure on plant communities and plant-insect interactions', in Cooperation with Univ. of Freiburg and Wurzburg, Germany. Funding agency: German Research Foundation (DFG)
2013	'Plant-organ specific carbon and nutrient allocation in response to abiotic drivers and their effects on higher trophic levels in the Biodiversity Exploratories (ALLO)', Funding agency: German Research Foundation (DFG) (MI 1365/2-1)

## TEACHING

Winter Terms 2011 - 2018	<p>Lecture '<i>Ecophysiology of central-European plant communities</i>' ('Einführung in den Stoffhaushalt von Pflanzenbeständen Mitteleuropas'), BSc Environmental Sciences [Bodenkunde, Hydrologie und Ökosystem], 1.5 credit points</p> <p>Lecture/exercise course '<i>Introduction to statistical methods using vegetation-data</i>' ('Einführung in die statistische Analyse vegetationsökologischer Daten'), MSc Landscape Ecology [Datenmodellierung], 3 credit points</p> <p>Seminar '<i>Milieu study nature conservation</i>', BSc Environmental Sciences [Milieustudie Naturschutz] (given in winter term 2011/12), 3 credit points</p> <p>Internal seminar of the Landscape Ecology Group for PhD, MSc and BSc students, 1.5 credit points</p>
Summer Terms (2012 – 2018)	<p>Practical course/seminar '<i>Soil-hydrogeology-ecosystem relationships</i>' ('Bodenkundlich-Hydrogeologisch-Ökosystemare Zusammenhänge'), BSc Environmental Sciences [Bodenkunde, Hydrologie und Ökosystem], in cooperation with Prof. Giani (Soil Sciences) and Prof. Massmann (Hydrology), 9 credit points</p> <p>Practical course '<i>Milieu study nature conservation</i>', BSc Environmental Sciences [Milieustudie Naturschutz] (given in summer term 2012), 3 credit points</p>

## FURTHER EDUCATION FOR DIDACTIC SKILL ENHANCEMENT

Participation in the program 'Hochschuldidaktische Qualifizierung' (*Didactic Qualification for Higher Education*) of the University of Oldenburg, Bremen and Osnabrück (<http://www.uni-oldenburg.de/lehre/hochschuldidaktik/>).

### WORKSHOPS INCLUDED:

- '*Evaluation and feedback in courses*' (Evaluation und Feedback in Lehrveranstaltungen)
- '*Diversity of methods and promotion of active learning*' (Methodenvielfalt und Förderung aktiven Lernens)
- '*Concept-oriented planning and examining*' (Konzeptorientiert planen und prüfen)
- '*Planning workshop: interactive teaching*' (Planungswerkstatt interaktive Lehre)
- '*Teaching and learning in and with large groups*' (Lehren und Lernen in großen Gruppen)
- '*Heterogeneity in teaching*' (Heterogenität in der Lehre)
- '*Curious, critical, independent and motivated*' (Neugierig, kritisch, selbständig und hochmotiviert)
- '*Lecture shadowing with subsequent evaluation of own performance*' (Kollegiale Hospitation)

## SUPERVISOR OF THESES

PhD	<p>4 (3 completed, 1 ongoing):</p> <p>1: <i>Dr. Miguel A. Cebrián-Piqueras</i> (2017): Trade-offs and synergies between forage production, species conservation and carbon stocks in temperate coastal wet grasslands: an ecosystem services and process-based approach, status: completed</p> <p>2: <i>Dr. Julia Bass</i>: Biodiversity effects on dune and saltmarsh biogeomorphology – a trait-based approach, status: completed</p> <p>3: <i>Tilla Schulte Ostermann</i>: Plant trait responses to the environment and their effects on ecosystem properties, status: completed</p>
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	4: <i>Juliane Trinogga</i> : Convergence and divergence of functional plant traits along environmental gradients, status: ongoing
Master	2 completed
Bachelor	5 completed
Diploma	3 completed
Reader of theses	2 BSc, 4 MSc, 2 PhD (Dr. <i>Dang Thi Nhu Y</i> (2019): Nutrients out of balance in Vietnamese aquatic ecosystems, VUB, Belgium; Dr. Marjolein Sterk (2015): Operationalising resilience for ecosystem management by assessing ecosystems' adaptive capacity, Wageningen University, The Netherlands)

## SCHOLARSHIPS AND AWARDS

2016	Grant (DFG) for a research Fellowship at the Vrije Universiteit Brussel
2010	Oxford University Press Achievement in Biosciences Prize
2009	Honorable mention in the category young scientist oral presentation award 'Plant functional traits in relation to disturbance in salt marshes of NW-Germany'. 52nd International Symposium of the International Association of Vegetation Science (IAVS), Chania, Crete
2004	Grant (DAAD) for field work in Hawai'i, USA
2002	Second prize in the competition 'Preservation of historical buildings' supported by HUSS-Media GmbH, Germany, for 'Assessment of algae occurrence on house-facades by quantification of chlorophyll a in plaster samples'

## CONFERENCES, KEYNOTES, INVITED PRESENTATIONS AND ATTENDED WORKSHOPS (\*ORAL PRESENTATION)

*2019	Conference: 'Plants increase silicon content as a response to nitrogen and phosphorus limitation: a case study with <i>Holcus lanatus</i> ' Ecological Society of Germany, Austria and Switzerland (GfÖ), Münster, Germany
*2019	Conference: 'Antibiotic-induced effects on plant traits' International Association of Vegetation Science (IAVS), Bremen, Germany
2018	Chair of Session: 'Ecological stoichiometry: Alterations through environmental change and impacts on organisms and ecosystems'. Netherlands Annual Ecological Meeting, Lunteren, The Netherlands
*2017	Conference: 'Plant traits and species interactions along gradients of N, P and K availabilities' Ecology Across Borders: Joint Annual Meeting of BES, GfÖ, NecoV and EEF, Ghent, Belgium
2017	Workshop: 'Understanding the role of climatic and biological factors in regulating stoichiometric responses of organisms and ecosystems to nutrient enrichment', HWK-Delmenhorst, Germany
2017	Workshop: sDiv workshop 'sToichNutNet II: Linking ecological stoichiometry with environment-diversity-productivity relationships in grasslands', Leipzig, Germany
2016	Workshop: sDiv workshop 'sToichNutNet I: Linking ecological stoichiometry with environment-diversity-productivity relationships in grasslands', Leipzig, Germany

- 2015 Workshop: 'Workshop on Stoichiometry – Jena and beyond', University of Oldenburg in Wilhelmshaven, Germany
- 2015 Workshop organizer: 'An introduction to structural equation modelling and path analysis.' 14th Meeting on Vegetation Databases: Vegetation Databases
- \*2014 Conference: 'Do invasives grow better? Testing the growth rate hypothesis of a native herb and its invasive congener', 57th Annual Symposium of the International Association of Vegetation Science (IAVS), Perth, Australia
- \*2013 Conference: 'Ecosystem multifunctionality is determined by key plant traits: evidence from a coastal salt marsh', 56th Annual Symposium of the International Association of Vegetation Science (IAVS), Tartu, Estonia
- 2013 Chair of Session: 'Nutrient deposition into open landscapes and their effects on biodiversity, ecosystem function/services and ecological stoichiometry', Open Landscape Conference, Hildesheim
- 2013 Workshop: 'Intensive course in path analysis and structural equations in ecology: Using R functions', University of Sherbrooke, Canada
- \*2013 Keynote: 'Ecosystem multifunctionality is determined by key plant traits: evidence from a salty grassland', Keynote at sDiv workshop, Leipzig, Germany
- \*2012 Invited Presentation: 'Plant trait responses to the environment and effects on ecosystem properties in salt marshes', University of Kingston, Kingston-upon-Thames, England
- \*2012 Invited Presentation: 'Functional traits of salt marsh plants: responses to environmental constraints and effects on ecosystem properties', University of Quintana Roo, Cozumel, Mexico
- 2012 Session: 'Ecological stoichiometry: Alterations through environmental change and impacts on organisms and ecosystems', GfÖ Luneburg
- \*2012 Conference: 'Plant trait responses to the environment and effects on ecosystem properties in salt marshes', Ecological Society of Germany, Austria and Switzerland (GfÖ), Luneburg, Germany
- 2011 Workshop: Metacommunities and Metaecosystems, University of Oldenburg in Wilhelmshaven, Germany
- 2011 Session: 'Coastal Ecology', GfÖ Oldenburg
- \*2011 Conference: 'Plant trait responses to the environment and effects on ecosystem properties in salt marshes', DevSus - Developing Sustainability, Workshop and Annual Meeting, Stonetown, Sansibar, Tanzania
- \*2011 Conference: 'Environmental constraints on the stoichiometry of plant organs in salt marshes', Ecological Society of Germany, Austria and Switzerland (GfÖ), Oldenburg, Germany
- \*2010 Conference: 'Environmental constraints on the elemental composition (carbon:nitrogen:phosphorus) content of plant organs in salt marshes', Coastal Ecology Workshop, Conwy, UK
- \*2009 Conference: 'Plant functional traits in relation to disturbance in salt marshes of NW-Germany', 52th Annual Symposium of the International Association of Vegetation Science (IAVS), Chania, Greece

- 2009 | Invited Presentation: ‚Ökosystem-Funktionen und biologische Merkmale von Pflanzen‘, University of Kiel, Germany
- \*2008 | Conference: ‘Effects of invasive alien ginger (*Hedychium gardnerianum*) on native plant species regeneration in a Hawaiian rainforest’, Hawai‘i Conservation Conference, Honolulu, HI, USA

## OUTREACH

### ARTICLES IN NEWSPAPERS

- 2019 | <https://www.nationalpark-wattenmeer.de/node/5185>
- 2018 | <https://biooekonomie.de/nachrichten/dynamik-der-oekosysteme-im-blick>  
<https://idw-online.de/de/news698868>
- 2015 | [https://www.lietz-nordsee-internat.de/de/aktuelles/news/forschungsprojekt\\_kuenstliche\\_inseln\\_in\\_sat1](https://www.lietz-nordsee-internat.de/de/aktuelles/news/forschungsprojekt_kuenstliche_inseln_in_sat1)
- 2014 | [https://www.weser-kurier.de/region/niedersachsen\\_artikel,-Biologen-stellen-Kunstinseln-ins-Watt-\\_arid,963497.html](https://www.weser-kurier.de/region/niedersachsen_artikel,-Biologen-stellen-Kunstinseln-ins-Watt-_arid,963497.html)

### ARTICLES IN PERIODICALS

- 2020 | Profiles in Stoichiometry: Nine Questions for Vanessa Minden. *Ratios Matter* 4(1): 4-5
- 2017 | Kleyer M: Evolution mit Doping. *natur – Das Magazin für Natur, Umwelt und besseres Leben* 11: 26-37
- 2011 | Minden V: Kahili-Ingwer - Eine Zierpflanze verdrängt den Regenwald. *Geographische Rundschau* 3:42-47

### Travelling Exhibition

- 2016-2017 | <https://uol.de/comtess/ausstellung>  
<https://www.bmbf.de/de/deutschlands-kuersten-sicher-machen-2067.html>

## MEMBERSHIPS

Ecological Society of Germany, Austria and Switzerland, GfÖ (since 2011)

International Association of Vegetation Science, IAVS (since 2009)

## PROFESSIONAL SERVICE FOR SCIENTIFIC JOURNALS AND RESEARCH FOUNDATIONS

Scientific Journals: *Acta Oecologia*; *Annals of Botany*; *Annals of Botany Plants*; *Applied Vegetation Science*; *Aquatic Botany*; *Biodiversity and Conservation*; *Ecological Engineering*; *Ecological Indicators*; *Ecological Research*; *Ecology*; *Ecology Letters*; *Estuarine, Coastal and Shelf Science*; *Functional Ecology*; *Hydrobiologia*; *Journal of Ecology*; *Journal of Tropical Ecology*; *Journal of Vegetation Science*; *Oikos*; *Perspectives in Plant Ecology, Evolution and Systematics*; *Philosophical Transactions B*; *Plant and Soil*; *Plant Ecology*; *PLOS ONE*; *Scientific Reports*

Research Foundations: German Research Foundation (DFG)

## LIST OF PUBLICATIONS

Data captured: 10<sup>th</sup> February 2022

Papers submitted: 9

Papers accepted/published: 41

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Metric	Web of Science	Google Scholar
Citations	1233	1857
h-index	18	21
i-index		31

[https://scholar.google.com/citations?user=\\_wlhZ30AAAAJ&hl=de](https://scholar.google.com/citations?user=_wlhZ30AAAAJ&hl=de)

### PAPERS SUBMITTED

Bass J, Granse D, Hache I, Jensen K, Karius V, **Minden V**, Stock M, Suchrow S, Kleyer M (submitted) Plant traits affect vertical accretion of salt marshes

Diaz S, Kattge J, Cornelissen JHC, Wright I, Lavorel S, Dray S, Reu B, Kleyer M, Wirth C, Prentice IC, Garnier E, Boenisch G, Westoby M, Poorter H, Reich P, Moles A, Dickie J, Zanne A, Chave J, Wright S, Sheremetiev S, Jactel H, Baraloto C, Cerabolini B, Pierce, Shipley B, Casanoves F, Joswig J, Günther A, Falczuk V, Rüger N, Mahecha M, Gorné L, Amiaud B, Atkin O, Bahn M, Baldocchi D, Beckmann M, Blonder B, Bond B, Bond-Lamberty B, Brown K, Burrascano S, Byun C, Campetella G, Cavender-Bares J, Chapin III F, Choat B, Coomes D, Cornwell W, Craine J, Craven D, Dainese M, de Araujo A, de Vries F, Domingues T, Enquist B, Fagúndez J, Fang J, Fernández-Méndez F, Fernandez-Piedade M, Ford H, Forey W, Freschet G, Gachet S, Gallagher R, Green W, Guerin G, Gutiérrez A, Harrison S, Hattingh W, He T, Hickler T, Higgins SI, Higuchi P, Ilic J, Jackson R, Jalili A, Jansen S, Koike F, König C, Kraft N, Kramer K, Kreft H, Kühn I, Kurokawa H, Lamb EG, Laughlin D, Leishman M, Lewis S, Louault F, Malhado A, Manning P, Meir P, Mencuccini M, Messier J, Miller R, **Minden V**, Molofsky J, Montgomery R, Montserrat-Martí G, Moretti M, Müller S, Niinemets Ü, Ogaya R, Öllerer K, Onipchenko V, Onoda Y, Ozinga W, Pausas J, Peco B, Penuelas J, Pillar V, Pladevall C, Römermann C, Sack L, Salinas N, Sandel B, Sardans J, Schamp BS, Scherer-Lorenzen M, Schulze E-D, Schweingruber F, Shiodera S, Sosinski Ê, Soudzilovskaia N, Spasojevic M, Swaine E, Swenson N, Tautenhahn S, Thompson K, Totte A, Urrutia R, Valladares F, Bodegom D, Vasseur F, Verheyen K, Vile D, Violle C, von Holle B, Weigelt P, Weiher E, Wiemann M, Williams M, Wright J, Zotz G (submitted) The global spectrum of plant form and function: enhanced species-level trait dataset

Večeřa M, Axmanová I, Chytrý M, Divíšek J, Ndiribe C, Čeplová N, Acíć S, Bahn M, Bergamini A, Boenisch G, Biurrun I, Bruun H H, Byun C, Catford J, Cerabolini B, Cornelissen H J, Dengler J, Jansen F, Jansen S, Kattge J, Kozub Ł, Kuzemko A, **Minden V**, Mitchell R, Moeslund J, Mori A, Niinemets Ü, Ruprecht E, Růsina S, Šilc U, Soudzilovskaia N, van Bodegom P, Vassilev K, Weiher E, Wright I, Lososová Z (submitted) Decoupled phylogenetic and functional diversity in European grasslands

Guo W-Y, Serra-Diaz JM, Schrodte F, Eiserhardt WL, Maitner BS, Merow C, Violle C, Blach-Overgaard A, Zhang J, Anand M, Belluau M, Bruun HH, Byun C, Catford JA, Cerabolini BEL, Chacón-Madrugal E, Ciccarelli D, Cornelissen JHC, Dang-Le AT, de Frutos A, Dias AS, Giroldo AB, Gutiérrez AG, Hattingh W, He T, Hietz P, Hough-Snee N, Jansen S, Kattge J, Klein T, Komac B, Kraft N, Kramer K, Lavorel S, Lusk CH, Martin AR, Mencuccini M, Michaletz ST, **Minden V**, Mori AS, Niinemets Ü, Onoda Y, Onstein RE, Peñuelas J, Pillar VD, Pisek J, Pound MJ, Robroek BJM, Schamp B, Slot M, Sosinski Ê, Soudzilovskaia NA, Thiffault N, van Bodegom P, van der Plas F, Wright IJ, Zheng J, Enquist BJ, Svenning J-C (submitted) High exposure of global tree diversity to human pressure

Bass J, Balke T, **Minden V** (submitted) Morphological plasticity of dune pioneer plants in response to timing and magnitude of sediment disturbance

Guo WY, Serra-Diaz JM, Schrodte F, Eiserhardt WL, Maitner BS, Merow C, Violle C, Anand M, Belluau M, Bruun HH, Byun C, Catford JA, Cerabolini BEL, Chacón-Madrugal E, Ciccarelli D, Cornelissen JHC, Dang-

Le AT, de Frutos A, Dias AS, Giroldo AB, Guo K, Gutiérrez AG, Hattingh W, He T, Hietz P, Hough-Snee N, Jansen S, Kattge J, Klein T, Komac B, Kraft N, Kramer K, Lavorel S, Lusk CH, Martin AR, Mencuccini M, Michaletz ST, **Minden V**, Mori AS, Niinemets Ü, Onoda Y, Onstein RE, Peñuelas J, Pillar VD, Pisek J, Robroek BJM, Schamp B, Slot M, Sosinski E, Soudzilovskaia NA, Thiffault N, van Bodegom P, van der Plas F, Wright IJ, Xu WB, Zheng J, Enquist BJ, Svenning JC (submitted) Half of the world's tree species diversity is unprotected and is increasingly threatened by human activities

Butler EE, Wythers KR, Flores-Moreno H, Ricciuto DM, Datta A, Banerjee A, Atkin OK, Kattge J, Thornton PE, Anand M, Burrascano S, Byun C, Cornelissen JHC, Forey E, Jansen S, Kramer K, **Minden V**, Reich PB (submitted) Increasing functional diversity in a global land surface model illustrates uncertainties related to parameter simplification

Veldhuis M, Isbell F, Bahn M, Beierkuhnlein C, Bezemer TM, Boenisch G, Buchmann N, Byun C, Catford JA, Cerabolini BEL, Connolly J, Cornelissen JHC, Craven D, de Luca E, Deutschman D, Doležal J, Eisenhauer N, Guo Q, Hector A, Hunt C, Jentsch A, Kattge J, Kreyling J, Lanta V, Leps J, **Minden V**, O'Brien K, Onipchenko V, Polley HW, Reich PB, Roscher CR, Ruijven JR, Schamp B, Soudzilovskaia NA, Tracy BJ, Visser MD, Weigelt A, Wilsey B, Tarnita CE, Pringle RM (submitted) A resistance-recovery continuum in ecology

Brussel T, Brewer S, Boenisch G, Campbell M, Catford J, Finginger W, Giesecke T, Hough-Snee N, Kattge J, Minckley TA, Wolters S, Anand M, van Bodegom PM, Burrascano S, Byun C, Cerabolini BEL, Cornelissen JHC, Dang-Le AT, Dias AS, Kramer K, Lavorel S, Michaletz ST, **Minden V**, Mitchell R, Mori AS, Niinemets Ü, Peñuelas J, Soudzilovskaia NA (submitted) Latitudinal gradients in trait space and functional diversity vary over 11 000 years

#### **PAPERS ACCEPTED/PUBLISHED**

41. Schoutens K, Luys P, Heuner M, Fuchs E, **Minden V**, Schulte Ostermann T, Bouma TJ, van Belzen J, Temmerman S (accepted with minor revisions) Traits of tidal marsh plants determine survival and growth response to hydrodynamic forcing: implications for nature-based shoreline protection
40. Schulte Ostermann T, Kleyer M, Fuchs E, Temmermann S, Schoutens K, Bouma TJ, **Minden V** (2021) Hydrodynamics affect plant traits in estuarine ecotones with impact on carbon sequestration potentials. *Estuarine, Coastal and Shelf Science* 259:107464. doi.org/10.1016/j.ecss.2021.107464
39. Joswig J, Wirth C, Schuman M, Kattge J, Reu B, Wright I, Sippel S, Rüger N, Richter R, Schaepman M, Bodegom P, Cornelissen JHC, Diaz S, Hattingh W, Kramer K, Lens F, Niinemets Ü, Reich P, Reichstein M, Römermann C, Schrod F, Anand M, Bahn M, Byun C, Campetella G, Cerabolini B, Craine J, Gonzalez-Melo A, Gutiérrez Á, He T, Higuchi P, Jactel H, Kraft N, **Minden V**, Onipchenko V, Penuelas J, Pillar V, Sosinski Ê, Soudzilovskaia N, Weiher E, Mahecha M (2021) Climatic and soil factors explain the two-dimensional spectrum of global plant trait variation. *Nature Ecology & Evolution* 6: 36-50. doi/org/0.1038/s41559-021-01616-8
38. **Minden V**, Schaller J, olde Venterink H (2021) Plants increase silicon content as a response to nitrogen or phosphorus limitation: a case study with *Holcus lanatus*. *Plant and Soil* 462: 95-108. doi.org/10.1007/s11104-020-04667-1
37. Schulte Ostermann T, Heuner M, Fuchs E, Temmermann S, Schoutens K, Bouma T, **Minden V** (2021) Unraveling plant strategies in tidal marshes by investigating plant traits and environmental conditions. *Journal of Vegetation Science* 32:1-17. doi.org/10.1111/jvs.13038
36. Cebrián-Piqueras MA, Trinogga J, Trenkamp A, **Minden V**, Maier M, Mantilla-Contreras J (2021): Digging into the roots: understanding direct and indirect drivers of ecosystem service trade-offs in



ocoastal grasslands via plant functional traits. *Environmental Monitoring and Assessment* 193, 271. doi.org/10.1007/s10661-020-08817-x

35. Guerrero-Ramírez, NR, Mommer L, Freschet G, Iversen C, McCormack ML, Kattge J, Poorter H, van der Plas F, Bergmann J, Kuyper TW, York LM, Bruelheide H, Laughlin D, Meier IC, Roumet C, Semchenko M, Sweeney CJ, van Ruijven J, Valverde-Barrantes OJ, Aubin I, Catford J, Manning P, Martin A, Milla R, **Minden V**, Pausas J, Smith SW, Soudzilovskaia N, Ammer C, Butterfield B, Craine J, Cornelissen J, de Vries FT, Isaac M, Kramer K, König C, Lamb E, Onipchenko V, Penuelas J, Reich P, Rillig M, Sack L, Shipley B, Tedersoo L, Valladares F, van Bodegom P, Weigelt P, Wright J, Weigelt A (2021) Global Root Traits (GRoot) Database. *Global Ecology and Biogeography* 30: 25-37. doi.org/10.1111/geb.13179

## 2020

34. Gorné L, Diaz S, **Minden V**, Onoda Y, Kramer K, Muir C, Michaletz S, Lavorel S, Sharpe J, Jansen S, Slot M, Chacon E, Boenisch G (2020) The acquisitive-conservative axis of leaf trait variation emerges even in homogeneous environments. *Annals of Botany*. doi.org/10.1093/aob/mcaa198
33. Schoutens K, Heuner M, Fuchs E, **Minden V**, Schulte-Ostermann T, Belliard J-P, Bouma T, Temmerman S (2020) Nature-based shoreline protection by tidal marsh plants depends on species-specific trade-offs between avoidance and attenuation of hydrodynamic forces. *Estuarine, Coastal and Shelf Science* 236: 106645. doi.org/10.1016/j.ecss.2020.106645
32. Kuppler J, Albert CH, Ames GM, Armbruster WS, Boenisch G, Boucher FC, Campbell DR, Carneiro LT, Chacón-Madrigal E, Enquist BJ, Fonseca CR, Gómez JM, Guisan A, Higuchi P, Karger DN, Kattge J, Kleyer M, Kraft NJB, Larue-Kontić A-AC, Lázaro A, Lechleitner M, Loughnan D, **Minden V**, Niinemets Ü, Overbeck GE, Parachnowitsch AL, Perfectti F, Pillar VD, Schellenberger Costa D, Sletvold N, Stang M, Alves-dos-Santos I, Streit H, Wright J, Zych M, Junker RR (2020) Global gradients in intraspecific variation in vegetative and floral traits are partially associated with climate and species richness. *Global Ecology and Biogeography* 29: 992–1007. doi.org/10.1111/geb.13077
31. Shiklomanov A, Cowdery E, Bahn M, Byun C, Craine J, Gonzalez-Melo A, Jansen S, Kraft N, Kramer K, **Minden V**, Niinemets Ü, Onoda Y, Sosinski Enio, Soudzilovskaia N, Dietze M (2020) Does the leaf economic spectrum hold within plant functional types? A Bayesian multivariate trait meta-analysis. *Ecological Applications*. doi.org/10.1002/eap.2064
30. Kattge J, Bonisch G, Díaz S, Lavorel S, Prentice IC, ... **Minden V**, ... Wirth C (2020) TRY plant trait database – enhanced coverage and open access. *Global Change Biology* 26: 119-188. doi.org/10.1111/gcb.14904

## 2019

29. Flores-Moreno H, Fazayeli F, Banerjee A, Datta A, Kattge J, Butler E, Atkin O, Wythers K, Chen M, Anand M, Bahn M, Burrascano S, Byun C, Cornelissen J, Craine J, Gonzalez-Melo A, Hattingh W, Jansen S, Kraft N, Kramer K, Laughlin D, **Minden V**, Niinemets Ü, Onipchenko V, Peñuelas J, Soudzilovskaia N, Reich P (2019) Robustness of trait connections between multiple plant organs across environmental gradients and growth forms. *Global Ecology and Biogeography* 28: 1806-1826. doi.org/10.1111/geb.12996
28. **Minden V**, olde Venterink H (2019) Plant traits and species interactions along gradients of N, P and K availabilities. *Functional Ecology* 33: 1611-1626. doi.org/10.1111/1365-2435.13387
27. Ladouceur E, Bonomi C, Bruelheide H, Klimešová J, Burrascano S, Poschlod P, Tudela-Isanta M, Iannetta P, Mondoni A, Amiaud B, Cerabolini B, Cornelissen JHC, Craine J, Louault F, **Minden V**, Öllerer

K, Onipchenko V, Soudzilovskaia N, Jiménez-Alfaro B (2019) The functional trait spectrum of European temperate grasslands. *Journal of Vegetation Science* 30: 777-788. doi.org/10.1111/jvs.12784

26. Schoutens K, Heuner M, **Minden V**, Schulte Ostermann T, Silinski A, Belliard J-P, Temmermann S (2019) How effective are tidal marshes as nature-based shoreline protection throughout seasons? *Limnology and Oceanography* 64: 1750-1762. doi.org/10.1002/lno.11149

25. Bruelheide H, Dengler J, Jimenez-Alfaro B, Purschke O,... **Minden V**,...Wiser S, Wohlgemuth T, Yamalov S, Zizka G, Zverev A (2019) sPlot – a new tool for global vegetation analyses. *Journal of Vegetation Science* 30: 161-168. doi.org/10.1111/jvs.12710

24. Pufal G, Memmert J, Leonhardt SD, **Minden V** (2019) Negative bottom-up effects of sulfadiazine, but not penicillin and tetracycline, in soil substitute on plants and higher trophic levels. *Environmental Pollution* 245: 531-544. doi.org/10.1016/j.envpol.2018.11.008

## 2018

23. Milla R, Bastida JM, Turcotte MM, Jones G, Violle C, Osborne CO, Chacón-Labela J, Sosinski Jr. EE, Kattge J, Laughlin DC, Forey E, **Minden V**, Cornelissen JHC, Aimaud B, Kramer K, Boenisch G, He T, Pillar VD, Byun C (2018) Phylogenetic patterns and phenotypic profiles of the species of plants and mammals farmed for food. *Nature Ecology & Evolution* 2: 1808-1817

22. Kleyer M, Trinogga J, Cebrián-Piqueras M, Trenkamp A, Fløjgaard C, Ejrnæs R, Bouma TC, **Minden V**, Maier M, Mantilla-Contreras J, Albach DC, Blasius B (2018) Trait correlation network analysis identifies biomass allocation traits and stem specific length as hub traits in herbaceous perennial plants. *Journal of Ecology* 107: 829-842. doi.org/10.1111/1365-2745.13066

21. Craven D, Eisenhauer N, Pearse WD, Hautier Y, Roscher C, Isbell F, Connolly J, Ebeling A, Griffin J, Hines J, Jentsch A, Lemoine N, Meyer ST, van Ruijven J, Smith M, Beierkuhnlein C, Boenisch G, Hector A, Kattge J, Kreyling J, Lanta V, de Luca E, Polley HW, Reich PB, Tilman D, Weigelt A, Wilsey B, Catford JA, Craine J, Schamp B, Bahn M, Byun C, **Minden V**, Cornelissen JHC, Manning P (2018) Multiple facets of biodiversity drive the diversity-stability relationship. *Nature Ecology & Evolution* 2: 1579-1587. doi.org/10.1038/s41559-018-0647-7

20. Moreno-Martínez À, Camps-Valls G, Kattge J, Robinson N, Reichstein M, van Bodegom P, Kramer K, Cornelissen JHC, Reich P, Bahn P, Niinemets Ü, Peñuelas J, Craine JM, Cerabolini BEL, **Minden V**, Laughlin DC, Sack L, Allred B, Baraloto C, Byun C, Soudzilovskaia NA, Running SW (2018) A methodology to derive global maps of leaf traits using remote sensing and climate data. *Remote Sensing of Environment* 218: 69-88. doi.org/10.1016/j.rse.2018.09.006

19. Kaluza BF, Wallace HM, Heard TA, **Minden V**, Klein AM, Leonhardt SD (2018) Social bees are fitter in more biodiverse environments. *Scientific Reports* 8: 12353. doi: 10.1038/s41598-018-30126-0

18. **Minden V**, Schnetger B, Pufal G, Leonhardt SD (2018) Antibiotic-induced effects on scaling relationships and on plant element contents in herbs and grasses. *Ecology and Evolution* 8: 6699-6713. doi.org/10.1002/ece3.4168

17. Zeeman BJ, **Minden V**, Morgan JW (2018) Non-native plant cover and functional trait composition of urban temperate grasslands in relation to local- and landscape-scale road density. *Biological Invasions* 20: 3025-2036. doi.org/10.1007/s10530-018-1756-6

## 2017

16. Butler EE, Datta A, Flores-Moreno H, Chen M, Wythers KR, Fazayeli F, Banerjee A, Atkin OK, Kattge J, Amiaud B, Blonder B, Boenisch G, Bond-Lamberty B, Brown KA, Byun C, Campetella G, Cerabolini BEL, Cornelissen JHC, Craine JM, Craven D, de Vries FT, Diaz S, Domingues TF, Forey E, Gonzalez A, Gross N, Han W, Hattingh WN, Hickler T, Jansen S, Kramer K, Kraft NJB, Kurokawa H, Laughlin DC, Meir P, **Minden V**, Niinemets Ü, Onoda Y, Penuelas J, Read Q, Valladares F, Sack L, Schamp B, Soudzilovskaia NA, Spasojevic MJ, Sosinski EE, Thornton PE, van Bodegom PM, Williams M, Wirth C, Reich PB (2017) Mapping local and global variability in plant trait distributions. *Proceedings of the National Academy of Sciences of the United States of America* 114: E10937-E10946. doi.org/10.1073/pnas.1708984114
15. Balke T, Löhmus K, Hillebrand H, Zielinski O, Haynert K, Meier D, Hodapp D, **Minden V**, Kleyer M (2017) Experimental salt marsh islands: a model system for novel metacommunity experiments. *Estuarine, Coastal and Shelf Science* 198: 288-298. doi.org/10.1016/j.ecss.2017.09.021
14. **Minden V**, Deloy A, Volkert AM, Leonhardt SD, Pufal G (2017) Antibiotics impact plant traits, even at small concentrations. *Annals of Botany Plants* 9:1-19. doi.org/10.1093/aobpla/plx010
13. Cebrián Piqueras MA, Trinogga J, Grande C, **Minden V**, Maier M, Kleyer M (2017) Interactions between ecosystem properties and land use resolve trade-offs between agricultural production and species conservation in coastal lowlands. *International Journal of Biodiversity Science, Ecosystem Services & Management* 13: 53-66. doi.org/10.1080/21513732.2017.1289245

## 2016

12. **Minden V**, Scherber C, Cebrián Piqueras MA, Trinogga J, Trenkamp A, Mantilla-Contreras J, Kleyer M (2016) Consistent drivers of plant biodiversity across managed ecosystems. *Philosophical Transactions of the Royal Society B* 371: 20150284. doi.org/10.1098/rstb.2015.0284
11. Lewandowska A, Biermann A, Borer ET, Cebrián-Piqueras M, Declerck SAJ, De Meester L, Van Donk E, Gamfeldt L, Gruner DS, Hagenah N, Harpole WS, Kirkman KP, Klausmeier CA, Kleyer M, Knops JMH, Lemmens P, Lind EM, Litchman E, Mantilla-Contreras J, Martens K, Meier S, **Minden V**, Moore JL, Olde Venterink H, Seabloom EW, Sommer U, Striebel M, Trenkamp A, Trinogga J, Urabe J, Vyverman W, Van de Waal DB, Wissicombe CE, Hillebrand H (2016) The importance of stoichiometry for biodiversity-functioning relationship – a synthesis across ecosystems. *Philosophical Transactions of the Royal Society B* 371: 20150283. doi.org/10.1098/rstb.2015.0283
10. **Minden V**, Gorschlüter J (2016) Comparison of native and non-native *Impatiens* species across experimental light and nutrient gradients. *Plant Ecology and Evolution* 149: 59-72. doi.org/10.5091/plecevo.2016.1118

## 2015

9. **Minden V**, Kleyer M (2015) Ecosystem multifunctionality of coastal salt marshes is determined by key plant traits. *Journal of Vegetation Science* 26: 651-662. doi.org/10.1111/jvs.12276
8. Kleyer M, **Minden V** (2015) Why functional ecology should consider all plant organs: an allocation-based perspective. *Basic and Applied Ecology* 16:1-9. doi.org/10.1016/j.baae.2014.11.002

## 2014

7. Kleyer M, Balke T, **Minden V**, Peppler-Lisbach C, Schoenmakers S, Spalke J, Timmermann H (2014) Mellum: A highly dynamic landscape, though not for plants. In: Hellwig, U., Stock, M. (Eds.) *Dynamic Islands in the Wadden Sea*. Wadden Sea Ecosystem 33, pp. 29-44

6. **Minden V**, Kleyer M (2014) Internal and external regulation of plant organ stoichiometry. *Plant Biology* 16:897-907. doi.org/10.1111/plb.12155

#### 2012

5. **Minden V**, Andratschke S, Spalke J, Timmermann H, Kleyer M (2012) Plant-trait environment relationships in salt marshes: deviations from predictions by ecological concepts. *Perspectives in Plant Ecology, Evolution and Systematics* 14:183-192. doi.org/10.1016/j.ppees.2012.01.002

#### 2011

4. **Minden V**, Kleyer M (2011) Testing the effect-response framework: key response and effect traits determining aboveground biomass of salt marshes. *Journal of Vegetation Science* 22:387-401. doi.org/10.1111/j.1654-1103.2011.01272.x

#### 2010

3. **Minden V**, Hennenberg K, Porembski S, Boehmer HJ (2010) Invasion and management of alien *Hedychium gardnerianum* (kahili ginger, Zingiberaceae) alter plant species composition of a montane rainforest on the island of Hawai'i. *Plant Ecology* 206:321-333. doi.org/10.1007/s11258-009-9645-9
2. **Minden V**, Jacobi JD, Porembski S, Boehmer HJ (2010) Effects of invasive alien kahili ginger (*Hedychium gardnerianum*) on native plant species regeneration in a Hawaiian rainforest. *Applied Vegetation Science* 13:5-14. doi.org/10.1017/S0266467404002160

#### 2007

1. Hennenberg KJ, Goetze D, **Minden V**, Traore D, Porembski S (2005) Size-class distribution of *Anogeissus leiocarpus* (Combretaceae) along forest-savanna ecotones in northern Ivory Coast. *Journal of Tropical Ecology* 21: 273-281. doi.org/10.1017/S0266467404002160

## Theses

**PhD thesis: Minden V** (2010) Functional traits of salt marsh plants: responses of morphology- and elemental based traits to environmental constraints, trait-trait relationships and effects on ecosystem properties, PhD thesis, Carl von Ossietzky-University Oldenburg, Germany

**Diploma thesis: Minden V** (2005) The effects of the invasion of *Hedychium gardnerianum* Ker.-Gaw. (Zingiberaceae) on the regeneration dynamics of a montane rainforest on the Island of Hawai'i, Diploma thesis, University of Rostock, Germany in cooperation with University of Hawai'i at Manoa, Hawai'i, USA