

Curriculum vitae

Marta Carboni

Dipartimento di Scienze, Università Roma TRE
 Viale Marconi 446, 00146 Roma, Italy
 e-mail: marta.carboni@uniroma3.it
 ORCID: 0000-0002-9348-4758

PERSONAL DATA

Born in Cagliari (Italy), 9/1/1981
 Nationality: Italian

WORK AND RESEARCH EXPERIENCE

From Jul 2022	Associate Professor at the University of Roma TRE, Italy
Feb 2019 - Jun 2022	Researcher at the University of Roma TRE, Italy
Nov 2017 – Jan 2019	Post Doc at the University of Toronto, Canada (with Marc Cadotte)
Oct 2013 - Oct 2017	Post Doc at the Laboratoire d'Ecologie Alpine, Grenoble, France (with W. Thuiller) (Funding: Marie-Curie fellowship "IASIMOV" & Biodiversa project "WhoIsNext")
May 2011- Sept 2013	Post Doc at the Plant Ecology Lab, University of Roma Tre (with A.T.R. Acosta)
Feb-April 2011	Research stay at the Institute of Botany, Czech Academy Sciences, Czech Republic (with Francesco de Bello / Jan Leps / Jitka Klimesova)
2007-2010	PhD student at University of Roma Tre (with Alicia T.R. Acosta)
March - Jul 2007	Trainee at the Italian Environmental Protection Agency (APAT/ISPRA)
2003 - 2004	Lab assistant at the Institute of Ecology, Technische Universität Berlin, and at the Institute of Applied Zoology/Animal Ecology, Freie Universität Berlin.

EDUCATION

2007-2010	PhD in Biodiversity and Analysis of Ecosystems (European PhD Label) Università degli Studi Roma Tre Thesis "Understanding patterns of invasions on Mediterranean coastal dunes: From environmental filtering to biotic interactions across scales" Supervisor: Alicia T. R. Acosta
2004 - 2006	Laurea Magistrale (Master of Science) in Environmental Biology, <i>Cum Laude</i> Università degli Studi Roma Tre Thesis: "Analysis of vegetation conservation status on coastal dunes" Supervisor: Alicia T. R. Acosta
1999-2003	Bachelor of Science in Biology (Ecology), with Honors, <i>Summa Cum Laude</i> San Francisco State University, CA Thesis: "Testing methods for sampling solitary bees in the Western United States". Supervisor: Gretchen LeBuhn

AWARDS, FELLOWSHIPS AND GRANTS

2023 **PRIN** grant 2022 for the project “UrBiS”, Local PI, (**MUR**)
 2021 **CESAB** (Centre for the Synthesis and Analysis of Biodiversity) grant 2021 for the project “BRIDGE”
 2018 **Rita Levi Montalcini** grant for young researchers (**MIUR**)
 2017 Ecography **E4** Award finalist
 2015 Post-Doc grant of the **Biodiversa** funded project WhoIsNext at LECA
 2013 **Marie Curie** IEF postdoc grant (call FP7-PEOPLE-2012-IEF, “IASIMOV”) at LECA
 2012 **MOBILITAS** postdoc grant of Estonian Research Council at University of Tartu, Estonia (declined)
 2011-2013 Italian Ministry of Education, University and Research (**MIUR**) post-doc research fellowship
 2008 **Marchetti Prize** for best poster presentation of the Italian Ecological Society (SIte)
 2007-2010 Italian Ministry of Education, University and Research (**MIUR**) PhD research fellowship
 2007 Italian Ministry of Education, University and Research (**MIUR**) research fellowship
 2003 **Phi-Beta-Kappa**
 2003 Achievement award as **Biology Departmental Honoree** – Department of Biology (SFSU)
 2001 Undergraduate **Hensill and Kuby Fellowships** – Department of Biology (SFSU)

SKILLS

Analysis and statistical skills

Statistical modelling (GLM, GLMM, GAM, MCMCglms), multivariate analysis, null model analyses, species distribution models, vegetation hybrid simulation modelling (FATE-HD), handling spatial data in GIS environment (R, ArcGis), programming in R.

Advanced courses: “Theories and Methods in Spatial Community Modelling” (University of Lausanne, 2015); Ecochange Summer school - “Predictive habitat distribution models: tools for building projections of global change impact on biodiversity” (University of Lausanne, 2009); Post Graduate Course - “Statistical Analyses for Botanists and Ecologists” (Università di Siena, 2008); Intro to C++ programming (City College of San Francisco, 2001)

Language skills

Italian (Mother tongue), English (Proficient), German (Proficient), French (Proficient), Spanish (Basic)

Certificates: TOEFL, Mittelstufe Deutsch and DSH (Deutsche Sprachprüfung für den Hochschulzugang);
Linguistic experiences: Linguistic high school diploma (English, French and Spanish); Bachelor degree in English language; studied and worked in German in Berlin (2 years); worked in Grenoble, France (4 years).

TEACHING EXPERIENCE

Academic

2023- Community Ecology at Università Roma Tre
 2019- Geographical Information Systems at Università Roma Tre
 2019- Statistical Analysis of Ecological Data at Università Roma Tre
 2015-2016 Biostatistics at Université Grenoble Alpes (UGA)
 2014-2017 Community Ecology and evolutionary biogeography (lectures on “Biological invasions”) at UGA
 2007-2008 Ecology and conservation of dunes (lectures on “Landscape ecology” and “Conservation of coastal dunes”) at Università di Siena/Follonica
 2007 Landscape Ecology (Teaching assistant) at Università Roma Tre

Mentoring

Phd

2020-2023 Thesis Co-director of PhD student Greta La Bella at Università Roma Tre
 2019-2022 Thesis Director of PhD student Luigi Cao Pinna at Università Roma Tre

2014-2017 Thesis Co-director of PhD student Luisa Conti at Università Roma Tre

Master

2017 Co-supervisor of MSc student Irene Calderon-Sanou at UGA

2012-2013 Co-supervisor of two MSc students, Luisa Conti and Barbara Valentini at Università Roma Tre

Bachelor

2023 Supervisor of two BSc students, Syria Cipettini and Mattia Russo at Università Roma Tre

2023 Co-supervisor of BSc student Sara Salatini at Università Roma Tre

2018 Co-supervisor of BSc student Neil Punwasi at University of Toronto

2011 Co-supervisor of two BSc students, Luisa Conti and Alessandro Bricca at Università Roma Tre

Habilitations

2016- Qualification M. Conférences (*French lecturer habilitation*): 67- Population biology and ecology

2017- Abilitazione Scientifica Nazionale (*Italian professor habilitation*): 05/A1 Botany, 05/C1 Ecology

ACADEMIC SERVICE

Editor

2020- Associate Editor for *Journal of Vegetation Science*

2019- Associate Editor for *Diversity and Distributions*

2016-2020 Editorial Board of the *Journal of Vegetation Science*

2014 *Hacquetia*, Guest Editor: “*Conservation, management & restoration of Europe's open landscapes*”

Reviewer

2009- *Agriculture Ecosystems and Environment, Applied Vegetation Science, Austral Ecology, Biodiversity and Conservation, Biological invasions, Community Ecology, Diversity and Distributions, Ecology, Ecology and Evolution, Ecological Indicators, Ecology Letters, Functional Ecology, Global Ecology and Biogeography, Journal of Applied Ecology, Journal of Ecology, Journal of Coastal Research, Journal of Vegetation Science, Nature Ecology and Evolution, Nature Communications, Oecologia, Oikos, Perspectives in Plant Ecology Evolution and Systematics, Plant Ecology, Plant Ecology and Diversity, PNAS, Proceedings of the Royal Society B: Biological Sciences.*

2016- *Hungarian National Research Development and Innovation Office (NKFIH), Czech Science Foundation (GACR), Biodiversa*

Other

2019 – Member of the Doctorate college of Roma Tre University

2019 – Reference for the University Linguistic Center (CLA) of the Dep. of Sciences; Roma Tre University

2011 – 2013 Representative of post-doc fellows in the administrative organs of the Department, Roma Tre University, Italy

CONFERENCES AND WORKSHOPS

Organization

2020 – Scientific committee of the “Conference for young botanists” (CYBO, Genova, Feb. 6-7 2020) of the SBI (Italian Botanical Society)

2022 – Organizing committee of the “1st International Plant Translocation Conference” (Rome, Jun. 2022)

2022-2023 Scientific committee of the CYBO online webinar series in 2022 and in person conference in Bolzano (Jan 2023)

Contributions in conferences

10 at the symposium of the International Association for Vegetation Science **IAVS** (2007, 2009, 2011, 2013, 2014, 2015, 2016, 2019); 8 at the yearly congress of the Società Italiana di Ecologia **SITE** (2006, 2007, 2008, 2010); 2 at the congress of the Société Française d'Ecologie (**SFE**) / **BES** (2014, 2016) ; 2 at the congress of

the Società Italiana Scienza Vegetazione **SISV** (2009, 2010); 2 at the congress of the Ecological Society of America **ESA** (2018); 1 at the congress of the European Vegetation Survey **EVS** (2013); 1 at the meeting **CoastGIS** (2007); 1 at the meeting **NEOBIOTA** (2008).

Selected Workshops

June 2022, Jan 2023 *BRIDGE project workshops* (CESAB, Montpellier, France), led by E. Tabacchi & G. Fried.

June 2019 *Global Urban Invasions* (U Toronto, Canada), organized by M. Cadotte.

March 2017 *Synthesizing invasion ecology* (iDiv, Leipzig, DE), organized by T. Knight & M. van der Sande.

March 2016 *Plant invasions, horticulture and forestry* (Institute Of Botany, Pruhonice, CZ), organized by M. van Kleunen, K. Dehnen-Schmutz and J. Pergl.

February 2012 *Functional species pool* (Trebou, CZ), organized by F. de Bello and M. Pärtel.

November 2011 *Simulating virtual data for community assembly* (LECA, Grenoble, FR), organized by T. Münkemüller and L. Gallien.

Invited Seminars

- University of S. Bohemia, Czech Republic (March 2011)

- Laboratoire d'Ecologie Alpine, France (February 2017)

- IDiV Leipzig, Germany (March 2017)

- University of Toronto, Scarborough (Jan 2018)

- Keynote Speaker: 1st Congress of the Italian Chapter - Society for Conservation Biology, Stazione Zoologica Anton Dohrn, Napoli (May 2022): “*Anticipare e prevenire le invasioni biologiche: una sfida per la conservazione della biodiversità*”

PUBLICATIONS

Published or in Press

66. Bricca A., Sperandii M.G., Acosta A.T.R., Montagnoli A., La Bella, G., Terzaghi M., & **Carboni M.** 2023. Above- and belowground traits along a stress gradient: trade-off or not? *Oikos*, e010043 (<https://doi.org/10.1111/oik.10043>)

65. Forey, E., Lodhar, S.Y.F., Galvin, S. D., Lowry, J. H., Gopaul, S., Hanson, G., **Carboni, M.**, Chauvat, M., H. J. Boehmer. 2023. Invasion by an alien palm in Fiji's tropical rainforest leads to selective biotic filtering of resident plant communities towards more competitive functional traits. *Biological invasions*, 25, 1489–1508 (<https://doi.org/10.1007/s10530-022-02991-4>)

64. Ricotta, Carlo, Michele Dalle Fratte, Simon Pierce, **Marta Carboni**, Bruno E.L. Cerabolini, Sandrine Pavoine. 2023. Quantifying the extent of plant functional specialization using Grime's CSR strategies. *Ecological Indicators*, 148, 110066 (<https://doi.org/10.1016/j.ecolind.2023.110066>).

63. De Toma, A., **Carboni, M.**, Bazzichetto, M., Malavasi, M., & Cutini, M. 2022. Dwarf-shrubs dynamics in Mediterranean high mountain ecosystems. *Journal of Vegetation Science*, 33, e13143. (<https://doi.org/10.1111/jvs.13143>)

62. Giulio S*, Cao Pinna, L.*, **Carboni M**, Marzioletti F, Acosta ATR, Garbolino E & T. Jucker. 2022. Invasion dynamics and potential future spread of sea spurge across Australia's coastal dunes. *Journal of Biogeography*, 49, 378–390. (<http://doi.org/10.1111/jbi.14308>)

61. Graco-Roza, C., Aarnio, S., Abrego, N., Acosta, A. T., Alahuhta, J., Altman, J., ... **Carboni M...** & Soininen, J. 2022. Distance decay 2.0 – a global synthesis of taxonomic and functional turnover in ecological communities. *Global Ecology and Biogeography*, 31, 1399–1421 (<https://doi.org/10.1111/GEB.13513>)

60. Bazzichetto, M., Massol, F., **Carboni, M.**, Lenoir, J., Lembrecchs, J.J., Joly, R. & D. Renault. 2021. Once upon a time in the south: local drivers of plant invasion in the harsh sub-Antarctic islands. *Journal of Vegetation Science* 32: e13057. (<https://doi.org/10.1111/jvs.13057>)

59. Biurrun I. et al. (including **Carboni M.**). 2021. Benchmarking plant diversity of Palaearctic grasslands and other open habitats. *Journal of Vegetation Science* 32: e13050. (<https://doi.org/10.1111/jvs.13050>)
58. Cao Pinna*, L., Axmanová, I., Chytrý, M., Malavasi, M., Acosta, A.T.R., Giulio, S., Attorre, F., Bergmeier, E., Biurrun, I. Campos, J.A., Font, X., Kůzmič, F., Landucci, F., Marcenò, C., Rodríguez-Rojo, M.P. & **M. Carboni**. 2021. The biogeography of alien plant invasions in the Mediterranean Basin. *Journal of Vegetation Science* 32(2): e12980 (DOI: 10.1111/jvs.12980)
57. **Carboni, M.**, Livingstone, S.W., Isaac, M.E., & M.W. Cadotte. 2021. Invasion drives plant diversity loss through competition and ecosystem modification. *Journal of Ecology* 109: 3587–3601. (<https://doi.org/10.1111/1365-2745.13739>).
56. Dembiczy, I, Dengler, J. et al. (including **Carboni M.**). 2021. Patterns and drivers of fine-scale beta diversity in Palaearctic grasslands. *Journal of Vegetation Science* 32: e13045. (<https://doi.org/10.1111/jvs.13045>)
55. Giulio S, Cao Pinna L, **Carboni M**, Marzialesi F, & Acosta ATR. 2021. Invasion success on European coastal dunes. *Plant Sociology* 58: 29–39. (DOI 10.3897/pls2021581/02)
54. Hosseini, Z., Zangari, G., Carboni, M., & Caneva, G. 2021. Substrate preferences of ruderal plants in colonizing stone monuments of the Pasargadae World Heritage Site, Iran. *Sustainability* 13: 9381. (<https://doi.org/10.3390/su13169381>)
53. Marx H.E., **Carboni M.**, Douzet R., Perrier C., Delbart F., Thuiller W., Lavergne S. & D.C. Tank. 2021. Community transcriptomics: extending axes of functional diversity informs invasion dynamics in an alpine streambed ecosystem. *Ecology and Evolution* 11: 12075– 12091. (<https://doi.org/10.1002/ece3.7973>)
52. Sperandii, MG, Barták, V, **Carboni, M**, & ATR Acosta. 2021. Getting the measure of the biodiversity crisis in Mediterranean coastal habitats. *Journal of Ecology* 109: 1224-1235 (DOI:10.1111/1365-2745.13547)
51. Andreello, M, de Villemereuil, P, **Carboni, M**, Busson, D, Fortin, MJ, Gaggiotti, OE and I. Till-Bottraud. 2020. Accounting for stochasticity in demographic compensation along the elevational range of an alpine plant. *Ecology Letters* 23: 870-880 (DOI: 10.1111/ele.13488)
50. Dengler, J. et al. (including **Carboni M**). 2020. Species-area relationships in continuous vegetation: evidence from Palaearctic Grasslands. *J of Biogeography* 47: 72– 86 (DOI: 10.1111/jbi.13697)
49. Giulio S, Acosta ATR, **Carboni M**, Campos JA, Chytrý M, Herrera M, Loidi J, Pergl J, Pyšek P, Isermann M, Janssen JAM, Kaçki Z, Rodwell JS, Schaminée JHJ & C Marcenò. 2020. Alien flora across European coastal dunes. *Applied Vegetation Science* 23: 317– 327 (DOI: 10.1111/avsc.12490)
48. Landi S, Tordoni E, Amici V, Bacaro G, **Carboni M**, Filibeck G, Scoppola A, & S Bagella. 2020. Contrasting patterns of native and non-native plants in a network of protected areas across spatial scales. *Biodiversity and Conservation* 29: 2035–2053 (DOI: 10.1007/s10531-020-01958-y)
47. Münkemüller T., L. Gallien, C. Barros, **M. Carboni**, L. Chalmandrier, F. Mazel, K. Mokany, L. Pollock, C. Roquet, J. Smycka, M. Talluto, & W. Thuiller. 2020. Dos and don'ts when inferring assembly rules from diversity patterns. *Global Ecology and Biogeography* 29: 1212– 1229 (DOI: 10.1111/geb.13098)
46. Ricotta, C., Acosta, A., Caccianiga, M., Cerabolini, B., Godefroid, S. & **M. Carboni**. 2020. From abundance-based to functional-based indicator species. *Ecological Indicators* 118: 106761 (DOI: 10.1016/j.ecolind.2020.106761)
45. Trotta G., Savo V., Cicinelli E, **Carboni M.** & Caneva G. 2020. Colonization and damages of *Ailanthus altissima* (Mill.) Swingle on archaeological structures: Evidence from the Aurelian Walls in Rome (Italy) *International Biodeterioration & Biodegradation* 153: 105054 (DOI: 1016/j.ibiod.2020.105054)
44. Cadotte, M.W, **Carboni, M.**, Si, X., & Tatsumi, S. 2019. Do traits and phylogeny support congruent community diversity patterns and assembly inferences? *Journal of Ecology*, 107: 2065-2077 (DOI:10.1111/1365-2745.13247)
43. Chelli, S. et al. (including **Carboni M**). 2019. Plant-environment interactions through a functional traits perspective: a review of Italian studies. *Plant Biosystems* 153: 853-869 (DOI: 10.1080/11263504.2018.1559250)

42. Fried G., **Carboni M.**, Mahaut L., & C. Violle. 2019. Functional traits modulate plant community responses to alien plant invasion. *Perspectives in Plant Ecology, Evolution and Systematics*, 37: 53-63 (DOI: 10.1016/j.ppees.2019.02.003).
41. Klonner G, Wessely J, Gattringer A, Moser D, Dullinger I, Hülber K, Rumpf S, Bossdorf O, Dawson W, Haeuser E, **Carboni M.**, Münkemüller T, Thuiller W, van Kleunen M, Essl F, Dullinger S. 2019. Effects of climate change and horticultural use on the spread of naturalized alien garden plants in Europe. *Ecography*, 42: 1548-1557 (DOI: 10.1111/ecog.04389)
40. Ricotta C, Acosta ATR, Bacaro G, **Carboni M.**, Chiarucci A, Rocchini D & S. Pavoine. 2019. Rarefaction of beta diversity. *Ecological Indicators*, 107: 105606 (DOI: 10.1016/j.ecolind.2019.105606).
39. Sodhi, D. S., Livingstone, S. W., **Carboni, M.**, M.W. Cadotte. 2019. Plant invasion alters trait composition and diversity across habitats. *Ecology and Evolution*, 9: 6199–6210 (DOI: 10.1002/ece3.5130)
38. **Carboni, M.**, Calderon-Sanou, I.*, Pollock, L., Violle, C., Thuiller, W. 2018. Functional traits modulate the response of alien plants to abiotic and biotic gradients. *Global Ecology and Biogeography*, 27: 1173-1185 (DOI:10.1111/geb.12775) *Joint first author / supervised student
37. **Carboni, M.**, Guéguen, M., Barros, C., Georges, D., Boulangeat, I., Douzet, R., Dullinger, S., Klonner, G., van Kleunen, M., Essl, F., Talluto, M., Moser, D., Block, S., Conti, L., Dullinger, I., Münkemüller, T. & Thuiller, W. 2018. Simulating plant invasion dynamics in mountain ecosystems under global change scenarios. *Global Change Biology*, 24: e289-e302 (DOI: 10.1111/gcb.13879).
36. Conti, L.*, Block, S., Parepa, M., Münkemüller, T., Thuiller, W., Acosta, A., van Kleunen, M., Dullinger, S., Essl, F., Dullinger, I., Moser, D., Klonner, G., Bossdorf, O. & **Carboni, M.** 2018. Functional trait differences and trait plasticity mediate biotic resistance to potential plant invaders. *Journal of Ecology*, 106:1607–1620. (DOI: 10.1111/1365-2745.12928) *Supervised PhD student
35. Dengler, J. et al. (including **Carboni, M.**). 2018. GrassPlot - a database of multi-scale plant diversity in Palearctic grasslands. *Phytocoenologia*, 48, 331-347. (DOI: 10.1127/phyto/2018/0267)
34. Fried, G., Mahaut, L., Pinston, A., **Carboni, M.** 2018. Environmental filtering and competitive exclusion control the establishment success and abundance of invasive *Humulus japonicus* in riparian habitats. *Biological Invasions*, 20: 315–331. (DOI 10.1007/s10530-017-1533-y)
33. Haeuser E, Dawson W, Thuiller W, Dullinger S, Block S, Bossdorf S, **Carboni M.**, [...], van Kleunen, M. 2018. Ornamental alien plants and climate change: the European garden flora and the impending invasion debt. *Journal of Applied Ecology*, 55:2386–2395 (DOI: 10.1111/1365-2664.13197)
32. Hulme, P., Brundu, G., **Carboni, M.** et al. 2018. Integrating invasive species policies across ornamental horticulture supply chains to prevent plant invasions. *Journal of Applied Ecology*, 55: 92–98. (DOI: 10.1111/1365-2664.12953)
31. Sheppard, C., **Carboni M.**, Essl, F., Seebens, H., DivGrass Consortium & W. Thuiller. 2018. It takes one to know one: similarity to resident alien species increases establishment success of new invaders. *Diversity and Distributions*, 24:680–691 (DOI: 10.1111/ddi.12708).
30. van Kleunen M., Essl F., Pergl J., Brundu G., **Carboni M.**, Dullinger S., Early R., González-Moreno P., Groom Q., Hulme P.E., Kueffer C., Kühn I., Máguas C., Maurel N., Novoa A., Parepa M., Pyšek P., Seebens H., Tanner R., Touza J., Verbrugge L., Weber E., Dawson W., Kreft H., Weigelt P., Winter M., Klonner G., Talluto M.V. & K. Dehnen-Schmutz. 2018. The changing role of ornamental horticulture in alien plant invasions. *Biological Reviews*, 93: 1421-1437 (DOI: 10.1111/brv.12402).
29. Barros, C., Guéguen, M., Douzet, R., **Carboni, M.**, Boulangeat, I., Zimmermann, N., Münkemüller, T., Thuiller, W. 2017. Extreme climate events counteract climate and land-use change in the Alpine forest-grassland ecotone. *Journal of Applied Ecology*, 54: 39–50 (DOI: 10.1111/1365-2664.12742)
28. Conti L.*, de Bello F., Leps, 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 (Doi: 10.1111/jvs.12533) *Supervised PhD student
27. Del Vecchio S., Jucker T., **Carboni M.** & Acosta ATR. 2017. Linking plant communities on land and at

- sea: the effects of stranded wrack from *Posidonia oceanica* seabeds on the structure of coastal dune vegetation. *Estuarine Coastal and Shelf Science* 184: 30-36 (DOI: 10.1016/j.ecss.2016.10.041)
26. Gallien L.* & **Carboni M***. 2017. The community ecology of invasive species. Where are we and what's next? *Ecography*, 40: 335-352. (DOI: 10.1111/ecog.02446) *Equal contribution
25. Klöner, G., Dullinger, I., Wessely, J., Bossdorf, O., **Carboni, M.**, Dawson, W., Essl, F., Gattringer, A., Haeuser, E., van Kleunen, M., Kreft, H., Moser, D., Pergl, J., Pyšek, P., Thuiller, W., Weigelt, P., Winter, M. & Dullinger, S. 2017. Will climate change increase hybridization risk between potential plant invaders and their congeners in Europe? *Diversity and Distributions*, 23:934-943 (DOI: 10.1111/ddi.12578)
24. **Carboni M.**, Münkemüller, T., Lavergne, S., Choler, P., Borgy, B., Violle, C., Essl, F., Roquet, C., the DivGrass Consortium & Thuiller, W. 2016. What it takes to invade grassland ecosystems: traits, introduction history and filtering processes. *Ecology Letters* 19: 219-229 (DOI: 10.1111/ele.12556)
23. **Carboni M.**, Zeleny, D. & Acosta A. 2016. Measuring ecological specialization along a natural stress gradient using a set of complementary niche breadth indices. *Journal of Vegetation Science* 27: 892-903
22. Malavasi M., Conti, L., **Carboni M.**, Cutini M., & Acosta A.T.R. 2016. Multifaceted analysis of patch-level plant diversity in response to landscape spatial pattern and patch history on Mediterranean dunes. *Ecosystems* 19: 850-864 (DOI: 10.1007/s10021-016-9971-4)
21. Prisco, I., **Carboni, M.**, Jucker, T. & Acosta A.T.R. 2016. Temporal changes in the vegetation of Italian coastal dunes: identifying winners and losers through the lens of functional traits. *Journal of Applied Ecology* 53: 1533–1542
20. **Carboni, M.**, Dengler, J., Mantilla-Contreras, J., Venn, S. & Török, P. 2015. Conservation value, management and restoration of Europe's semi-natural open landscapes. *Hacquetia* 14: 5-17 (DOI: 10.1515/hacq-2015-0017) (Editorial)
19. Ricotta, C., **Carboni, M***. & Acosta, A.T.R. 2015. Let the concept of indicator species be functional! *Journal of Vegetation Science* 26: 839–847 (DOI: 10.1111/jvs.12291) *Corresponding author
18. **Carboni M.**, de Bello F., Janeček S., Doležal J., Horník J, Lepš, J. Reitalu, T. & Klimesová J. 2014. Changes in trait divergence and convergence along a productivity gradient in wet meadows. *Agriculture, Ecosystems and Environment* 182: 96–105 (DOI: 10.1016/j.agee.2013.12.014) (Special Feature)
17. Gallien, L. **Carboni, M.**, & Münkemüller, T. 2014. Identifying the signal of environmental filtering and competition in invasion patterns – a contest of approaches from community ecology. *Methods in Ecology and Evolution* 5:1002-1011 (DOI: 10.1111/2041-210X.12257) (Robert May Prize)
16. Malavasi M., **Carboni M.**, Cutini M., Carranza M.L., & Acosta A.T.R. 2014. Landscape fragmentation, land use legacy and propagule pressure promote plant invasion on Mediterranean coastal dunes. A patch based approach. *Landscape Ecology* 29:1541–1550 (DOI: 10.1007/s10980-014-0074-3)
15. **Carboni M.**, Acosta A.T.R. & Ricotta C. 2013 Are differences in functional diversity among plant communities on Mediterranean coastal dunes driven by their phylogenetic history? *Journal of Vegetation Science* 24: 932-941 (Special Feature)
14. **Carboni M.**, Münkemüller T., Gallien L., Lavergne S., Acosta A.T.R. & Thuiller W. 2013. Darwin's naturalization hypothesis: scale matters in coastal plant communities. *Ecography* 36: 560–568
13. Fenu G., **Carboni M.**, Acosta A.T.R. & Bacchetta G. 2013. Environmental factors influencing coastal vegetation pattern: new insights from the Mediterranean basin. *Folia Geobotanica* 48: 493-508 (DOI: 10.1007/s12224-012-9141-1)
12. Jucker T., **Carboni M***. & Acosta A.T.R. 2013. Going beyond taxonomic diversity: deconstructing biodiversity patterns reveals the true cost of iceplant invasion. *Diversity and Distributions* 19: 1566-1577
11. Prisco I., **Carboni M*** & Acosta A.T.R. 2013. The fate of threatened coastal dune habitats in Italy under climate change scenarios. *PlosOne* 8(7): e68850 (DOI: 10.1371/journal.pone.0068850) *Corresponding author
10. Prisco, I., **Carboni, M.**, Acosta, A.T.R. 2012. VegDunes – a coastal dune vegetation database for the

analysis of Italian EU habitats. In: Dengler, J., Oldeland, J., Jansen, F., Chytrý, M., Ewald, J., Finckh, M., Glöckler, F., Lopez-Gonzalez, G., Peet, R.K., Schaminée, J.H.J. [Eds.]: Vegetation databases for the 21st century. *Biodiversity & Ecology* 4: 191–200

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Marc Cadotte

Department of Biological Sciences
University of Toronto Scarborough
1265 Military Trail,
Toronto, ON M1C 1A4, Canada
e-mail: mcadotte@utsc.utoronto.ca

Wilfried Thuiller

Laboratoire d'Ecologie Alpine - LECA
Université Grenoble Alpes / CNRS
BP 53, 2233 Rue de la Piscine
38041 Grenoble Cedex 9, France
e-mail: wilfried.thuiller@univ-grenoble-alpes.fr

Alicia T.R. Acosta

Dipartimento di Scienze
Università Roma TRE
Viale Marconi 446
00146 Roma, Italy
e-mail: aliciateresarosario.acosta@uniroma3.it