ACCIONES DE INTERNACIONALIZACIÓN REALIZADAS POR EL PERSONAL DEL DEPARTAMENTO DE BOTÁNICA DURANTE EL PERIODO 2021-2023, ALINEADAS CON EL PLAN ESTRTÉGICO DE INTERNACIONALIZACIÓN DE LA UNIVERSIDAD DE GRANADA.

Durante los cursos 2021-2022 y 2022-2023, el Departamento de Botánica ha favorecido que los profesores realicen una serie de acciones de internacionalización, de acuerdo a las líneas de actuación (**LA**) recogidas en el Plan Estratégico de Internacionalización de la UGR, detalladas a continuación:

LA1: Cooperación Institucional Internacional:

- Paloma Cariñanos González: Miembro del WP2 Living Labs. ARQUS Alliance. https://arqus.ugr.es/noticias/comision-europea-aprueba-plan-trabajo-2022-2026-arqus/

LA2: Cooperación internacional en redes:

1. **GLORIA NETWORK**: Global Observation Research Initiative in Alpine Environments. Coordinador: Harald Pauli, Austrian Academy of Sciences & University of Natural Resources and Life, Wien, Austria. Consists of target regions, each with usually four summit sites for long term monitoring on vegetation changes. Target regions are distributed over six continents, with more than 130 mountain ranges all-over the world. Sierra Nevada takes part of this network with eight monitoring sites (Sierra Nevada West-ES-SNE and Sierra Nevada Northeast). Monitoring dates back from 1999. (https://gloria.ac.at). Participante: Juan Lorite. Role: Site responsible.
2. **GYPWORLD**: A global initiative to understand gypsum ecosystems ecology. Coordinadora: Sara Palacio, CSIC. https://gypworld.com. Participante: Juan Lorite. Role: Member.
3. **Soiltemp**- Global database for soil microclimate. To build a global database of soil and near-surface temperatures,and associated species data for use in ecological modelling. Coordinador: Jonas Lembrechts, Universidad de Antwerp, Bélgica. https://soiltemp.weebly.com. Participante: Juan Lorite. Role: Contributor.
4. **GEOBON**: Group on Earth Observations - Biodiversity Observation Network. Aims: To improve the acquisition, coordination and delivery of biodiversity observations and related services to users including decision makers and the scientific community. Domingo Alcaraz es miembro activo de tres grupos de trabajo (Working groups on Ecosystem Functions, Ecosystem Structure, Ecosystem Services) y una fuerza de trabajo (Task Force on Remote Sensing). Participante: Domingo Alcaraz Segura. Role: Member.
5. **LifeWatch ERIC**: LifeWatch ERIC is a European Research Infrastructure Consortium providing e-Science research facilities to scientists investigating biodiversity and ecosystem functions and services in order to support society in addressing key planetary challenges. Participantes: Domingo Alcaraz Segura, Juan Lorite Moreno, Eva Mª Cañadas Sánchez, Mª Noelia Jiménez Morales, Paloma Cariñanos González. Role: Member. https://prezi.com/p/nrlr6q8v6ii0/smart-ecomountains-modificado/
6. **European Pollen Database** (EPD): aims at storing and developing a relational database containing data and metadata of fossil and modern pollen records from natural

archives (lacustrine sediments, peat bogs, marine sediments) collected on the Eurasian continent. The goal of the EPD is to develop an open platform to foster the scientific study of long-term palaeoecological records to address various themes such as biogeography, vegetation history, ecosystem conservation. Participante: Francisca Alba Sánchez. Role: Contributor. https://epdweblog.org/

7. **Paleoclimate Modelling Intercomparison Project Phase III**. PMIP provides an efficient mechanism for coordinating palaeoclimate modelling activities. The key aims of the project are to: Understand the mechanisms of climate change; Identify the different climatic factors that shape our environment; Evaluate the capability of state-of-the-art models to reproduce different climates. Participante: Francisca Alba Sánchez. Role: Member. https://pmip3.lsce.ipsl.fr/

LA2: Movilidad Internacional envío y recepción de estudiantes Erasmus + y otros programas durante 2021-2023

- Alumna: Seyedeh Asieh Khatami. Universidad Mohaghegh Ardabili, Irán. Programa Erasmus +. Periodo de estancia: Mayo-Julio 2021.Tutora UGR: Paloma Cariñanos González

- Alumno: Shahriyar Einizadeh. Universidad Mohaghegh Ardabili, Irán. Programa Erasmus +. Periodo de estancia: Abril-Julio 2022.Tutora UGR: Paloma Cariñanos González

- Alumna: Alice Feger. Universidad París Agro Tech, Francia. Programa Erasmus + Internship. Periodo de estancia: Diciembre 2021-Abril 2022. Tutora UGR: Paloma Cariñanos González

- Alumna. El Wela El Mabrouck. Universidad Of Nouakchott El asriya, Mauritania. Marzo-junio 2022. Tutora UGR: M.Reyes González-Tejero García.

- Alumna. Lauren Young. Uni Freiburg (Albert-Ludwigs-Universität Freiburg). Enero-Abril 2023. Tutor UGR: Domingo Alcaraz Segura

- Alumna: Pegah Kharazian. Universidad de Cagliari (Italia). Desde Noviembre 2021 hasta Mayo 2022. Tutoras UGR: Emilia Fernández Ondoño y María Noelia Jiménez Morales

- Alumno: Jakub Štenc. Charles University, Praga (República Checa). 13 Noviembre - 22 de Diciembre 2022. Tutora UGR: Rocío Pérez-Barrales

- Profesor: Seine Nyoe Nyoe Ko. Dagon University, Rangun (Myanmar). 30 Mayo - 3 Junio 2022. Responsable UGR: Juan Francisco Jiménez Martínez

LA3: Movilidad PDI (recepción y salida)

- Julio Peñas de Giles: Estancia Départament de Géographie. Faculté des Arts et des Sciencies. Universtité de Montréal. 23 febrero a 8 marzo 2023.

- Rocío Santos Gally: Estancia en el Dpto. Botánica, UGR. Centro de origen: Departamento de Ecología Evolutiva, Instituto de Ecología, Universidad Autónoma de México. 8 Marzi-22 Marzo 2022

LA4: Experiencia y Competencia Internacional

- Manuel Casares Porcel: Miembro Contribuyente del Comité Científico Internacional de Paisajes Culturales del ICOMOS. (UNESCO). Desde 2015 a la actualidad. https://www.iflaclc.org/index.html

- Paloma Cariñanos González: Coordinadora del SilvaMediterranea Working Group on Urban and PeriUrban Forestry, Food and Agricultural Organization of the United Nations (FAO) desde 2019 a la actualidad. https://medforest.net/2020/04/20/silva-mediterranea-working-group-workshop-on-urban-and-peri-urban-forestry/

- Francisca Alba Sánchez. Miembro CRC-806 OUR WAY TO EUROPE: Culture-Environment Interaction and Human Mobility in the Late Quaternary. Centre for Quaternary Science & Geoarchaeology, Institute of Prehistoric Archaeology, University of Cologne (Alemania). https://www.pgg.rwth-aachen.de/cms/PGG/Forschung/Forschungsprojekte/~ieoh/Collaborative-Research-Centre-806-Our-/?lidx=1

LA5: Participación en Proyectos Europeos, Acciones COSTS, MSCFP

- Paloma Cariñanos González: Miembro de los WGs de las Acciones Costs CA18226 - New approaches in detection of pathogens and aeroallergens (Adopt) y CA21138 - Joint effects of CLimate Extremes and Atmospheric depositioN on European FORESTs (CLEANFOREST). https://www.cost.eu/actions/CA21138/#tabs+Name:Working%20Groups%20and%20Membership

- Carlos García-Verdugo: Miembro del proyecto GEN4OLIVE “Mobilization of olive genetic resources through pre-breeding activities to face the future challenges and development of an intelligent interface to ensure a friendly information availability for end users” (ref 101000427). 2020-2023, IP: R. Rubio de Casas. Financiación: European Union–H2020. https://gen4olive.eu/

- Carlos García-Verdugo: Miembro del proyecto NEXGENDEM “Gestión evolutiva de la diversidad vegetal terrestre endémica de Macaronesia” (MAC2/4.6d/236). 2019-2023. IP: J. Caujapé-Castells. Financiación: European Union (Interreg). https://www.nextgendem.eu/es/

LA6: Pertenencias a Comités Internacionales de Revistas Indexadas:

- Manuel Casares Porcel: Miembro del Consejo Editorial de la Revista Internacional de Diseño, Medio Ambiente y Sostenibilidad de la UNAM. México, desde Marzo de 2017.

https://revista.unaminternacional.unam.mx/nota/3/editorial-la-quimera-de-la-sostenibilidad

- Juan Lorite Moreno: Participación en consejo editorial de revista internacional indexada. Environmental Management, Environmental Sciences; Q2, IF: 2,177

- Francisca Alba Sánchez: Participación en consejo editorial revista internacional indexada. Frontiers in Ecology and Evolution; Q2, IF: 2,416. https://www.springer.com/journal/267/editors

- Víctor N. Suárez Santiago: Participación en consejo editorial revista internacional indexada. Frontiers in Plant Science; Q1, D1, IF: 4,402. https://www.frontiersin.org/journals/plant-science?utm_source=ad&utm_medium=ggl-src&utm_campaign=sub_ggl_fpls&gclid=Cj0KCQjw8e-gBhD0ARIsAJiDsaV9JlB82-tE6lEbArniGvd4SKQ_zVy8fEMavs3x3rTlnwuodSIn8qYaAq2qEALw_wcB

- Paloma Cariñanos González: Member of Editorial Board of Journal of *Allergy and Disorders Therapy*. ISSN 2470-7491. Q3 IF: 1,6

- Paloma Cariñanos. Participación en el Comité Editorial de la Revista *Forests* Q1 Impact Factor: 3,282 ISSN 1999-4907. https://susy.mdpi.com/user/edit/editor

- Paloma Cariñanos González. Topic Editor en el Special Issue Global Impacts of Invasive Plant Species in Forest Ecosystems. Frontiers in Forest and Global Change. IF: 4,332. https://www.frontiersin.org/research-topics/48946/global-impacts-of-invasive-plant-species-in-forest-ecosystems

- Paloma Cariñanos. Participación en el Comité Editorial *de International Journal of Environmental Research and Public Health*. Q1, IF: 4,614 ISSN 1660-4601. https://www.mdpi.com/journal/ijerph/editors

- Julio Peñas de Giles. Miembro del Editorial Board: *Diversity* (ISSN 1424-2818; CODEN: DIVEC6) Q2, IF: 3,031. https://www.mdpi.com/journal/diversity/editors

- Julio Peñas de Giles. Miembro Review Editor*: Frontiers in Plant Science (sección Plant Systematics and Evolution)* (ISSN 1664-462X) Q1, IF: 4,402. https://www.frontiersin.org/journals/plant-science/editors

- Carlos García-Verdugo (2012-actualidad): Participación en Comité Internacional (Associate Editor) de la revista indexada Botanical Journal of the Linnean Society (IF = 2.828). https://academic.oup.com/botlinnean?login=true

- Carlos García-Verdugo (2020-actualidad): Participación en Comité Internacional (Associate Editor) de la revista indexada Diversity (Biogeography and Macroecology section) (IF = 3.031). https://www.mdpi.com/journal/diversity/editors

- Carlos García-Verdugo (2017-2023): Participación en Comité Internacional (Coordinating Editor) de la revista indexada Biochemical Genetics (IF = 2.220). https://www.springer.com/journal/10528/editors

- Carlos García-Verdugo (2022-actualidad): Participación en Comité Internacional (Associate Editor) de la revista indexada Frontiers in Plant Science (Plant Systematics and Evolution section) (IF = 6.627). https://www.frontiersin.org/journals/plant-science/editors

- Rocío Pérez-Barrales (2022-actualidad): Miembro del comité editorial de International Journal of Plant Sciences (IF= 3.142). https://www.tandfonline.com/action/journalInformation?show=editorialBoard&journalCode=wjnf20

LA7: Organización de Eventos Internacionales.

- Paloma Cariñanos González: Miembro del Scientific Committee World Forum on Urban Forests, Washington DC 13-16 Octubre 2023

LA8: Co-autoria en publicaciones internacionales (https://botanica.ugr.es/pages/publicaciones):

PUBLICACIONES AÑO 2021

1-Abebe Semu, A., Bekele, T., Lulekal, E., **Cariñanos, P**., Nemomisso, N. 2021. Projected Impact of Climate Change on Habitat Suitability of a Vulnerable Endemic Vacchellia negrii (Pic. Serm), Fabaceae, in Ethiopia. Sustainability, 13:11275

2-Benhammou, Y., **Alcaraz-Segura, D.**, Guirado, E., **Khaldi, R.**, Achchab, B., Herrera, F., & Tabik, S. 2021. Sentinel2GlobalLULC: A deep-learning-ready Sentinel-2 RGB image dataset for global land use/cover mapping. bioRxiv.

3-**Cariñanos P**, Marinangeli F. 2021. An update proposal of the Potential Allergenicity of 150 ornamental Trees and shrubs in Mediterranean Cities. Urban Forestry and Urban Greening 63:127218

4-Castro J, Morales-Rueda F, Navarro FB, Löf M, Vacchiano G, **Alcaraz-Segura**. 2021. Precision restoration: A necessary approach to foster forest recovery in the 21st century. Restoration Ecology, 29(7):e13421

5-Cazorla B, Cabello J, Peñas J, Garcillán PP, Reyes-Díez A, **Alcaraz-Segura D**. 2021. Incorporating ecosystem functional diversity into geographic conservation priorities using remotely sensed Ecosystem Functional Types. Ecosystems, 24:548-564.

6-Cazorla BP, Garcillán PP, Cabello J, **Alcaraz-Segura D**, Reyes A. Peñas J. 2021. Patterns of ecosystem functioning as tool for biological regionalization: the case of the

mediterranean-desert-tropical transition of Baja California. Mediterranean Botany, 42, e68529

7-Damialis, T., Gillesa, S., Sofievd, M., Sofiev, V., Koleka, F., Bayra, D., Plaza, M.P., Leier-Wirtz, V., Kaschuba, R., Ziska, L.K., Bielory, L., Makra, L., Trigo, M.M., Oliver, G., Pham-Thi, N., Thibaudon, M., Aribo, A.H., Belmonte, J., Cervigon Morales, P., **De Linares, C.**, Covid-19/Pollen Study Group3, Traidl-Hoffmann, C. (2021). Higher airborne pollen concentrations correlated with increased SARS-CoV-2 infection rates, as evidenced from 31 countries across the globe. Proceedings of the National Academy of Sciences, 118(12), e2019034118.

8-deCastro-Arrazola, I., March-Salas, M., & **Lorite, J.** (2021). Assessment of the Potential Risk of Rock-Climbing for Cliff Plant Species and Natural Protected Areas of Spain. Frontiers in Ecology and Evolution, 9(April), 1–9. https://doi.org/10.3389/fevo.2021.611362

9-Dellinger AS, **Pérez-Barrales R**, Michelangeli FA, Penneys DS, Fernández-Fernández DM, Schönenberger J. 2021. Low bee visitation rates explain pollinator shifts to vertebrates in tropical mountains. New Phytologist, 231: 864–877.

10-**García-Verdugo C**, Mairal M, Tamaki I, Msanda F. 2021. "Phylogeography at the crossroad: Pleistocene range expansion throughout the Mediterranean and back-colonization from the Canary Islands in the legume Bituminaria bituminosa". Journal of Biogeography (Early View).

11-Gómez-Martín JC, Guirado D, Frattin E, Bermudez-Edo M, **Cariñanos P**, Olmo-Reyes FJ, Nousianen T, Gutiérrez PJ, Moreno F, Muñoz O. 2021. On the application of scattering matrix measurements to detection and identification of major types of airborne aerosol particles: volcanic ash, desert dust and pollen. Journal of Quantitative Spectroscopy & Radiative Ttansfer 271,107761

12-J**iménez MN**, Bacchetta G, Navarro FB, Casti M, Fernández-Ondoño E. 2021. Native plant capacity for gentle remediation in heavily polluted mines. Applied Sciences 11, 1769

13-**Khaldi, R.**, **Alcaraz-Segura, D.**, Guirado, E., Benhammou, Y., El Afia, A., Herrera, F., & Tabik, S. (2021). TimeSpec4LULC: A Global Deep Learning-driven Dataset of MODIS Terra-Aqua Multi-Spectral Time Series for LULC Mapping and Change Detection. Earth System Science Data Discussions, 1-28

14-LLamprecht, A., Pauli, H., Fernández Calzado, M. R., **Lorite, J.,** Molero Mesa, J., Steinbauer, K., & Winkler, M. (2021). Changes in plant diversity in a water-limited and isolated high-mountain range (Sierra Nevada, Spain). *Alpine Botany*, *131*(1), 27–39. https://doi.org/10.1007/s00035-021-00246-x

15-**Lorite, J.**, Salazar-Mendías, C., Pawlak, R., Cañadas, E. 2021. Assessing the effectiveness of exclusion fences in protecting threatened plants. Scientific Reports 11, 16124. https://doi.org/10.1038/s41598-021-95739-4

16-Niederheiser, R, Winkler, M, Di Cecco, V, Erschbamer, B, **Fernández, R**, Geitner C, Hofbauer, H, Kalaitzidis, C, Klingraber, B, Lamprecht, A, **Lorite, J**, Nicklas, L, Nyktas, Pauli, H, Stanisci A, Steinbauer, K, Theurillat JP, Vittoz, P & Rutzinger, M. 2021. Using automated vegetation cover estimation from close-range photogrammetric point clouds to compare vegetation location properties in mountain terrain. GIScience & Remote Sensing, 58(1): 120-137.

17-Pacheco-Romero M, Kuemmerle T, Levers C, **Alcaraz-Segura D**, Cabello J. 2021. Integrating inductive and deductive analysis to identify and characterize archetypical social-ecological systems and their changes. Landscape and Urban Planning. 215, 104199

18-Shackelford N, GB Paterno, DE Winkler, TE Erickson, EA Leger, LN Svejcar, MF Breed, AM Faist, PA Harrison, MF Curran, Q Guo, A Kirmer, DJ Law, KZ Mganga, SM Munson, LM Porensky, RE Quiroga, P Török, CE Wainwright, A Abdullahi, MA Bahm, E A Ballenger, N Barger, OW Baughman, C Becker, ME Lucas-Borja, CS Boyd, C M Burton, PJ Burton, E Calleja, P J Carrick, A Caruana, D Clements, KW Davies, B Deák, J Drake, S Dullau, J Eldridge, E Espeland, H L Farrell, SE Fick, M Garbowski, EG de la Riva, PJ Golos, P A Grey, B Heydenrych, PM Holmes, J J James, J Jonas-Bratten, R Kiss, A T Kramer, JE Larson, **J Lorite**, C E Mayence, L Merino-Martín, T Miglécz, S J Milton, TA Monaco, A M Montalvo, JA Navarro-Cano, MW Paschke, P L Peri, ML Pokorny, MJ Rinella, N Saayman, MC Schantz, T Schroeder, EW Seabloom, K L Stuble, S M Uselman, O Valkó, K Veblen, S Wilson, M Wong, Z Xu, and KL Suding . 2021. Drivers of seedling establishment success in dryland restoration efforts. Nature Ecology & Evolution 5, 1283–1290.

19- Polling, M., Li, C., Cao, L., Verbeek, F., de Weger, L. A., Belmonte, J., **De Linares, C.**, Willense, J., de Boer, H. & Gravendeel, B. (2021). Neural networks for increased accuracy of allergenic pollen monitoring. Scientific Reports, 11(1), 11357.

20-Safonova A, Guirado E, Maglinets Y, **Alcaraz-Segura D**, Tabik S. 2021 Olive tree biovolume from UAV multi-resolution image segmentation with Mask R-CNN. Sensors, 21(5):1617.

21-Mazuecos-Aguilera I., Romero-García A.T., Klodová B., Honys D.,Fernández-Fernández M.C., **Ben-Menni Schuler S**., Dobritsa A.A. and **Suárez-Santiago V.N**. 2021. The Role of INAPERTURATE POLLEN1 as a Pollen Aperture Factor Is Conserved in the Basal Eudicot Eschscholzia californica (Papaveraceae). Frontiers in Plant Science, 12: 701286.

22- **Ben-Menni Schuler S.**, Picazo-Aragonés J., Rumsey F.J., **Romero-García A.T**. & **Suárez-Santiago V.N.** 2021. Macaronesia Acts as a Museum of Genetic Diversity of Relict Ferns: The Case of *Diplazium caudatum* (Athyriaceae). Plants 10(11): 2425.

23- Viruel J, Kantar MB, Gargiulo R, Hesketh-Prichard P, Leong N, Coctel C, Forest F, Gravendel B, **Pérez-Barrales R**, Leitch IJ, Wilkin P. 2021. Crop wild phylorelatives (CWPs): phylogenetic distance, cytogenetic compatibility and breeding system data enable estimation of crop wild relative gene pool classification. Botanical Journal of the Linnean Society 195(1): 1-33

24- Furtado MT, Matias R, **Pérez-Barrales R**, Consolaro H. 2021. Do reciprocal herkogamy and pollinators affect legitimate pollen flow in distylous species of Rubiaceae? Botanical Journal of the Linnean Society 196(4): 524-539

25- Matias R, Furtado MT, Consolaro H, **Perez-Barrales R**. 2021. Variation in pollen sterility and gender specialization: an investigation with distylous species of Erythroxylum (Erythroxylaceae). Plant Biology 23: 947-955

26- Albertsen E, Opedal OH, Bolstad GH, **Pérez-Barrales R,** Hansen TF, Pélabon C, Armbruster WS. 2021. Evolution 75(2): 294-309

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27-**Alcaraz-Segura D**, Cabello J, Arenas-Castro S, **Peñas J**, **Vaz AS**. 2022. Remote Sensing in Sierra Nevada: From Abiotic Processes to Biodiversity and Ecosystem Functions and Services. 2022. In: Zamora R, Oliva M (Eds.) The Landscape of the Sierra Nevada: A Unique Laboratory of Global Processes in Spain, pp. 315-327. Springer nature.

28-Arroyo, J., Abellán, P., Arista, M., Ariza, M. J., de Castro, A., Escudero, M., **Lorite, J.**, Martínez-Borda, E., Mejías, J. A., Molina-Venegas, R., Pleguezuelos, J. M., Simón-Porcar, V., & Viruel, J. (2022). Sierra Nevada, a Mediterranean Biodiversity Super Hotspot. In R. Zamora & M. Oliva (Eds.), *The Landscape of the Sierra Nevada* (pp. 11–30). Springer International Publishing. https://doi.org/10.1007/978-3-030-94219-9_2

29-Cardoso, A. S., Renna, F., Moreno-Llorca, R., **Alcaraz-Segura, D.**, Tabik, S., Ladle, R. J., & Vaz, A.S.. 2022. Classifying the content of social media images to support cultural ecosystem service assessments using deep learning models. Ecosystem Services, 54, 101410

30-**Cariñanos, P.**, Borelli, S., Conigliaro, M. & Fini, A. 2022. The Place of Urban Food Forests in Cities of the 21st Century. Urban Planning, 7:135-138.

31-Caujapé-Castells, J., **García-Verdugo, C.**, Sanmartín, I., Fuertes-Aguilar, J., Romeiras, M. M., Zurita-Pérez, N., Nebot, R. (2022). The late Pleistocene endemicity increase hypothesis and the origins of diversity in the Canary Islands Flora. Journal of Biogeography, 49, 1469– 1480

32-Esperón-Rodriguez, M., Rymer, P., Power, S., Barton, D., **Cariñanos, P.**, Dobbs, C., Eleuterio, AA., Escobedo, FJ., Hauer, R., Hermy, M., Jahani, A., Onyekwelu, JC., Östberg, J., Pataki, D., Randrup, TB., Rasmussen, T., Roman, LA., Russo, A., Shackleton, C., Solfjeld, I., van Doorn, NS., Wells, MJ., Wiström, B., Yan, P., Yang, J., Tjoelker, MG. 2022. Assessing

climate risk to support urban forests in a changing climate. Plants, People and Planet. New Phytologist,

33-Ilvonen L, López-Sáez JA, Holmström L, **Alba-Sánchez F**, Pérez-Díaz S, Carrión JS.,Ramos-Román MJ, Camuera J, Jiménez-Moreno G, Ruha L, Seppa H. (2022). Spatial and temporal patterns of Holocene precipitation change in the Iberian Peninsula. Boreas.

34-Kzdebski A, Guzowski P, Poniat R, Masci L, Palli J, Vignola C, Bch M, Cocozza C, Fernandes R, Ljungqvist FC, Newfield T, Seim A, **Abel-Schaad D, Alba-Sánchez F**. Masi, A. (2022). Palaeoecological data indicates land-use changes across Europe linked to spatial heterogeneity in mortality during the Black Death pandemic. Nature Ecology & Evolution.

35-Kharazian P, Fernández-Ondoño E, **Jiménez MN**, Sierra M, Aguirre-Arcos A, Bacchetta G, Cappai G, De Giudici G. 2022. Investigation on mineralogy and geochemical forms of availa-ble metals for Pinus halepensis using BCR sequential extraction method in abandoned mine tailing. Toxics 2022, 10.728

36-**Lorite, J**., Lamprecht, A., Peñas, J., Rondinel-Mendoza, K., Fernandez-Calzado, R., Benito, B., & Cañadas, E. (2022). Altitudinal Patterns and Changes in the Composition of High Mountain Plant Communities. In R. Zamora & M. Oliva (Eds.), *The Landscape of the Sierra Nevada* (pp. 171–191). Springer International Publishing. https://doi.org/10.1007/978-3-030-94219-9_11

37-Moreira, X., Abdala-Roberts, L., Castagneyrol, B., Caujapé-Castells, J., Cruz-Guedes, J., Lago-Núñez, B., Vicens-Fornés, M., & **García-Verdugo, C.** (2022). A phylogenetically controlled test does not support the prediction of lower putative anti-herbivore leaf traits for insular woody species. Journal of Biogeography, 49, 274– 285.

38-Pacheco-Romero M, Vallejos M, Paruelo J, **Alcaraz-Segura D**, Torres-García MT, Salinas- Bonillo MJ, Cabello J. 2022. A data-driven methodological routine to identify key indicators for social-ecological system archetype mapping. Environmental Research Letters, 17(4): 04501

39-Regos A, Gonçalves J, Arenas-Castro S, **Alcaraz-Segura D**, Guisan A, Honrado JP. 2022. Mainstreaming Remotely Sensed Ecosystem Functioning into Species Distribution Models. Remote Sensing in Ecology and Conservation, 8(4):431-447

40-Rodrigues EB, Consolaro H, **Pérez-Barrales R**, Oliveira PE. 2022. Evolution of distyly breakdown in Palicoureeae Robbr. & Manen and Psychotrieae Cham. & Schltdl. (Rubiaceae). Acta Botanica Brasilica [online], 36, e2021abb0242.

41-Sancho, L.G., Aramburu, A., Pintado, A., **Casares, M.**, Raggio, J. & Sánchez-Pescador, D. 2022. Sierra Nevada (Spain), the southernmost European locality for the polar-alpine Umbilicaria aprina and U. virginis. Mediterr. Bot. 43, e77925.

42-Ugolini, F., Massetti, L., Calaza-Martínez, P., **Cariñanos, P.**, Dobbs, C., Krajter-Ostoic, S., Marin, A.M., Pearlmutter, D., Saaroni, H., Sauliene, I., Vuletic, D., Sanesi, G. 2022. Understanding the benefits of public urban green space: How do perceptions vary between professionals and users? Landscape and Urban Planning, 228: 104575.

43-Vaz AS, Moreno-Llorca M, Carvalho-Santos C, Cardoso AS, Honrado JP, Cabello J, **Alcaraz-Segura D**. 2022. Earth Observations of Human-Nature Interactions from a Cultural Ecosystem Service Perspective. In: Misiune I, Depellegrin D, Egarter Vigl L (Eds). Human-Nature Interactions: Exploring Nature's Values Across Landscapes. pp. 85-100. Springer nature.

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