CURRICULUM VITAE ABREVIADO (CVA)

Part A. PERSONAL INFORMATION

First name	Mario		
Family name	Fernández-Mazuecos Santa Teresa		
Gender	Male	Birth date (dd/mm/yyyy)	6/8/1984
e-mail	mfmazuecos@rjb.csic.es	URL Web	https://mfmazuecos.weebly.com/
Open Researcher and Contributor ID (ORCID)		0000-0003-4027-6477	

A.1. Current position

Position	Científico Titular		
Initial date	19/12/2024		
Institution	Real Jardín Botánico (RJB), CSIC		
Department/Center	Departamento de Biodiversidad y Conservación		
Country	Spain	Teleph. number	+34 914203017
Key words	Botany, evolutionary biology, phylogenetics, phylogenomics, conservation, systematics, biogeography, phylogeography, population genetics, genotyping-by-sequencing.		

A.2. Previous positions

Period	Position/Institution/Country
1/1/2024 – 18/12/2024	Ramón y Cajal Researcher. Departamento de Biología, Facultad de Ciencias, Universidad Autónoma de Madrid. Spain.
1/9/2021 – 31/12/2023	Profesor Ayudante Doctor. Departamento de Biología, Facultad de Ciencias, Universidad Autónoma de Madrid. Spain.
1/3/2021 – 31/8/2021	Profesor Ayudante Doctor. Departamento de Biodiversidad, Ecología y Evolución, Facultad de Ciencias Biológicas, Universidad Complutense de Madrid. Spain.
24/10/2019 – 23/10/2020	Hired Researcher (funded by Proyecto Intramural Especial, CSIC). Real Jardín Botánico, CSIC, Madrid. Spain.
1/5/2017 – 30/4/2019	Postdoctoral Fellow (funded by Ayuda Juan de la Cierva Incorporación). Real Jardín Botánico, CSIC, Madrid. Spain.
22/4/2016 – 20/4/2017	Postdoctoral Research Associate (funded by Isaac Newton Trust Research Grant). Department of Plant Sciences, University of Cambridge. UK.
22/4/2014 – 21/4/2016	Postdoctoral Research Associate (funded by Marie Curie Intra-European Fellowship). Department of Plant Sciences, University of Cambridge. UK.
26/11/2012 – 30/11/2013	Hired Researcher (funded by Fundación General CSIC). Real Jardín Botánico, CSIC, Madrid. Spain.
1/1/2008 – 31/12/2011	Predoctoral Fellow (funded by FPU Fellowship and JAE-Pre Fellowship). Real Jardín Botánico, CSIC, Madrid. Spain.

A.3. Education

PhD, Licensed, Graduate	University/Country	Year
Doctor en Biología Evolutiva y Biodiversidad	Universidad Autónoma de Madrid (UAM), Spain	2012
Licenciado en Biología	Universidad Autónoma de Madrid (UAM), Spain	2007

Part B. CV SUMMARY *(max. 5000 characters, including spaces)*

1. *Scientific contributions*

My scientific interests are focused on applying **innovative phylogenetic approaches to uncover the keys to plant diversity at multiple evolutionary scales** (from macroevolution to microevolution) **and to help conserve that diversity**. To those ends, I incorporate multidisciplinary insights from biogeography, population genetics, species distribution modelling and evo-devo. I have made relevant contributions to the following topics: (**1**) the use of next-generation sequencing (genotyping-by-sequencing, GBS) for plant phylogenomics; (**2**) patterns of plant speciation and colonization in the Mediterranean Region (with a particular focus on the Antirrhineae, a model group for plant biology) and oceanic archipelagos (e.g. the first phylogenomic study of the *Scalesia* radiation, or "Darwin's finches of the plant world", in the Galapagos Islands); (**3**) the evolutionary dynamics of floral key

innovations promoting diversification; (**4**) the effect of Quaternary climatic changes on plant diversity; and (**5**) phylogenetic approaches to plant conservation.

- Funding for research: 2 Plan Estatal projects as PI, Ramón y Cajal fellowship, Marie Curie Intra-European Fellowship, Isaac Newton Trust Research Grant (UK), Juan de la Cierva Incorporación fellowship, participation in 8 Plan Estatal grants (Spain) and a BBSRC grant (UK). In total, I have participated in 22 R&D projects (6 as PI) and 14 other grants and scholarships, and I have secured c. 780.000 € of research funding as PI in competitive calls.
- Institutions: I have been hired by leading scientific institutions such as the University of Cambridge (3 years), CSIC (8 years) and two Spanish universities (UAM, 3 years; UCM, 6 months).
- Publications: 53 articles in indexed (JCR) journals, including 24 as first or last author; 39 in Q1 and 13 in Q2; average impact factor: 4.775. First-authored articles in leading journals: *Nature Ecology & Evolution*, *Current Biology*, *Systematic Biology*, *New Phytologist*, *Molecular Ecology*. Other articles in *Nature Communications*, *Trends in Ecology and Evolution*. 6 book chapters and 10 other publications and preprints. Citations: 1928 (Google Scholar), 1438 (WoS). *H*-index: 26 (Google Scholar), 24 (WoS). Approximately 50% of articles involved international collaboration.
- Congresses, meetings, seminars and courses: 113 contributions. Of these, 2 invited talks (University of the Free State, South Africa, 2021; Simposio Anual de Botánica Española, 2020); 50 international contributions; 35 contributions presented by myself; 68 oral communications, 45 posters. Organization of a symposium and parallel session, XX International Botanical Congress (2024).
- Awards: I3 certification (2023); 2 *sexenios de investigación* (2022); Outstanding Student Award, International Botanical Congress (2017); Sentinel of Science Award, Publons (2016); Premio Extraordinario de Doctorado, UAM (2013), 2º Premio Nacional Fin de Carrera (2008), Premio Extraordinario de Licenciatura (2007).
- R&D management: member of 3 HR selection committees (UAM, UCM), HRS4R advisory committee (UAM), Erasmus coordinator (UAM).

2. *Contributions to society*

- Transfer: actions for conservation of endangered species (2006, 2016, 2022, 2023).
- Scientific advice: SEBiCoP (2018-23); Ministerio Transición Ecológica (2020-23); BBC (2021).
- Citizen science: organizing committee of *Biomaratón de Flora Española* (2021, 2022).
- Scientific outreach: 7 educational talks aimed at various audiences (secondary school, university students, general public), including 3 talks at Semana de la Ciencia Madrid (2011–2017). Participation in 6 worshops/exhibitions, including Festival of Plants and Cambridge Science Festival, Cambridge, UK (2015, 2016). 5 popular science articles, 4 web articles, 7 press releases covered by numerous media outlets. Organizing committee of seminar series *Cafés Sistemáticos* (2021–present). Scientific outreach in social networks.
- Software development: R package PAICE (2022).

3. *Training, editorial and evaluation activity*

- Supervision and mentorship: 3 doctoral theses supervised (2 finished, funded by FPU and FPI-UAM; 1 in progress, funded by FPI), 3 postdocs, 9 TFM, 7 TFG, 1 YEI, 6 interns.
- Teaching: 476 h in Degree and Master programs (UAM, 2021–2024; UCM, 2021; University of Cambridge, 2016), Course "Introduction to species distribution modelling" (IBB, CSIC, 2014, 16 h).
- Editing: Associate Editor of *Frontiers in Plant Science* (2021–present; 9 manuscripts edited) and *Plant Systematics and Evolution* (2019–present; 10 manuscripts edited).
- Peer-review: 122 manuscripts for 32 journals (2011–present).
- Evaluation: 5 grant proposals evaluated (AEI, DGF, Czech Science Foundation, Leverhulme Trust; 2015–2024), 5 PhD thesis committees (2015–2023), 4 TFM committees (2018–2025), scientific committee of I Congreso Español de Botánica (2020–2021).

4. *Other contributions*

- Founding member, Grupo de Trabajo Sistemática y Evolución, Sociedad Botánica Española (2019–).

Part C. RELEVANT MERITS

C.1. Publications. The 10 most relevant articles are included here, see full list at Google Scholar.

1. Cerca, J., Cotoras, D.D., Bieker, V.C., … **Fernández-Mazuecos, M.**, … Martin, M.D. (2023). Evolutionary genomics of oceanic island radiations. *Trends in Ecology and Evolution* 38(7): 631-642. Position 6/30. Impact Factor (IF) = **16.700**.

2. Cerca, J., Petersen, B., Lazaro-Guevara, J.M., ... **Fernández-Mazuecos, M.**, … Martin, M.D. (2022). The genomic basis of the plant island syndrome in Darwin's giant daisies. *Nature Communications* 13: 3729. Position 13/29. IF = **16.600**.
3. **Fernández-Mazuecos, M.**, Vargas, P., McCauley, R.A., Monjas, D., Otero, A., Chaves, J.A., Guevara Andino, J.E., Rivas-Torres, G. (2020). The radiation of Darwin's giant daisies in the Galápagos Islands. *Current Biology* 30(24): 4989–4998. IF = **10.834**.
4. Gorospe, J.M., Monjas, D., **Fernández-Mazuecos, M.** (2020). Out of the Mediterranean Region: worldwide biogeography of snapdragons and relatives (tribe Antirrhineae, Plantaginaceae). *Journal of Biogeography* 47(11): 2442–2456. IF = **4.327**.
5. **Fernández-Mazuecos, M.**, Blanco-Pastor, J.L., Juan, A., Carnicero, P., Forrest, A., Alarcón, M., Vargas, P., Glover, B.J. (2019). Macroevolutionary dynamics of nectar spurs, a key evolutionary innovation. *New Phytologist* 222(2): 1123–1138. IF = **8.512**.
6. **Fernández-Mazuecos, M.**, Mellers, G., Vigalondo, B., Sáez, L., Vargas, P., Glover, B.J. (2018). Resolving recent plant radiations: power and robustness of genotyping-by-sequencing. *Systematic Biology* 67(2): 250–268. IF = **10.266**.
7. **Fernández-Mazuecos, M.**, Glover, B.J. (2017). The evo-devo of plant speciation. *Nature Ecology & Evolution* 1: 0110. IF = **10.965**.
8. **Fernández-Mazuecos, M.**, Vargas, P. (2013). Congruence between distribution modelling and phylogeographical analyses reveals Quaternary survival of a toadflax species (*Linaria elegans*) in oceanic climate areas of a mountain ring range. *New Phytologist* 198(4): 1274–1289. IF = **6.545**.
9. Besnard, G., Khadari, B., Navascués, M., **Fernández-Mazuecos, M.**, … Savolainen, V. (2013). The complex history of the olive tree: from Late Quaternary diversification of Mediterranean lineages to primary domestication in the northern Levant. *Proceedings of the Royal Society B: Biological Sciences* 280(1756): 20122833. Position 4/11. IF = **5.292**.
10. **Fernández-Mazuecos, M.**, Vargas, P. (2010). Ecological rather than geographical isolation dominates Quaternary formation of Mediterranean *Cistus* species. *Molecular Ecology* 19(7): 1381–1395. IF = **6.457**.

C.2. Congresses

1. Coello, A.J., … **Fernández-Mazuecos, M.** Spatial phylogenetics in the western Mediterranean Region: phylogenetic diversity and endemism of the Iberian angiosperm flora. Talk. XX International Botanical Congress. Madrid, Spain, 2024.
2. **Fernández-Mazuecos, M.**, *et al*. Spatial phylogenetics of the Iberian vascular flora. Talk. XV MEDECOS (International Mediterranean Ecosystems Conference). Mykonos, South Africa, 2022.
3. **Fernández-Mazuecos, M.** Investigando las radiaciones recientes de plantas mediante genotipado por secuenciación (GBS): de la Región Mediterránea a las Islas Galápagos. Talk. I Congreso Español de Botánica, Sociedad Botánica Española. Toledo, 2021.
4. **Fernández-Mazuecos, M.** Genotipado por secuenciación (GBS): preparación de bibliotecas y aplicaciones a la investigación macro- y microevolutiva". **Invited lecture**. I Simposio Anual de Botánica Española, Sociedad Botánica Española. Seville, 2020.
5. **Fernández-Mazuecos, M.**, Vargas, P., Glover, B.J. Are floral nectar spurs a key evolutionary innovation? Phylogenetic, ecological and developmental insights from the Antirrhineae (Plantaginaceae). Talk. XIX International Botanical Congress. Shenzhen, China, 2017.
6. **Fernández-Mazuecos, M.**, Glover, B.J. Floral nectar spurs as a key innovation in the Mediterranean flora: a multi-scale analysis of snapdragons and relatives. Talk. XIV MEDECOS (International Mediterranean Ecosystems Conference). Seville, 2017.
7. **Fernández-Mazuecos, M.**, *et al*. Evaluating the power of genotyping-by-sequencing to resolve species boundaries and phylogeny in a Quaternary radiation. Talk. UK Plant Evolution 2016 Meeting. Cambridge, UK, 2016.
8. **Fernández-Mazuecos, M.**, *et al*. Are floral nectar spurs a key innovation in angiosperms? A phylogenetic comparative analysis of snapdragons and relatives. Talk. Modern Phylogenetic Comparative Methods Conference. Seville, 2014.
9. **Fernández-Mazuecos, M.**, *et al*. ¿Tienen todas las especies amenazadas el mismo valor evolutivo? Origen y conservación de 'fósiles vivientes' de plantas endémicos de la Península Ibérica y Baleares. Talk. VI Congreso de Biología de la Conservación de Plantas. Murcia, 2013.

10. **Fernández-Mazuecos, M.**, *et al*. Pollinator-restrictive flower traits determine evolutionary optima with differential diversification rates in bifid toadflaxes (*Linaria* sect. *Versicolores*). Talk. XIV Congress of the European Society for Evolutionary Biology. Lisbon, Portugal, 2013.

C.3. Research projects

1. PID2024-158450NB-I00. "Dissecting a hotspot of paleo- and neoendemism of vascular plants: from spatial phylogenetics to population genomics" (*DAHPNE*). Ministerio de Ciencia, Innovación y Universidades. Plan Estatal, Proyectos de Generación de Conocimiento. 2025–2029 (4 years). 211,250 €. **Principal Investigator**.
2. Research grant associated with Ayuda Ramón y Cajal. Ministerio de Ciencia, Innovación y Universidades (RYC2022-036418-I). 2024 (1 year). 30,000 €. **Principal Investigator**.
3. TED2021-131234A-I00. "Iberian flora on the EDGE: prioritising endangered species based on evolutionary distinctiveness" (*IF-EDGE*). Ministerio de Ciencia e Innovación. Plan Estatal, Proyectos Estratégicos Orientados a la Transición Ecológica y a la Transición Digital. 2022–2025 (3 years). 150,650 €. **Principal Investigator** (PI 1, with Pedro Jiménez-Mejías as PI 2).
4. PID2021-124234NA-I00. "From spatial phylogenetics to spatial phylogenomics: biogeographic patterns of evolutionary diversity and endemism in the Iberian flora" (*HISPAPHYLO*). Ministerio de Ciencia e Innovación. Plan Estatal, Proyectos de Generación de Conocimiento. 2022–2025 (3 years). 162,140 €. **Principal Investigator**.
5. BIOUAM05-2021. "La diversificación de las lavandas canarias (*Lavandula* spp.): análisis filogenómico, patrones de especiación y cambios de nicho". Universidad Autónoma de Madrid. Ayudas a proyectos de investigación en el Departamento de Biología. 2021–2022 (1 year). 3,481 €. **Principal Investigator**.
6. BB/S009256/1. "Evolution of gene regulation through small RNA-mediated neofunctionalisation". Biotechnology and Biological Sciences Research Council (BBSRC, UK). 2019–2022 (3 years). 707,279 £. PI: Enrico Coen (John Innes Centre). Team member.
7. Research grant associated with Ayuda Juan de la Cierva Incorporación. Ministerio de Economía y Competitividad (IJCI-2015-23459) and Real Jardín Botánico, CSIC. 2017–2019 (2 years). 26,000 €. **Principal Investigator**.
8. CGL2017-87198-P. "El papel de la diferenciación de nicho en la evolución de las Araliáceas: análisis macro- y micro-evolutivos". Ministerio de Economía, Industria y Competitividad. Plan Estatal, Proyectos de I+D (Excelencia). 2018–2021 (4 years). 98,131 €. PI: Virginia Valcárcel (UAM). Work team member.
9. FP7-PEOPLE-2013-IEF, Project reference 624396. "Integrating phylogenetics, ecology and evo-devo to understand the origin of plant species: the role of spur length evolution in speciation of the genus *Linaria*". European Commission. Framework Program for Research and Technological Development. 2014–2016 (2 years). 221,606 €. Host researcher: Beverley Glover (University of Cambridge). Marie Curie fellow, **Principal Investigator**.
10. "Do all endangered species hold the same value? Origin and conservation of living fossils of flowering plants endemic to Spain". Fundación General CSIC. Proyectos Cero. 2011–2014 (4 years). 232,220 €. PI: Pablo Vargas (RJB, CSIC). Team member.

C.4. Contracts, technological or transfer merits

1. Transfer: "Consolidación de acciones de recuperación de la jara de cartagena en la Región de Murcia". Scientific coordinator of works "Ampliación del estudio de la genética y filogeografía de *Cistus heterophyllus*" (2022–2023). 25,000 € funded by Comunidad Autónoma de la Región de Murcia and Ministerio para la Transicón Ecológica y el Reto Demográfico.
2. Transfer: "Accions de conservació de flora". Scientific coordinator of genetic study of threatened species *Chaenorhinum rodriguezii* (2022–2023). 3,950 € funded by Conselleria de Medi Ambient i Territori, Govern de les Illes Balears.
3. Scientific advice: Sociedad Española de Biología de la Conservación de Plantas (2018, 2022); Grupo de Trabajo "Situación crítica de la jara de Cartagena", Ministerio de Transición Ecológica (2020-2023); BBC Natural History Unit (2021).
4. Software development: R package PAICE (with A.J. Coello, R. Heleno and P. Vargas; 2022).
5. Citizen science and outreach: Biomaratón de Flora Española. Member of organizing committee, Grupo de Trabajo en Sistemática y Evolución, Sociedad Botánica Española (2021, 2022).