



Part A. PERSONAL INFORMATION

CV date	17/5/2022
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First and Family name	Montserrat Arista Palmero		
Social Security, Passport, ID number		Age	
Researcher numbers	Researcher ID		
	Author ID		
	ORCID code		

A.1. Current position

Name of University/Institution	University of Seville		
Department	Vegetal Biology and Ecology		
Address and Country	Avda. Reina Mercedes nº 6, 41012 Sevilla		
Phone number	E-mail		
Current position	Full Professor	From	2015
UNESCO code			
Key words	Reproductive biology, plant mating systems, floral trait evolution, pollination, phylogeny and phylogeography, conservation		

A.3. JCR articles, h Index, thesis supervised...

Number of JCR articles: 67 (50% Q1)

H index: 29 (Google Scholar), 23 (WOS)

No. Cites: 2430 (Scholar), 1431 (WOS)

Number of competitive research projects led: 9 Spanish R+D+I, 1 European Commission, 1 FEDER-US, 1 Junta de Andalucía.

No. Sexenios: 5 (last 2020)

Number of PhD Thesis supervised: 8 (+ 3 ongoing).

Part B. CV SUMMARY

My scientific career began with the study of the reproductive biology of *Abies pinsapo* and diverse gymnosperms. Later, my research has been developed in the following lines: floral biology, plant-pollinator interaction, dispersion, systematics, phylogeny and phylogeography, conservation and, in recent years, evolution of reproductive systems and floral traits. I have published 119 articles, book chapters or books, of which 67 were published in JCR journals (overall $h = 29$). In the last ten years I have published 32 JCR paper, which indicates that my recent achievements are important in my 30-yr career. I have also published diverse genera in *Flora iberica* and edited the Vol XI of this collection. In the last 10 years my research has focused on two main lines: the evolution of flower color and the conservation of biodiversity. In the first one I have addressed the importance of floral color in the plant speciation processes with genomic, ecological, reproductive and physiological approaches. My scientific production in this line is very good and has allowed me to collaborate with Australian, Dutch, German, American and Brazilian groups, all experts in this topic. It has also allowed me to supervise PhD theses and numerous undergraduate and master theses. The second line, more recent, deals with the study of biodiversity and conservation at different scales, including plant interactions, and with emphasis on the Andalusian and Brazilian Flora.

I have been Leader researcher for twelve competitive research projects, nine of them funded by the Spanish R+D+I national programme (MICINN, MINECO), two from regional programmes (Andalusian PAIDI-FEDER) and one from the European Commission (LIFE Program) with a total amount of 1.604.070,37€. In the last ten years I have been leader in six competitive projects with a total financing of 918.533€ and I am also responsible for the WP7 in a project LIFEWATCH-ERIC from the European Commission. Four of the active projects are directly related to the topic of project proposal focused on biodiversity conservation (see below). I was researcher member in 6 Research Projects of

foreign entities. I was in the organizing committee of 2 international meetings (MEDECOS XIV-AEET XIII 2017 and SESBE VII 2020). I am member of the Scientific committee of MITECO for advising on proposals related to the conservation of species (Real Decreto 139/2011). I have achieved 5 periods (6-yr) of positive evaluation of research (CNEAI).

I have supervised a total of 8 PhD Theses, 4 were defended in the last ten years. Currently, I am supervising 3 PhDs. Six of the supervised doctors are currently employed in the scientific field: 5 are lecturers at the Universities of Huelva, Pablo de Olavide and Seville and 2 are Post-Docs hired at IFAPA and at UNESP (Brazil). I have supervised pre- and postdoctoral researchers from Mexico and Brazil. I have been founder and coordinator of the MSc in Advanced Biology (2015-2021) and founder and member of the Academic Committee of the PhD Programme in Integrative Biology (2013-2020) at U. of Seville. I actively participated in the development of the double Master's and Doctorate in Biology UNAM (Mexico)-US for these careers.

I am in the Editorial Committee of Plant Biology (Wiley) and edited a successful special volume on Flower colour evolution in *Frontiers in Plant Science*. I acted as regular reviewer for JCR journals. I have regularly acted as panel member of the ANEP and intermittently as an Expert Member panel of the Spanish R+D+i (CGL-BOS) committees for research grants. I have been reviewer of grants for foreign international research agencies, as ANR-France or Israel Science Foundation. I regularly organize and participate in activities for Science dissemination. My main contribution in this activity has been the project "Evolution and conservation of plants", a fixed exhibition for two years in the Parque de las Ciencias de Granada that has received more than 26.000 visits from a wide public.

I am the Scientific Director of the General Research Service of Herbarium (from 2015). Since my appointment as director of the herbarium, I have obtained competitive funds to develop diverse facilities as diverse laboratories: molecular, morphological and physiological to study the evolution and development of plant traits. I was Vice Dean of Research and Postgraduate of the Faculty of Biology. Currently I am member of the Committee of the Doctorate School and from 2021, I am Director of the General Research Services of the University of Seville.

Part C. RELEVANT MERITS

C.1. Publications (selected articles from last 10 years)

1. Sánchez-Cabrera, M., Jiménez-López, F. J., Narbona, E., Arista, M., Ortiz, P. L., Romero-Campero, F. J., ..& Whittall, J. B. (2021). Changes at a critical branchpoint in the anthocyanin biosynthetic pathway underlie the blue to orange flower color transition in *Lysimachia arvensis*. *Frontiers in Plant Science*, 12, 247. Q1, D1
2. Narbona, E. Del Valle, J.C., Arista, M., Buide, M. & Ortiz, P.L. (2021). Major flower pigments originate different colour signals to pollinators. *Frontiers in Ecology & Evolution*. Q1
3. Martins, A., Arista, M. Morellato, L.P. & Camargo, MG. (2021). Color signals of bee-pollinated flowers: the significance of natural leaf background. *Amer. J. Bot.* 108: 788-797. Q1
4. Rodríguez-Castañeda, N.L., Ortiz, P.L., Arista, M., Narbona, E. & Buide M.L. 2020. Indirect selection on flower colour in *Silene littorea*. *Frontiers in Plant Science*. IF: 4.402, D1
5. Ortiz, P.L., Fernández-Díaz P., Pareja, D. Escudero, M. & Arista, M. 2020. Do visual traits honestly signal floral rewards at community level? *Functional Ecology*. doi: 10.1111/1365-2435.13709. IF: 4.434, Q1
6. Jiménez-López, J., Ortiz, P.L., Talavera, M. & Arista, M. 2020. Reproductive assurance maintains red-flowered plants of *Lysimachia arvensis* in Mediterranean populations despite high inbreeding depression. *Frontiers in Plant Science*. doi: 10.3389/fpls.2020.563110. IF: 4.402, D1
7. Jiménez-López, J., Ortiz, P.L., Talavera, M., Pannell, J.F.R. & Arista, M. 2020. The role of lateral and vertical herkogamy in the divergence of the blue- and red-flowered lineages of *Lysimachia arvensis*. *Annals of Botany* 125, 1127-1133. IF: 4.005, Q1
8. Arista M., Berjano R., Viruel J., Ortiz M.Á., Talavera M. & P.L. Ortiz. 2017. Uncertain pollination environment promotes the evolution of a stable mixed reproductive system in the self-incompatible *Hypochaeris salzmanniana* (Asteraceae). *Annals of Botany* 120: 447-456.

CURRICULUM VITAE (maximum 4 pages)

9. Ortiz, P.L., Berjano, R., Talavera, M., Rodríguez, L. & Arista M. 2015. Flower colour polymorphism in *Lysimachia arvensis*: how is the red morph maintained in unfavourable environments? *PPEES* 17: 142-150.
10. Arista, M., Talavera, M., Berjano, R. & P.L. Ortiz. 2013. Abiotic factors may explain the geographical distribution of flower colour morphs and the maintenance of colour polymorphism in the scarlet pimpernel. *Journal of Ecology* 101: 1613-1622. IF: 5.762, D1
11. Talavera M., Navarro L., Ortiz P.L. & M. Arista. 2013. Phylogeography and seed dispersal in islands: the case of *Rumex bucephalophorus* subsp. *canariensis* (Polygonaceae). *Annals of Botany* 111: 249-260.
12. Talavera, M., Arista, M. & Ortiz, P.L. 2012. Evolution of dispersal traits in a biogeographical context: a study using the heterocarpic *Rumex bucephalophorus* as a model. *Journal of Ecology* 100: 1194–1203.
13. Talavera, M., Balao, F., Casimiro-Soriguer, R., Ortiz, M.Á., Terrab, A., Arista, M., Ortiz, P.L., Stuessy, T.F., Talavera, S. 2011. Molecular phylogeny and systematics of the highly polymorphic *Rumex bucephalophorus* complex (Polygonaceae). *Molecular Phylogenetics and Evolution*, 61: 659-670.

C.2. Research projects and grantsAs Responsible: Research projects

- 1-Reconciling patterns and processes in flower colour evolution (RECOLOR). PID2020-116222GB-I00. Ministerio de Ciencia e Innovación. Amount: 186.098,00 €. Leaders: M. Arista & E. Narbona
- 2-Decisive in situ and ex situ conservation strategies to secure the critically endangered Sicilian fir, *Abies nebrodensis*. LIFE4FIR, LIFE18 NAT/IT/000164. 2019-2023. Amount: 260.000,00€. Spanish Leader: M. Arista.
- 3-Andalusian plant biodiversity assessment, from genes to ecosystems (Biovegan). PY18-3651. Junta de Andalucía. 2019-2021. Amount: 108.292,00 €. Leaders: J. Arroyo and M. Arista.
- 4-Biogeography, evolution, ecology and conservation of Andalusian flora (EVOFLORAND). Proyectos FEDER-US. Junta de Andalucía. US-1265280. 2020-2021. Amount: 79.912,0€. Leaders: J. Arroyo and M. Arista
- 5-The importance of flower color polymorphism in angiosperm speciation. MINECO CGL2015-63827. 2016-2020. Amount: 212.234,00€. Leaders: M. Arista and P.L. Ortiz.
- 6-The importance of “Reproductive assurance” hypothesis in the evolution of mixed reproductive systems in plants. MINECO. CGL2012-33270. 2013-2015. Amount: 161.460,00 €. Leader: M. Arista.
- 7-Evolution and maintenance of polymorphism in floral color using *Silene* and *Anagallis* as models. MINCIN. CGL-2009-08257. 136.730,00€, 2010-2013. Leader: M. Arista.
- 8- Spermatophyte evolution in the Mediterranean: *Rumex* subgen. *platypodium* and *Hypochaeris* sect. *seriola* MINCIN CGL2008-02531-E. Amount: 15.000,00€. 2008-2009. Leader: M. Arista
- 9- Spermatophyte evolution in the the Western Mediterranean: implications of the Baetic and Riffaeen Corridors in the population differentiations. MINCIN CGL2005-01951. 166.600,00 €. 2005-2008. Leader: M. Arista.
- 10-The Strait of Gibraltar and the evolution of angiosperms: molecular, cytogenetic and reproductive analyses. REN2002-04354-C02-02. 108100,00€. 2002-2005. Leader: M. Arista.

As Responsible: Competitive Infrastructure Projects

- 11-Scientific infrastructure for the General Research Services of Herbarium and Greenhouse. MINECO. UNSE15-CE-3095. 2016-2017. Total amount: 114.843,00 €. Leader: M. Arista.
- 12-Strengthening and development of a new line of work in plant ecophysiology in the General Research Services of Herbarium and Greenhouse of the University of Seville. Ministerio de Ciencia, Innovación y Universidades. EOC2019-006133-P. 2019-2021. Amount: 143.252,00€. Leader: M. Arista

As participant (only last ten years)

- 1-Sustainability for Mediterranean Hotspots in Andalusia integrating LifeWatch ERIC (SUMHAL) (LIFEWATCH-2019-09-CSIC-13). Leaders: F. Pugnaire & C. Alonso. 2020-2023.
- 2-Global biodiversity alliance. A multidisciplinary approach on tropical biodiversity from genes to ecosystems. UNESP-Print Project. Brazil. 2020-2023. Contact in Spain: M. Arista
- 3-Ecosystem services of pollination and dispersion in natural protected areas. CYTED. Universidad Autónoma de México. 2017-2021. Leader: M. Quesada.

C.3. Research management experience

- Director of the General Research Services at the Seville University (from February 2021)
- Member of the Research Committee of the Seville University (from May 2018 to 2021)
- ANEP regular panel reviewer
- Expert Member of the Panel of the Spanish R+D+i (CGL-BOS) committees for research grants in 2013, 2014, 2016 and 2018,
- Member of the evaluation panel Juan de la Cierva call in 2017.
- Reviewer grants for foreign international research agencies: ANR-France and Israel Science Foundation.
- Member of the panel of Scientific committee "Scientific Committee of the List of Wild Species under Special Protection Regime and the Spanish Catalog of Threatened Species and Invasive Alien Species". MITECO (2022-)
- Member of the board of the JAE-DOC contracts (CSIC) in 2008, 2010, 2011

C.4. Other institutional responsibilities

- Responsible for the General Research Service of Herbarium at the Seville University (from June 2014)
- Vice Dean of Research and Postgraduate of the Faculty of Biology (from February 2014 to November 2019)
- Coordinator of the Master's degree of the Faculty of Biology of the University of Seville (from 2014 to 2019)
- Member of Academic Committee of the PhD Program In Integrate Biology at the University of Seville (from 2013 to 2019)
- Member of the Committee of Doctorate Programme of the University of Seville (from October 2019)

C.5. Research dissemination

Projects as Leader

- Ventana a la Ciencia. I+D+i Project. Consejería de Economía, Innovación, Ciencia y Empleo de la Junta de Andalucía, el Parque de las Ciencias y las Universidades andaluzas. 2019-2021. Responsible from the University of Seville: Montserrat Arista. More than 38.000 visits
- Café con Ciencia. Seville University. Editions 2017, 2018, 2109 and 2020. Grants from Seville University. Leader: Montserrat Arista.

Participant

- European Researcher's Night. Marie Skłodowska Curie (MSCA) action. Editions 2015, 2016, 2017 and 2018. Participant.
- Feria de la Ciencia y Ferisport. Seville University. Editions 2015, 2016, 2017 and 2018.

CURRICULUM VITAE (maximum 4 pages)

-La Semana de la Ciencia. Seville University. Editions 2015, 2016, 2017 and 2018.

C.6. Editorial board

Member of the Editorial board of Plant Biology

Editor of the special issue « The role of Flower colour in angiosperm speciation » in Frontiers in Plant Science

C.7. Meeting organizations

-XIV Medecos & XIII AEET Meeting. February 2017. Organizing committee

-SESBE VII. 2020. Congress of the Spanish society for evolutionary biology. February 2020. Organizing and Scientific committee.

C.8. Scientific societies

Botanical Society of America

Spanish Society of Terrestrial Ecology

Spanish Society of Evolutionary Biology

Spanish Society of Botany

SEO BirdLife