



## Part A. PERSONAL INFORMATION

CV date 14/9/2021

First and Family name	Montserrat Arista Palmero		
Researcher numbers	Researcher ID	D-1096-2018	
	Author ID		
	ORCID code	0000-0003-0914-9525	

## 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	954557057	E-mail	<a href="mailto:marista@us.es">marista@us.es</a>
Current position	Full Professor	From	2015
UNESCO code	241799		
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: 66 (55 Q1)

H index: 28 (Google Scholar), 22 (WOS)

Nº Cites: 2293 (Scholar), 1302 (WOS)

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

N. Sexenios: 5 (last 2020)

Number of PhD Thesis supervised: 8 (+ 4 ongoing).

## Part B. CV SUMMARY (max. 3500 characters, including spaces)

My research has been developed in the following lines: floral biology, plant-pollinator interaction, dispersion, phylogeny and phylogeography, conservation and, in recent years, evolution of reproductive systems and floral traits. I have been Leader researcher for twelve competitive research projects, nine of them funded by the Spanish R+D+I national programme, two from regional programmes and one from the European Comission. I actively collaborated with foreign researchers. I was also responsible for a Technical contract and six grants. I was researcher member in 18 Research Projects, six of foreign entities from France, Brazil, Germany and Mexico.

I have published 119 articles, book chapters or books, of which 66 were published in journals included in the JCR, most of them in Q1 (55). I have supervised a total of eight PhD Theses and four ongoing. Six of the supervised doctors are currently employed in the scientific field: five are lecturers at the Universities of Huelva, Pablo de Olavide, Córdoba and Seville and other two are Post-Doctoral hired at IFAPA and at UNESP (Brazil). I have also supervised various pre- and postdoctoral researchers from Mexico and Brazil. Regarding activities for the Science dissemination, I've been in charge of diverse grants for the programme "Café con Ciencia" (University of Sevilla) and "Ventana a la Ciencia" (Junta de Andalucía).

I am Director of the General Research Service of the University of Seville and the Scietific Director of the General Research Service of Herbarium in which I established molecular and morphology labs to study the evolution and development of plant traits. I was Vice Dean of Research and Postgraduate of the Faculty of Biology and Master's degree Coordinator of the Faculty of Biology of the University of Seville. I was member of the Academic Committee of the Doctorate Program of the Faculty of Biology from 2013 to 2019 and member of the Research Committee of the Seville University. Currently I am member of the Committee of the Doctorate School of the University of Seville and belong to.



## 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, 1127-113. 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.
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 grants (last ten years)

#### As Responsible

Reconciling patterns and processes in flower colour evolution (RECOLOR). PID2020-116222GB-100. Ministerio de Ciencia e Innovación. Amount: 186.098,00 €. Leaders: M. Arista & E. Narbona

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.



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.

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. EQC2019-006133-P. 2019-2021. Amount: 143.252,00€. Leader: M. Arista

Biogeography, evolution, ecology and conservation of Andalusian flora (EVOFLORAND). Proyectos FEDER-US. Junta de Andalucía. US-1265280. 2020-2021. Amount: 79.912,00€. Leaders: J. Arroyo and M. Arista

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.

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.

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.

#### As participant

8-Sustainability for Mediterranean Hotspots in Andalusia integrating LifeWatch ERIC (SUMHAL) (ECOBIODIV). Leaders: P. Pando and M.B. García. 2020-2023.

9-Global biodiversity alliance. A multidisciplinary approach on tropical biodiversity from genes to ecosystems. UNESP-Print Project. Brazil. 2020-2023. Contact in Spain: M. Arista

10-Ecosystem services of pollination and dispersion in natural protected areas. CYTED. Universidad Autónoma de México. 2017-2021. Leader: M. Quesada.

#### **C.3. Institutional responsibilities**

-Director of the General Research Services at the Seville University (from February 2021)

-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 the Research Committee of the Seville University (from May 2018)

-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.6. Research dissemination**

-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. Responsible from the University of Seville. 2019. More than 18.000 visits

-European Researcher's Night. Marie Skłodowska Curie (MSCA) action. Editions 2015, 2016, 2017 and 2018. Participant.

-Café con Ciencia. Seville University. Editions 2017, 2018, 2109 and 2020. Grants from Seville University. Leader and participant.

-Feria de la Ciencia y Ferisport. Seville University. Editions 2015, 2016, 2017 and 2018.

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



-Interviews in public media: Un banco de ADN vegetal en Andalucía (interview in local newspaper: El diario de Sevilla, 2015), Noticias de Luz 2019 (Investigación para conservar especies vegetales amenazadas), La investigación en Ecología Reproductiva de plantas (interview in the program “XX”, 2019), El Herbario de la Universidad de Sevilla (Canal Sur, 2020).

#### **C.7. 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.8. 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.9. Scientific societies**

Botanical Society of America

Spanish Society of Terrestrial Ecology

Spanish Society of Evolutionary Biology

Spanish Society of Botany