



CURRICULUM VITAE (CVA)

Part A. PERSONAL INFORMATION

CV date

11/07/2024

First name	JOSE ANTONIO		
Family name	HÓDAR CORREA		
Gender (*)		Birth date	
ID number			
e-mail	jhodar@ugr.es	URL Web	https://ecologia.ugr.es/en/about/staff-directory/jose-antonio-hodar-correa/curriculum-vitae
Open Researcher and Contributor ID (ORCID)(*)		0000-0003-3475-4997	

(*) Mandatory

A.1. Current position

Position	Chair Professor		
Initial date	2023		
Institution	University of Granada		
Department/Center	Ecology	Faculty of Sciences	
Country	Spain	Telephone number	958 241000 ext 20079
Key words	Plant-animal interactions. Trophic relationships: food selection, herbivory and predation. Long-term population dynamics of defoliating forest Lepidoptera. Effects of global change in ecological relationships. Conservation and regeneration of Mediterranean ecosystems.		

A.2. Previous positions (research activity interruptions, art. 14.2.b))

Period	Position/Institution/Country/Interruption cause
1998-2003	Associate Lecturer, Univ. Granada (Spain)
2003-2023	Senior Lecturer, Univ. Granada (Spain),
2023-	Chair Professor, Univ. Granada (Spain),

A.3. Education

PhD, Licensed, Graduate	University/Country	Year
Biology, Licensed	Granada, Spain	1988
Biology, PhD	Granada, Spain	1993

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

Dr Hódar has a Degree in Biological Sciences at UGR (1983-1988), and a PhD in Ecology (University of Granada, UGR, Spain, FPI fellowship, Spanish Ministry of Science, 1989-1992). His doctorate (*summa cum laude*) dealt with trophic relationships between passerine birds in semiarid shrublands of SE Spain. After his doctorate at UGR he carried out his postdoc (postdoc fellowship, UGR, 1993-1995) at Swedish University of Agricultural Sciences in Umeå, Sweden, an international reference in forest sciences, in which he specialized on plant-animal interactions, mainly chemical defense in plants against ungulate herbivory. After two years of postdoctoral training abroad, he got a research contract funded by the Spanish Ministry of Science (1996-1998), at the Department of Ecology of the UGR. Later, he got a position as Lecturer in 1998, Senior Lecturer in 2003, and Chair Professor in 2023. Since 1996, his main lines of research were the trophic relationships between organisms (food selection, herbivory and predation), the chemical defense in plants against herbivores, the effect of global change on ecological interactions, and the conservation and regeneration of Mediterranean ecosystems. In particular, in recent years his main research subject is the biology and ecology of defoliating lepidopterans, with special attention to the pine processionary moth (*Thaumetopoea pityocampa*), its ecology, its population dynamics,

its interaction with its nutritional trees and its relationship with predators, parasites and parasitoids. The work areas in which this research is carried out are the Mediterranean mountains and the arid depressions of southeastern Spain.

Dr Hódar has more than 120 publications in the fields of Ecology, Forestry, Plant Sciences and Multidisciplinary Sciences. He has published 89 manuscripts in Web of Science, being 30 in Q1, some of them in top journals such as *Forest Ecology and Management*, *Ecological Applications*, *Oikos*, *Oecologia*, or *Journal of Ecology*. WoS total citations: 5289; citations without self-citations: 5037. Average citations per article: 60,1. H Index: 38 (2024/01/23). Google Scholar total citations: 8739, since 2019: 2514. H Index: 47, since 2019: 29. i10 Index: 90, since 2019: 68. (2024/01/23). Five six-year terms recognized by the CNEAI (1992-1997, 1998-2003, 2004-2009, 2010-2015 and 2016-2021). Listed in the "Ranking of the World Scientists: World's Top 2% Scientists" by Ioannidis JPA, Boyack KW, Baas J. 2020. Updated science-wide author databases of standardized citation indicators. *PLoS Biol.* 18(10): e3000918. <https://doi.org/10.1371/journal.pbio.3000918> at position 96334 in the database, and updated in Ioannidis JPA 2022, September 2022 data-update for "Updated science-wide author databases of standardized citation indicators", at position 98021.

He participated in more than 25 projects of competitive calls. Currently he is participating in 3 National projects. He is regular reviewer for more than 40 international journals included in the JCR®. In addition, regularly collaborate with the public administrations responsible for regional and state environmental management, promoting the transfer and application of scientific knowledge to the conservation, management and restoration of ecosystems.

As a teacher, during last 25 years, his teaching included matters as *Ecology*, *Applied Ecology* and *Concepts in Ecology* for undergraduate students, as well as doctorate and master courses. Five 5-year teaching terms recognized by the University of Granada. He directed 7 doctoral theses (currently directing another one) and supervised 16 BSc and 13 MSc theses. He got *excellence* (99.42 out of 100) in the teaching qualification program 'Docentia'. Regarding university management, Dr Hódar was member of the Teaching Commission of the Biology Degree at UGR from 2007 to 2018, being also member (Secretary) of the Quality Commission of the Biology Degree from 2010 to 2018. Currently (from 2018) Dr Hódar is Head of the Department of Ecology at the UGR.

Part C. RELEVANT MERITS (sorted by typology)

C.1. Publications (10 more relevant for the last 10 years)

Khaldi R, Tabik S, Puertas-Ruiz S, Peñas de Giles J, **Hódar JA**, Zamora R, Alcaraz-Segura D. Shrub of a thousand faces: an individual delineation from satellite images using deep learning. *International Journal of Applied Earth Observation and Geoinformation* 134:104191.

Battisti A, **Hódar JA**, Hernández R, Larsson S. 2023. Aggregative oviposition varies with population density in social processionary moths – implications for insect outbreak propensity. *Ecological Entomology* 48:102-111.

Zamora R, **Hódar JA**, Pérez-Luque AJ, Barea-Azcón JM. 2022. Responses of animal populations and communities to climate change and land-use shifts. Pp. 193-211 in: Zamora R, Oliva M. (eds.) *The landscape of Sierra Nevada: A unique laboratory of global processes*. Springer-Verlag.

Lázaro-González A, Gargallo-Garriga A, **Hódar JA**, Sardans J, Oravec M, Urban O, Peñuelas J, Zamora R. 2021. Implications of mistletoe parasitism for the host metabolome: a new plant identity in the forest canopy. *Plant, Cell & Environment* 44:3655-3666. DOI: 10.1111/pce.14179.

Hódar JA, Cayuela L, Heras D, Pérez-Luque AJ, Torres-Muros L. 2021. Expansion of elevational range in a forest pest: Can parasitoids track their hosts? *Ecosphere* 12(4): e03476. DOI 10.1002/ecs2.3476.

Tikkanen OP, Kilpeläinen J, Mellado A, Hämäläinen A, **Hódar JA**, Jaroszewicz B, Luoto M, Repo T, Rigling A, Wang A, Li MH, Lehto T. 2021. Freezing tolerance of seeds can

- explain differences in the distribution of two widespread mistletoe subspecies in Europe. *Forest Ecology and Management* 482: 118806. DOI: 10.1016/j.foreco.2020.118806.
- Zamora R, Lázaro-González A, **Hódar** JA. 2020. Secondary foundation species foster novel plant-animal interactions in the forest canopy: evidence from mistletoe. *Insect Conservation and Diversity* 13:470-479. DOI: 10.1111/icad.12428.
- Lázaro-González A, **Hódar** JA, Zamora R. 2020. Ecological assembly rules on arthropod community inhabiting mistletoes. *Ecological Entomology* 45:1088-1098. DOI: 10.1111/een.12887.
- Suárez-Muñoz M, Bonet-García FJ, **Hódar** JA, Herrero J, Tanase M, Torres-Muros L. 2019. INSTAR: An Agent-Based Model that integrates existing knowledge to simulate the population dynamics of a forest pest. *Ecological Modelling* 411:108764. DOI: 10.1016/j.ecolmodel.2019.108764.
- Lázaro-González A, **Hódar** JA, Zamora R. 2019. Mistletoe generates non-trophic and trait-mediated indirect interactions through a shared host of herbivore consumers. *Ecosphere* 10(3): e02564. DOI:10.1002/ecs2.2564.

C.2. Congress (10 more relevant for the last 10 years)

- Villar-Argaiz M, Medina-Sánchez JM, López-Rodríguez MJ, Corral Arredondo E, González-Olalla JM, Vilá Duplá M, Zamora R, Pérez-Martínez C, Ramos Rodríguez E, Conde-Porcuna JM, Picazo F, Llodrá J, Garrido Cañete E, Fernández-Zambrano A, Morales Baquero R, Camacho-Páez J, Tierno de Figueroa JM, Sánchez Castillo P, Carrillo P, Jiménez-Tejada MP, Romero López MC, Barón López SD, Fernández Ferrer G, Abellán P, Jaimez Cuéllar P, Fernández P, Jiménez A, Quesada A, Barea-Arco JM, Pérez F, Delgado Molina JA, Martón Girela MI, Castro J, Barea Márquez A, **Hódar** JA, Merino Ceballos M, Ramos B. Citizen Science in Sierra Nevada: a necessary step forward in mountain water research and conservation (Oral). *International Mountain Conference, September 11-15, 2022. Innsbruck, Austria.*
- Khaldi R, Benhammou Y, Puertas-Ruiz S, Pérez-Hernández F, Rodríguez Ortega J, Peñas de Giles J, **Hódar** JA, Zamora R, Guirado E, Achchab B, El Afia A, Herrera F, Tabik S, Alcaraz-Segura D. Monitoring high-mountain shrubs and land-cover change with remote sensing and deep learning (Póster). *International Mountain Conference, September 11-15, 2022. Innsbruck, Austria.*
- Hódar** JA, Suárez-Muñoz M, Zamora R. Phenological adjustment of the Pine Processionary Moth to contrasting climatic environments along an elevation gradient: how to cope with abiotic factors and biotic interactions (Oral). *XXVI international Congress of Entomology, July 17-22, 2022. Helsinki, Finlandia.*
- Suárez Muñoz M, Bonet García FJ, **Hódar** JA. Simulación de la dinámica poblacional de la procesionaria del pino mediante la modelización basada en agentes (Oral). *V Reunión del Grupo de Trabajo de Modelización Forestal: Modelización Forestal en la Era de la Información. 6-7 de noviembre de 2019. Solsona (España).*
- Suárez-Muñoz M, Bonet-García FJ, **Hódar** JA. Simulating forest pest dynamics in Mediterranean pine plantations (Oral). *1st Meeting of the SIBECOL Iberian Ecological Society & XIV AEET Meeting, 4-7 February 2019, Barcelona (Spain).*
- González-Megías A, Menéndez R, **Hódar** JA. Contrasting the tri-trophic interaction hypothesis: plant quality vs. parasitoids. (Oral). *1st Meeting of the SIBECOL Iberian Ecological Society & XIV AEET Meeting, 4-7 February 2019, Barcelona (Spain).*
- González-Megías A, Menéndez R, **Hódar** JA. Specialisation and generalization of pierid butterflies in a semiarid environment: do they have a choice? (Oral). *8th International Symposium Butterfly Conservation, 5-8 April 2018, Southampton University, Southampton (UK).*
- Hódar** JA. Subiendo la ladera: respuesta de los bosques de montaña y sus plagas al cambio climático. Sesión "Decaimiento de la vegetación y cambio global en sistemas de montaña" (Oral). *Congreso CIMAS 2018, 8-11 de marzo de 2018. Granada (España).*
- Lázaro A, **Hódar** JA, Zamora R. Este pino no me gusta: la infestación por muérdago (*Viscum album*) reduce la supervivencia de las larvas de la mariposa isabelina (*Graellsia isabellae*). (Oral). *III Reunión Científica de Sanidad Forestal de la Sociedad Española de Ciencias Forestales, 7-8 de octubre de 2015. Madrid (España).*
- Hódar** JA, Lázaro A, Zamora R. Under the mistletoe: the herbaceous understory of

parasitized pines is more abundant, more diverse and more visited by mammalian herbivores. (Poster). 4º Congreso Ibérico de Ecología SPECO/AEET, 16- 19 junio de 2015. Coimbra (Portugal).

C.3. Research projects (10 more relevant for the last 10 years)

Ventanas de oportunidad: DEPREdación, clima, o ambas, como determinantes de la dinámica poblacional de la PROcesionaria del pino a lo largo de un gradiente altitudinal (PRODEPRE), PID2021-128681NB-I00. Proyectos de I+D, Subprograma Estatal de Generación de Conocimiento, Programa Estatal de Generación de Conocimiento y Fortalecimiento Científico y Tecnológico del Sistema de I+D+I, MICINN, 2022-2025. IP: **Hódar JA** (UGR). 116160 €.

Vulnerabilidad al cambio climático de pino silvestre en Parques Nacionales: enfoque metabolómico y funcional del decaimiento forestal (MetForDec), OAPN (2948/2022), 2022-2025. IP: Rivas Ubach A. (ICIFOR-INIA, CSIC, Madrid). 122.893,60 €.

Thematic Center on Mountain Ecosystems, remote sensing, Deep learning-AI and e-Services. LifeWatch-ERIC (N/REF LifeWatch-2019-10-UGR-01), 2019-2023. IP: Zamora R (UGR). 6052480,83 €.

Biogenic Refuges as modulators of Climate Change in mountain ecosystems (Mountain BIOREFUGES), TED2021-130888B-I00, del Plan de Recuperación, Transformación y Resiliencia del MICINN, 2021. IP: Zamora R (UGR). 417.450,00 €.

Ventanas de oportunidad: DEPREdación, clima, o ambas, como determinantes de la dinámica poblacional de la PROcesionaria del pino a lo largo de un gradiente altitudinal (PRODEPRE). Ministerio de Ciencia e Innovación (PID2021-128681NB-I00), 2022-2025. IP: **Hódar JA** (UGR). 116.160 €.

Interacciones bióticas y adaptación al clima de la PROcesionaria del Pino a lo largo de un gradiente altitudinal: ¿cómo ajusta su FENología a entornos climáticos contrastados? (PROPIFEN). Ministerio de Ciencia, Innovación y Conocimiento, 2019-2021. IP: **Hódar JA** (UGR). 121000 €.

Sistema Automático Basado en Teledetección e Inteligencia Artificial Para la Detección de Cambios en la Distribución de Arbustos de Alta Montaña en Respuesta al Cambio Global. (DETECTOR). Agencia Andaluza del Conocimiento (Junta de Andalucía), 2019-2021. IP: Alcaraz D. (UGR). 37150 €.

Interacciones tri-tróficas en ambientes áridos: ¿como lo que quiero o lo que puedo?, Ministerio de Economía y Competitividad, 2016-2018. IP: Gonzalez-Megías A. (UGR). 168311 €.

Integrated European Long-Term Ecosystem & Socio-Ecological Research Infrastructure (eLTER). Comisión Europea, 2015-2019. IP: Bonet-García FJ. (UGR). 167051 €.

Protection of key ecosystem services by adaptive management of Climate Change endangered Mediterranean socioecosystems (ADAPTAMED). Comisión Europea, 2015-2020. IP: Zamora R. (UGR). 191693 €.

C.4. Contracts, technological or transfer merits