

**Part A. PERSONAL INFORMATION**

**CV date**

19-06-2020

First and Family name	Arantza ALDEZABAL ROTETA		
Social Security, Passport, ID number	34089075Q	Age	52
Researcher codes	WoS Researcher ID (*)	V-7930-2017	
	SCOPUS Author ID(*)	6507718632	
	Open Researcher and Contributor ID (ORCID) **	0000-0001-7917-7690	

(\*) At least one of these is mandatory

(\*\*) Mandatory

**A.1. Current position**

Name of University/Institution	University of the Basque Country (UPV-EHU)		
Department	Faculty of Science and Technology, Plant Biology and Ecology		
Address and Country	Barrio Sarriena s/nº, 48940 LEIOA		
Phone number	946012617	E-mail	arantza.aldezabal@ehu.eus
Current position	Aggregate Professor	From:	17-10-2008
UNESCO code	240102, 240106, 241713, 310310, 310601, 310607		
Key words	Soil-plant-herbivore interactions, grazing ecology, biodiversity, mountain ecosystem and management, plant functional traits.		

**A.2. Education**

Degree/PhD	University	Year
Biological Science (degree)	University of the Basque Country (UPV/EHU)	1990
Biological Science (PhD)	University of the Basque Country (UPV/EHU)	1997

**A.3. JCR (WoS) articles, h Index, thesis supervised...**

Number of six-year periods of research activity: 2 (last one date: 01/01/2018)

Number of theses supervised (from 01/01/2009): 3

Publications: 23 (in WoS), 28 (in SCOPUS)

Sum of time cited: 183 (in WoS), 218 (in SCOPUS).

Average Citations in WoS: 8.0 (per item), 9.6 (per year).

Total number of publications in the first quartile (Q1): 15

h-Index: 7 (in WoS), 8 (in SCOPUS)

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

Since 2008, I am Senior Researcher/Lecturer (Aggregate Professor) at the University of Basque Country (UPV/EHU), where I lead the *Grazing Ecology* Research Group. As an ecological scientist, I have 25 years of research experience investigating the soil-plant-herbivore interface for elucidating the multi-trophic consequences of land-use changes and climate warming in mountain ecosystems (mainly grasslands, but also shrublands and secondary forests) at both fine and coarse spatial scales, from individual traits to community responses. To date, I have participated in 65 research projects, contracts, technical services, and special actions (in 29 as Principal Investigator).

My research aims to better understand the interconnection between global change drivers and biodiversity maintenance in mountain areas, where livestock grazing (a disturbance mechanism with long history) plays an important ecological, social, cultural and economical role. With this purpose, I have developed interdisciplinary research on the interaction between land use change, biodiversity and sustainability of grazing systems. In this context, relevant scientific contributions have been resulted from close collaboration with leading researchers from both national and international research centers, including the Pyrenean

Institute of Ecology (CSIC), NEIKER-Tecnalia, and the James Hutton Institute in Scotland. More recently, I have established a permanent and funded collaboration with two research teams of UPV/EHU: the Research Group of Plant Physiology, led by Dr. Muñoz-Rueda, with a remarkable trajectory on studies about the effect of CO<sub>2</sub>, water stress and salinity on plant growth and development (funded by the Basque Government), and LACTIKER, a multidisciplinary research group led by Dr. Rodríguez Barron (funded by a MINECO project from 2014 to 2017), with whom I will continue working in the assessment and improvement of the sustainability of livestock production systems. Additionally, I have an active role in academic management and coordination tasks in PhD-programs and masters at the UPV/EHU.

## **Part C. RELEVANT MERITS (from 01/01/2009 to date)**

### **C.1. Publications (including books)**

- Aldezabal, A., Odriozola, I. & García-Baquero, G. 2019. Grazing Abandonment Delays the Effect of Temperature on Aboveground Net Primary Productivity in Atlantic Grasslands. ***Rangeland Ecology and Management*** 72 (5): 822-831.
- Odriozola, I., García-Baquero, G., Etxeberria, A., Aldezabal, A., 2017. Patterns of species relatedness created by competitive exclusion depend on niche stabilization: evidence from Atlantic grasslands. ***Perspectives in Plant Ecology, Evolution and Systematics (PPEES)*** 28, 36-46.
- Odriozola, I., García-Baquero, G., Fortin, M.J., Laskurain, N.A., Aldezabal, A., 2017. Grazing exclusion unleashes competitive plant responses in Iberian Atlantic mountain grasslands. ***Applied Vegetation Science*** 20, 50-61.
- Valdivielso, I., Bustamante, M., Aldezabal, A., Amores, G., Virto, M., Ruiz de Gordo, J., de Renobales, M., Rodríguez-Barron, L.J., 2016. Case study of a commercial sheep flock under extensive mountain grazing: pasture derived lipid compounds in milk and cheese. ***Food Chemistry*** 197, 622-633.
- Pérez-Barbería, F.J., Small, M., Hooper, R.J., Aldezabal, A., Soriguer-Escofet, R., Bakken, G.S., Gordon, I.J., 2015. State-space modelling of the drivers of movement behaviour in sympatric species. ***PLoS ONE*** 10(11): e0142707.
- Aldezabal, A., Moragues, L., Odriozola, I., Mijangos, I., 2015. Impact of grazing abandonment on plant and soil microbial communities in an Atlantic mountain grassland. ***Applied Soil Ecology*** 96, 251-260.
- Odriozola, I., García-Baquero, G., Laskurain, N.A., Aldezabal, A., 2014. Livestock grazing modifies the effect of environmental factors on soil temperature and water content in a temperate grassland. ***Geoderma*** 235-236, 347-354.
- Laskurain, N.A., Aldezabal, A., Olano, J.M., Loidi, J., Escudero, A., 2013. Intensification of domestic ungulate grazing delays secondary forest succession: evidence from enclosure plots. ***Journal of Vegetation Science*** 24, 320-331.
- Barrio, I., Herrero, J., Bueno, C.G., López, B.C., Aldezabal, A., Campos-Arceiz, A., García-González, R., 2013. The successful introduction of the alpine marmot *Marmota marmota* in the Pyrenees, Iberian Peninsula, Western Europe. ***Mammal Review*** 43, 142-155.
- Aldezabal, A., Mandaluniz, N., Laskurain, N.A., 2013. Gorse (*Ulex* spp.) use by ponies in winter: Is the spatial pattern of browsing independent of the neighbouring vegetation? ***Grass & Forage Science*** 68, 49-58.

### **C.2. Research projects and grants**

\*(Co-)Principal Investigator

\*2016-2021: Basque Government. Consolidated Research Group, **IT1022-16. Impact of climatic change on agro-pastoral systems: production under sustainability and food security premises** [Impacto del cambio climático en los sistemas agro-

pascícolas: producción bajo premisas de sostenibilidad y seguridad alimentaria]. 339,000 € (Leader of the *Grazing Ecology* team)

- \*2014-2017:Ministerio de Economía y Competitividad (MINECO), **AGL2013-48361-C2-1-R. Mountain grazing system: quality and traceability of traditional food, biodiversity, system adaptation to global change and rural development** [Pastoreo de montaña: calidad y trazabilidad de alimentos tradicionales, biodiversidad, adaptación del sistema al cambio global y desarrollo rural (TRADEMON)]. 89,000 €.
- 2011-2014:Ministerio de Medio Ambiente y Medio Rural, **430/211. Monitoring the impacts of global change on mountain plant diversity and ecosystems** [Seguimiento y evaluación de los efectos del cambio global en la diversidad vegetal de los ecosistemas de montaña]. 23,575 €.
- 2010-2011:Basque Government, **IE10-277 (ETORTEK10/34). Climatic change: Impacts and Adaptations** [Cambio Climático: Impactos y Adaptación]. 59,213 €.
- 2009-2012:Instituto Nacional de Investigación Agraria (INIA), **RTA2009-00129. Study of the teratogenesis in bovine livestock linked to grazing in the Picos de Europa** [Estudio de la teratogénesis en ganado vacuno asociada al pastoreo en los Picos de Europa]. 275,000 €.
- \*2010-2011:UNESCO-cathedra (UPV/EHU), **UNESCO09/18. Functional characterization of mountain grasslands, grazing effect and physiological responses of grassland species to water deficit and CO<sub>2</sub> increase** [Caracterización funcional de pastos de montaña, efectos del pastoreo y respuestas fisiológicas de especies pascícolas al déficit hídrico y aumento del CO<sub>2</sub>]. 38,000 €.

### C.3. Contracts

- \*2014-2015 Basque Government, **OTRI.2014.0390. Study of the temporal evolution and landscape changes in the mountain grasslands and shrublands of EC interest** [Estudio de la evolución temporal y los cambios paisajísticos en los pastos y matorrales de montaña de interés comunitario].. 20,000 €.
- \*2013-2016. NEIKER-Tecnalia, **OTRI: 2013.0607. Technical assistance for the characterization of ruminant diets by micrographical technique to determining plant cuticles from faeces** [Servicios de asistencia técnica para la caracterización de dietas de rumiantes a partir de la técnica de micrografía fecal para determinación de cutículas de epidermis vegetales (dentro del proyecto LIFE-Regen Farming)]. 55,000 €.
- \*2012-2012 Basque Government, **OTRI: 2012.0440. Grassland habitats of EC interest and stocking rate. Proposal of a methodology for the analysis of the evolution of the habitats of grasslands and shrublands depending on the stocking density** [Hábitats de interés comunitario en pastos y carga ganadera. Propuesta de una metodología para el análisis de la evolución de los hábitats de pastos y matorrales en función de la carga ganadera]. 12,000 €.
- \*2011. Basque Government. **PT10136** (Euskoiker Foundation). **Assessments of the conservation status of the habitats of community interest in the Basque Country and the consequences of conservation measures (PACK 4: grasslands and shrublands)** [Evaluaciones del estado de conservación de los hábitats de interés comunitario en la CAPV y de las repercusiones que están teniendo las medidas de conservación adoptadas (LOTE 4: hábitats de pastos y matorrales)]. 19,000 €.
- \*2011. IHOBE, S.A. (Basque Government). **PT10074** (Euskoiker Foundation). **Adaptation to the CAPV of a predictive model of livestock management to improve the state of conservation of the grassland and shrubland habitats of European interest in the Basque Country** [Adecuación a la CAPV de un modelo predictivo de gestión ganadera para mejorar el estado de conservación de los hábitats de pastos y matorrales de interés europeo en la CAPV]. 11,000 €.

#### C.4. Supervised PhD and master theses

During 2009-2019 I have been **PhD supervisor of 2 PhD students at the UPV/EHU and one at the James Hutton Institute**, and **14 MSc students at the UPV/EHU**. I am currently advising **two other PhD students** at the UPV/EHU, with the **co-supervision of Dr. del Prado (Basque Centre for Climate Change-BC3)** and **Dr. García-Baquero (UPV/EHU)**. Additionally, I have been examiner of five PhD students in Spain.

#### C.5. Participation in assessment or advisory tasks

I am evaluator/advisor of ANEP regularly since 2007.

#### C.6. Membership of committees (organizer of meetings/workshops...)

Membership of the Scientific Committee of the Congress: 55<sup>a</sup> Reunión Científica de la Sociedad Española para el Estudio de los Pastos (SEEP): *Innovación sostenible en pastos, hacia una agricultura de respuesta al cambio climático*. 2016.

Membership of the Scientific Committee of the Congress: 53<sup>a</sup> Reunión Científica de la Sociedad Española para el Estudio de los Pastos (SEEP): *Pastos y PAC 2014-2020*. 2014.

Organizer of the Functional Traits in Ecology workshop, Funded by Vicerrectorado de Bizkaia-UPV, Ref.: 1697. 17-19 April-2013.

#### C.7. Editorial boards, referee activity (last 10 years)

I am member of Editorial Board of PASTOS (SEEP society) since 2013 to nowadays, as Associated Editor.

I have been reviewer of scientific manuscripts in various international scientific journals since 2011:

- *Rangeland Ecology and Management* (June-2010, February-2011).
- *Wildlife Biology in Practice* (October-2012).
- *Basic and Applied Ecology* (June-2013, August-2013, July-2014).
- *PlosONE* (May-2013, October-2013).
- *Journal of Arid Environment* (December-2014).
- *Applied Soil Ecology* (December-2016, November-2017 and October-2019)
- *Geographical Research Letters* (April-2018)

#### C.8. Science dissemination

Nº of technical reports: 15

Nº of non-technical (dissemination) papers: 1

Nº of invited talks/round-tables/debates: 5

Participation in oral/poster communications: 14/23

Dissemination activities: 7 Press reports, 5 Radio interviews, 17 On line outlines.

Attendance to workshops/Training courses: 7.

Organization of Summer Courses for UEU (Basque Summer University): 2

Others: 2 datasets published in Dryad [Digital Repository](#), several contributions to the Encyclopedic Dictionary of Science and Technology.

#### C.9. Others

Membership of scientific associations: Spanish Association of Terrestrial Ecology (AEET), Spanish Association of Grassland Studies (SEEP), European Ecological Federation (EEF).