



Rafael Robaina Romero

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General quality indicators of scientific research

This section describes briefly the main quality indicators of scientific production (periods of research activity, experience in supervising doctoral theses, total citations, articles in journals of the first quartile, H index...). It also includes other important aspects or peculiarities.

La producción científica más reciente (2019-2024) se ha mantenido en el cuartil Q1-Q2 de las bases JCR y SJR-Science, con un índice h=20 en scholar academics, h =19 en Research gate RG-Score 30.87, por encima del 90% de los miembros de la red. Se adjuntan indicadores de la producción del último sexenio.

Jasmonates and Ethylene Shape Floridoside Synthesis during Carposporogenesis in the Red Seaweed *Grateloupia imbricata*
Marine Drugs 2024
JCR Q1

Jasmonates disrupt carrageenan synthesis during carposporogenesis in the red seaweed *Grateloupia imbricata*
Frontiers in Marine Science JCR Q1

Editorial: The world of seaweeds
Frontiers in Marine Science (Editores) 2023

S-Assimilation Influences in Carrageenan Biosynthesis Genes during Ethylene-Induced Carposporogenesis in Red Seaweed *Grateloupia imbricata*
Marine Drugs
JCR Q1

Expression of Genes Related to Carrageenan Synthesis during Carposporogenesis of the Red Seaweed *Grateloupia imbricata*
Marine Drugs
JCR-Q2;SJR-Q2;SCIE ;
2020

Analysis of ethylene-induced gene regulation during carposporogenesis in the red seaweed *Grateloupia imbricata* (Rhodophyta)
Journal of Phycology
JCR-Q1;SJR-Q1;SCIE ;
SCOPUS: 3;WOS: 3



2018

Analysis of the transcriptome of the red seaweed *Grateloupia imbricata* with emphasis on reproductive potential

Marine Drugs

JCR-Q1;SJR-Q2;SCIE ;

SCOPUS: 4;WOS: 5

2018

Zostera noltii in the Canary Islands: a genetic description for conservation purposes

Journal of Coastal Research

JCR-Q4;SJR-Q2;SCIE ;

2018

Artificial seagrass leaves shield transplanted seagrass seedlings and increase their survivorship

Aquatic Botany

JCR-Q2;SJR-Q1;SCIE ;

SCOPUS: 6;WOS: 5

2017

Furthering knowledge of seaweed growth and development to facilitate sustainable aquaculture

New Phytologist

JCR-Q1;SJR-Q1;SCIE ;

SCOPUS: 20;WOS: 19

2017

Genetic description and remote sensing techniques as management tools for *Zostera noltii* seagrass populations along the Atlantic Moroccan coast

Journal of Coastal Research

JCR-Q4;SJR-Q2;SCIE ;

SCOPUS: 4;WOS: 4

2017

Molecular mechanisms underlying *Grateloupia imbricata* (Rhodophyta) carposporogenesis induced by methyl jasmonate

Journal of Phycology

JCR-Q1;SJR-Q1;SCIE ;

SCOPUS: 4;WOS: 4

2017

In silico characterization of DNA motifs associated with the differential expression of the ornithine decarboxylase gene during in vitro cystocarp development in the red seaweed *Grateloupia imbricata*

Journal of Plant Physiology

JCR-Q1;SJR-Q1;SCIE ;

SCOPUS: 5;WOS: 4

2016

Occurrence of jasmonates during cystocarp development in the red alga *Grateloupia imbricata*

Journal of Phycology

JCR-Q1;SJR-Q1;SCIE ;

SCOPUS: 11;WOS: 8

2016

On reproduction in red algae: further research needed at the molecular level



Frontiers in Plant Science

JCR-Q1;SJR-Q1;SCIE ;

SCOPUS: 9;WOS: 7

2015

Plant Hormones And Reproduction In Red Seaweeds: From The Chemicals To Transcriptomics

European Journal of Phycology

JCR-Q1;SJR-Q1;SPI ;SCIE ;

SCOPUS: 0;WOS: 1

Rafael Robaina Romero

Surname(s): **Robaina Romero**
Name: **Rafael**
ORCID: **0000-0003-4265-5809**

Current professional situation

Employing entity: Universidad de las Palmas de Gran Canaria **Type of entity:** University
Department: Facultad de Ciencias del Mar
Professional category: Catedrático de Universidad
Start date: 2009
Dedication regime: Full time
Primary (UNESCO code): 241719 - Plant physiology
Secondary (UNESCO code): 241707 - Phycology
Tertiary (UNESCO code): 241502 - Molecular biology of plants

Previous positions and activities

| | Employing entity | Professional category | Start date |
|---|---|---------------------------|------------|
| 1 | Universidad de las Palmas de Gran Canaria | Profesor Titular | 1993 |
| 2 | Universidad de las Palmas de Gran Canaria | Profesor Titular Interino | 1990 |
| 3 | Universidad de las Palmas de Gran Canaria | Profesor Asociado LRU | 1989 |

- 1** **Employing entity:** Universidad de las Palmas de Gran Canaria **Type of entity:** University
Professional category: Profesor Titular
Start-End date: 1993 - 2009 **Duration:** 16 years
- 2** **Employing entity:** Universidad de las Palmas de Gran Canaria **Type of entity:** University
Professional category: Profesor Titular Interino
Start-End date: 1990 - 1993 **Duration:** 2 years
- 3** **Employing entity:** Universidad de las Palmas de Gran Canaria **Type of entity:** University
Professional category: Profesor Asociado LRU
Start-End date: 1989 - 1990 **Duration:** 1 year



Education

University education

1st and 2nd cycle studies and pre-Bologna degrees

University degree: Higher degree

Name of qualification: Biología

Degree awarding entity: Universidad de La Laguna **Type of entity:** University

Date of qualification: 1985

Doctorates

Doctorate programme: Programa Oficial de Doctorado en Ciencias del Mar

Degree awarding entity: Universidad de las Palmas de Gran Canaria **Type of entity:** University

Date of degree: 1988

Specialised, lifelong, technical, professional and refresher training (other than formal academic and healthcare studies)

- 1 Training title:** Curso de Operador de Instalaciones Radioactivas
Awarding entity: PROINSA, S.A.
End date: 1995 **Duration in hours:** 36 hours
- 2 Training title:** Curso de Histoquímica e Histología Vegetal
Awarding entity: Instituto de Edafología y Biología Vegetal **Type of entity:** State agency
End date: 1989 **Duration in hours:** 40 hours

Attended advanced, improvement and innovative teacher training and new technology courses and seminars focused on improving teaching

Title of course/seminar: Curso de Adaptación Pedagógica (CAP)

Goals of the course/seminar: Competencias para la actividad docente

Organising entity: Universidad de las Palmas de Gran Canaria **Type of entity:** University

Duration in hours: 150 hours

Start-End date: 1986 - 1986



Language skills

| Language | Listening skills | Reading skills | Spoken interaction | Speaking skills | Writing skills |
|----------|------------------|----------------|--------------------|-----------------|----------------|
| French | A1 | A1 | A1 | A1 | |
| English | B2 | C1 | B2 | B2 | B2 |

Teaching experience

General teaching experience

- 1 Name of the course:** Biodeterioro
University degree: Master Interuniversitario en Gestión del Patrimonio Artístico y Arquitectónico, Museos y Mercado del Arte
Start date: 2018 **End date:** 2022
Entity: Universidad de las Palmas de Gran Canaria **Type of entity:** University
Faculty, institute or centre: Escuela de Arquitectura
- 2 Name of the course:** Fisiología de los Organismos Marinos
University degree: Grado en Ciencias del Mar
Start date: 2010 **End date:** 2012
Entity: Universidad de las Palmas de Gran Canaria **Type of entity:** University
- 3 Name of the course:** Métodos Experimentales en Fisiología y Biotecnología Vegetal Marina
University degree: Licenciatura en Ciencias del Mar
Start date: 2004 **End date:** 2010
Entity: Universidad de las Palmas de Gran Canaria **Type of entity:** University
Faculty, institute or centre: Facultad de Ciencias del Mar
- 4 Name of the course:** Fisiología de los Vegetales Marinos
University degree: Licenciatura en Ciencias del Mar
Start date: 2003 **End date:** 2010
Entity: Universidad de las Palmas de Gran Canaria **Type of entity:** University
Faculty, institute or centre: Facultad de ciencias del Mar
- 5 Name of the course:** Producción Primaria y Productores Primarios
University degree: Licenciatura en Ciencias del Mar
Start date: 1989 **End date:** 2003
Entity: Universidad de las Palmas de Gran Canaria **Type of entity:** University
Faculty, institute or centre: Facultad de Ciencias del Mar
- 6 Name of the course:** Biología
University degree: Licenciatura en Ciencias del Mar
Start date: 1989 **End date:** 1995
Entity: Universidad de las Palmas de Gran Canaria **Type of entity:** University
Faculty, institute or centre: Facultad de Ciencias del Mar



- 7** **Name of the course:** Vías Detrítica y Microbiana
University degree: Licenciatura de Ciencias del Mar
Start date: 1989 **End date:** 1995
Entity: Universidad de las Palmas de Gran Canaria **Type of entity:** University
Faculty, institute or centre: Facultad de Ciencias del Mar

Experience supervising doctoral thesis and/or final year projects

- 1** **Project title:** EXPRESIÓN GÉNICA DIFERENCIAL, POR ACCIÓN DE COMPUESTOS VOLÁTILES, DURANTE LA CARPOESPOROGÉNESIS DE LA MACROALGA ROJA GRATELOUPIA IMBRICATA
Entity: Universidad de las Palmas de Gran Canaria **Type of entity:** University
Student: Montserrat Montero Fernández
Date of reading: 2017
- 2** **Project title:** INTERACCIÓN MOLECULAR ENTRE EL ALGA ROJA GRATELOUPIA IMBRICATA Y SUS ALGAS ENDÓFITAS MICROSPONGIUM TENUISSIMUM Y EPÍFITAS ULVELLA LEPTOCHAETE
Entity: Universidad de las Palmas de Gran Canaria **Type of entity:** University
Student: Miguel Angel Navarro Ponce
Date of reading: 2016
- 3** **Project title:** CARACTERIZACIÓN BIOLÓGICA Y QUÍMICA DE KAPPAPHYCUS ALVAREZII DE PANAMÁ.
Entity: Universidad de las Palmas de Gran Canaria **Type of entity:** University
Student: Claudia Massiel Pérez González
Date of reading: 2013
- 4** **Project title:** CONSERVACIÓN "EX SITU" DE CYMODOCEA NODOSA (UCRIA) ASCHERSON. PROPAGACIÓN DE SEMILLAS IN VITRO Y ESTABLECIMIENTO DE CULTIVOS CELULARES.
Entity: Universidad de las Palmas de Gran Canaria **Type of entity:** University
Student: Maite Zarranz Elso
Date of reading: 2010
- 5** **Project title:** CULTIVO ECOSOSTENIBLE DE Kappaphycus alvarezii EN PANAMÁ.
Entity: Universidad de las Palmas de Gran Canaria **Type of entity:** University
Student: Gloria Edelmira Batista De Vega
Date of reading: 2009
- 6** **Project title:** REGULACIÓN DEL DESARROLLO DEL CISTOCARPO POR LAS POLIAMINAS
Entity: Universidad de las Palmas de Gran Canaria **Type of entity:** University
Student: Alicia Sacramento Trujillo
Date of reading: 2005
- 7** **Project title:** MIXOTROFÍA Y ACTIVIDAD BIOSINTÉTICA DE ÁCIDOS GRASOS E INTERACCIÓN POLIAMINAS-GLICEROL DURANTE EL CRECIMIENTO Y DESARROLLO DE MACROALGAS MARINAS IN VITRO
Entity: Universidad de las Palmas de Gran Canaria **Type of entity:** University
Student: Fernando Marián De Diego
Date of reading: 2002
- 8** **Project title:** DESARROLLO EN MACROALGAS. SUSTANCIAS REGULADORAS, FOTOFISIOLOGÍA Y DIFERENCIACIÓN CELULAR (TETRASPOROGÉNESIS) DURANTE LOS ESTADIOS DE CRECIMIENTO IN VITRO DEL ALGA ROJA GRATELOUPIA DORYPHORA



Entity: Universidad de las Palmas de Gran Canaria
Student: Marta Rodrigo Sanz
Date of reading: 1998

Type of entity: University

9 Project title: ACLIMATACIÓN REPRODUCTIVA FISIOLÓGICA Y ESTRUCTURAL AL CULTIVO "IN VITRO" DEL ALGA GRATELOUPIA DORYPHORA.

Entity: Universidad de las Palmas de Gran Canaria
Student: Pilar García Jimenez
Date of reading: 1994

Type of entity: University

Materials and other teaching or educational publications.

1 Maite Zarranz Elso; Pilar García Jiménez; Nieves González Henríquez; Rafael Robaina Romero. La Planta Marina Cymodocea nodosa: Biología y Cultivo, Canary Islands (Spain): 2013. Available on-line at: <https://issuu.com/biblioteca-ulpgc/docs/la_planta_marina_cymodocea_nodosa>. ISBN 978-84-9042-069-0

Name of the materials: Cuadernos de Difusión Científica: Ciencias

Target group profile: Graduados

Date of drafting: 2013

Format: Book

Corresponding author: Yes

2 Rafael Robaina Romero; Ángel Luque Escalona; Jose Juan Castro Hernández; Pilar García Jiménez. Introducción a las Ciencias de la Naturaleza, 2004. ISBN 84-96502-93-7

Name of the materials: Colección Manuales de Acceso para Mayores de 25 años

Date of drafting: 2006

Format: Book

Description Narrative: Material guía para la impartición de la materia con el mismo nombre en el curso de acceso para mayores de 25 años establecido en la Universidad de Las Palmas de Gran Canaria en 1999 y que continúa hasta la fecha sin interrupción

Corresponding author: No

3 Josefa Rodríguez Pulido; Cristina Miranda Santana; Jose Moya Otero; Rafael Robaina Romero; Oscar Medina Fernández; Luis Mazorra Manrique de Lara; Arcadia Martín Pérez; Rosa Marchena Gómez; Josefa Farray Cuevas; Victoria Aguiar Perera; Fátima Sosa Moreno. Transición a la Vida Universitaria, Canary Islands (Spain): 2001. ISBN 84-95792-37-0

Legal deposit: GC 463-2001

Name of the materials: Servicio de Publicaciones Universidad de Las Palmas de Gran Canaria

Target group profile: Profesorado universitario y de enseñanzas preuniversitarias

Date of drafting: 2001

Format: Book

Degree of contribution: Author or co-author of entire book



Scientific and technological experience

Scientific or technological activities

R&D projects funded through competitive calls of public or private entities

- 1 Name of the project:** I3-4- Seaweed
Entity where project took place: Universidad de las Palmas de Gran Canaria **Type of entity:** University
Name principal investigator (PI, Co-PI....): Rafael Robaina Romero
Nº of researchers: 30
Funding entity or bodies: Comisión Europea **Type of entity:** Programa I3
Start-End date: 01/09/2024 - 01/09/2027
Total amount: 397.790 €
- 2 Name of the project:** Cultivos celulares de arribazones de plantas marinas para restauración medioambiental (cellgrasses)
Entity where project took place: Universidad de las Palmas de Gran Canaria **Type of entity:** University
City of entity: LAS PALMAS, Canary Islands, Spain
Name principal investigator (PI, Co-PI....): Pilar García Jimenez
Nº of researchers: 5
Start-End date: 2022 - 2024
Total amount: 65.000 €
- 3 Name of the project:** Obtención de planta de posidonia oceánica mediante técnicas de vivero y desarrollo de técnicas de propagación in vitro
Entity where project took place: Universidad de las Palmas de Gran Canaria **Type of entity:** University
City of entity: Madrid, Canary Islands, Spain
Name principal investigator (PI, Co-PI....): Pilar García Jimenez
Nº of researchers: 5
Start-End date: 2021 - 2024
Total amount: 90.000 €
- 4 Name of the project:** Advancing knowledge on seaweed growth and development
Entity where project took place: Universidad de las Palmas de Gran Canaria **Type of entity:** University
City of entity: las palmas de gran canaria, Canary Islands, Spain
Name principal investigator (PI, Co-PI....): Rafael Robaina Romero; Benedicte Charrier
Nº of researchers: 47
Start-End date: 2015 - 2019
Total amount: 344.000 €
Applicant's contribution: Proyecto EU- COST Action FA1406 por el que se constiutyó la red PHYCOMORPH (Phycomorph.org). Originalmente 12 países EU hasta 26 países EU y non-EU (Israel, USA, Japón, Tunez, Egipto)



- 5** **Name of the project:** Tecnología de vegetales marinos para la región atlántica TechMARAT
Entity where project took place: Universidad de las Palmas de Gran Canaria **Type of entity:** University
City of entity: las palmas de gran canaria, Canary Islands, Spain
Name principal investigator (PI, Co-PI....): Rafael Robaina Romero
Nº of researchers: 10
Funding entity or bodies: Ministerio de Economía **Type of entity:** Ministerio
Start-End date: 2011 - 2014
Participating entity/entities: Instituto Tecnológico de Canarias
Total amount: 367.567 €
Applicant's contribution: Programa de cooperación interregional Canarias-Marruecos (INRH, FSR)
- 6** **Name of the project:** Compuestos orgánicos volátiles en algas. Fisiología molecular de los efectos del etileno
Entity where project took place: Universidad de las Palmas de Gran Canaria **Type of entity:** University
City of entity: las palmas de gran canaria, Canary Islands, Spain
Name principal investigator (PI, Co-PI....): Rafael Robaina Romero
Nº of researchers: 4
Funding entity or bodies: Ministerio de Ciencia e Innovación. Investigación **Type of entity:** Ministerio
Start-End date: 2011 - 2013
Total amount: 54.000 €
- 7** **Name of the project:** Canarias Marruecos Observatorio Marino Atlántico. CM-OMARAT
Entity where project took place: Instituto Canario de Ciencias Marinas **Type of entity:** Innovation and Technology Centres
City of entity: Telde, Canary Islands, Spain
Name principal investigator (PI, Co-PI....): Nieves González Henríquez
Nº of researchers: 47
Funding entity or bodies: Ministerio Asuntos Exteriores **Type of entity:** Ministerio
Start-End date: 2010 - 2011
Participating entity/entities: Instituto Canario de Ciencias Marinas; Instituto Español de Oceanografía; Universidad de La Laguna; Universidad de las Palmas de Gran Canaria
Total amount: 600.000 €
Applicant's contribution: Proyecto del programa de cooperación interterritorial POCTEFEX con Marruecos (REMER)
- 8** **Name of the project:** Cultivo de algas sostenible. Seaweed Ecofriendly Aquaculture (SEA-Panamá).
Entity where project took place: Universidad de las Palmas de Gran Canaria **Type of entity:** University
City of entity: las palmas de gran canaria, Canary Islands, Spain
Name principal investigator (PI, Co-PI....): Gloria Batista De Vega; Rafael Robaina Romero
Nº of researchers: 2
Funding entity or bodies: Agencia Española de Cooperación Internacional **Type of entity:** MAE
Start-End date: 2008 - 2009



Total amount: 23.000 €

- 9 Name of the project:** Modelo espacio-temporal de diferenciación celular durante la carposporogénesis en algas rojas mediante el seguimiento a nivel transcripcional del metabolismo de la poliaminas.

Entity where project took place: Universidad de las Palmas de Gran Canaria **Type of entity:** University

City of entity: las palmas de gran canaria, Canary Islands, Spain

Name principal investigator (PI, Co-PI....): Rafael Robaina Romero

Nº of researchers: 3

Funding entity or bodies:

Ministerio de Ciencia y Tecnología

Type of entity: State agency

Start-End date: 2006 - 2009

Total amount: 45.000 €

- 10 Name of the project:** Estudio de las implicaciones morfofuncionales de las poliaminas en algas marinas: actividad transglutaminasa en la organización del ficobilisoma y deposición calcárea (biomineralización)

Entity where project took place: Universidad de las Palmas de Gran Canaria **Type of entity:** University

City of entity: las palmas de gran canaria, Canary Islands, Spain

Name principal investigator (PI, Co-PI....): Rafael Robaina Romero

Nº of researchers: 3

Funding entity or bodies:

Gobierno de Canarias

Type of entity: Consejería de Educación

Start-End date: 2006 - 2008

Total amount: 8.637 €

- 11 Name of the project:** Cultivo de algas sostenible. Seaweed Ecofriendly Aquaculture (SEA-Panamá)

Entity where project took place: Universidad de las Palmas de Gran Canaria **Type of entity:** University

Name principal investigator (PI, Co-PI....): Gloria Batista De Vega; Rafael Robaina Romero

Nº of researchers: 2

Funding entity or bodies:

Agencia Española de Cooperación Internacional

Type of entity: MAE

Start-End date: 2007 - 2007

Total amount: 4.400 €

- 12 Name of the project:** Mecanismos moleculares responsables de los efectos de las poliaminas sobre la reproducción y el estrés salino en macroalgas marinas.

Entity where project took place: Universidad de las Palmas de Gran Canaria **Type of entity:** University

City of entity: las palmas de gran canaria, Canary Islands, Spain

Name principal investigator (PI, Co-PI....): Rafael Robaina Romero

Nº of researchers: 6

Funding entity or bodies:

Ministerio de Ciencia y Tecnología (BFI2003-01244) **Type of entity:** State agency

City funding entity: Madrid, Community of Madrid, Spain

Start-End date: 2003 - 2006

Total amount: 63.000 €



- 13** **Name of the project:** Efecto de reguladores del crecimiento en la micropropagación de algas rojas
Entity where project took place: CINVESTAD
City of entity: Mérida, Mexico
Name principal investigator (PI, Co-PI....): Daniel Robledo
Nº of researchers: 9
Funding entity or bodies:
Consejo Nacional de Ciencia y Tecnología de México **Type of entity:** State agency
City funding entity: México, Mexico

Start-End date: 2002 - 2005
Total amount: 163.358 €
- 14** **Name of the project:** Establecimiento y propagación del cultivos celulares a partir de esporas y masas celulares obtenidas por cultivo in vitro del alga roja Garteloupia doryphora
Entity where project took place: Universidad de las Palmas de Gran Canaria **Type of entity:** University
City of entity: las palmas de gran canaria, Canary Islands, Spain
Name principal investigator (PI, Co-PI....): Rafael Robaina Romero
Nº of researchers: 5
Funding entity or bodies:
Gobierno de Canarias **Type of entity:** Consejería de Educación

Start-End date: 2001 - 2003
Total amount: 13.700 €
- 15** **Name of the project:** Cultivo celular heterotrófico de algas marinas con fines biotecnológicos
Entity where project took place: Universidad de las Palmas de Gran Canaria
City of entity: las palmas de gran canaria, Canary Islands, Spain
Name principal investigator (PI, Co-PI....): 1; Rafael Robaina Romero
Nº of researchers: 3
Funding entity or bodies:
Gobierno de Canarias **Type of entity:** Consejería de Educación

Start-End date: 1998 - 2000
Participating entity/entities: Universidad de La Laguna
Total amount: 21.000 €
- 16** **Name of the project:** Lipids and secondary metabolites from macroalgal cells cultivated under heterotrophic conditions
Geographical area: European Union
Degree of contribution: Scientific coordinator
Entity where project took place: Universidad de las Palmas de Gran Canaria **Type of entity:** University
City of entity: las palmas de gran canaria, Canary Islands, Spain
Name principal investigator (PI, Co-PI....): Kamen Stefanov; Rafael Robaina Romero
Nº of researchers: 4
Funding entity or bodies:
OTAN **Type of entity:** Defensa
City funding entity: Bruselas, Belgium

Start-End date: 1999 - 1999
Total amount: 2.000 €



- 17** **Name of the project:** Seguimiento de la carposporogénesis y la tetrasporogénesis en cultivos in vitro del alga roja *Grateloupia doryphora*
Entity where project took place: Universidad de las Palmas de Gran Canaria **Type of entity:** University
City of entity: las palmas de gran canaria, Canary Islands, Spain
N° of researchers: 3
Funding entity or bodies: Gobierno de Canarias **Type of entity:** Consejería de Educación
Start-End date: 1995 - 1995
Total amount: 4.000 €
- 18** **Name of the project:** Efecto de la luz sobre los cultivos in vitro del alga roja *Garteloupia doryphora*
Entity where project took place: Universidad de las Palmas de Gran Canaria **Type of entity:** University
City of entity: las palmas de gran canaria, Canary Islands, Spain
N° of researchers: 3
Funding entity or bodies: Gobierno de Canarias **Type of entity:** Consejería de Educación
Start-End date: 1991 - 1994
Total amount: 22.000 €
- 19** **Name of the project:** Estudio de la fotomorfogénesis y de la contribución de la luz al metabolismo del glicerol en cultivos celulares de macroalgas marinas
Entity where project took place: Universidad de las Palmas de Gran Canaria **Type of entity:** University
City of entity: las palmas de gran canaria, Canary Islands, Spain
N° of researchers: 3
Funding entity or bodies: Universidad de las Palmas de Gran Canaria **Type of entity:** University
Start-End date: 1990 - 1990
Total amount: 4.200 €

R&D non-competitive contracts, agreements or projects with public or private entities

- 1** **Name of the project:** OBTENCIÓN DE PLANTA DE POSIDONIA OCEÁNICA MEDIANTE TÉCNICAS DE VIVERO Y DESARROLLO DE TÉCNICAS DE PROPAGACIÓN IN VITRO
Degree of contribution: Researcher
Name principal investigator (PI, Co-PI...): Pilar García Jiménez; Rafael Robaina Romero; Marina Carrasco Acosta; Diana Del Rosario Santana
N° of researchers: 4
Participating entity/entities: Grupo Tragsa
Start date: 29/10/2021 **Duration:** 3 years
Total amount: 90.000 €
- 2** **Name of the project:** Estudio de viabilidad de restauración de praderas de posidonia oceanica mediante el desarrollo de técnicas de propagación in vitro
Degree of contribution: Coordinator of total project, network or consortium
Name principal investigator (PI, Co-PI...): Rafael Robaina Romero
N° of researchers: 3

**Funding entity or bodies:**

EMPRESA DE TRANSFORMACION AGRARIA, S.A.

Start date: 2008**Total amount:** 30.000 €**3 Name of the project:** La Caja de los Vegetales Marinos**Degree of contribution:** Coordinator of total project, network or consortium**Name principal investigator (PI, Co-PI....):** Rafael Robaina Romero**Nº of researchers:** 6**Funding entity or bodies:**

La Caja de Canarias

Type of entity: Business**City funding entity:** las palmas de gran canaria, Canary Islands, Spain**Start date:** 2006**Total amount:** 22.000 €**4 Name of the project:** Vitivinicultura en Gran Canaria. Estudio para la solicitud de la denominación de origen**Degree of contribution:** Coordinator of total project, network or consortium**Name principal investigator (PI, Co-PI....):** Rafael Robaina Romero**Nº of researchers:** 5**Funding entity or bodies:**Consejo Regulador de la denominación de origen
Gran Canaria**Type of entity:** Associations and Groups**Start date:** 1999**5 Name of the project:** Estudio de los sebaales de Gran Canaria y las posibilidades de regeneración por Cymodocea nodosa producida por biotecnología**Degree of contribution:** Researcher**Name principal investigator (PI, Co-PI....):** Ángel Luque Escalona**Nº of researchers:** 3**Funding entity or bodies:**

Gobierno de Canarias

Type of entity: Consejería de Agricultura y Pesca del
Gobierno de Canarias**Start date:** 1996**6 Name of the project:** Informe sobre la Charca de Los Clicos (Lanzarote) para su regeneración**Degree of contribution:** Researcher**Name principal investigator (PI, Co-PI....):** Angel Luque Escalona**Nº of researchers:** 3**Funding entity or bodies:**

Dirección General de Costas

Type of entity: Ministerio**Start date:** 1995**7 Name of the project:** Programa de Monitorización ambiental de la costa del litoral turístico de San Bartolomé de Tirajana (Gran Canaria)**Degree of contribution:** Researcher**Name principal investigator (PI, Co-PI....):** Jesús Pérez Peña; Angel Luque Escalona**Nº of researchers:** 7**Funding entity or bodies:**

Ayuntamiento de San Bartolomé de Tirajana

Type of entity: Ayuntamiento



Start date: 1995

8 Name of the project: Evaluación de impactos de las obras del tunel de La Laja de la autovía del norte de Gran Canaria

Degree of contribution: Researcher

Name principal investigator (PI, Co-PI....): Angel Luque Escalona

Nº of researchers: 2

Funding entity or bodies:

Fomento de Construcciones y Contratas, S.A.

Type of entity: Business

Start date: 1994

9 Name of the project: Planificación territorial de la costa norte de Gran Canaria

Degree of contribution: Researcher

Name principal investigator (PI, Co-PI....): Angel Luque Escalona

Nº of researchers: 3

Funding entity or bodies:

Gestur

Type of entity: Empresa Pública de Planificación

Start date: 1992

10 Name of the project: Evaluación de impacto ambiental de trazados de líneas de alta tensión en Gran Canaria

Degree of contribution: Researcher

Nº of researchers: 2

Funding entity or bodies:

INYPSA Informes y Proyectos, S.A.

Type of entity: Business

Start date: 1991

11 Name of the project: Evaluación del impacto ambiental de la explotación de la cantera de Roque Ceniciento en Las Palmas de Gran Canaria

Degree of contribution: Researcher

Name principal investigator (PI, Co-PI....): Angel Luque Escalona

Nº of researchers: 3

Funding entity or bodies:

Junta de Obras del Puerto de Las Palmas

Type of entity: Portuaria

Start date: 1991



Results

Industrial and intellectual property

- 1 Title registered industrial property:** Propagación in vitro de Posidonia oceanica
Inventors/authors/obtainers: Pilar García Jiménez; Eva Pérez Navarro; Rafael Robaina Romero
Entity holder of rights: EMPRESA DE TRANSFORMACION AGRARIA, S.A.
Nº of application: ES 2369797B1
Country of inscription: Spain
Conferral date: 03/10/2012
Operating aut.region/region: Spain
- 2 Title registered industrial property:** Procedimiento para la propagación in vitro de explantos de embrión y células libres de una especie del tipo fanerógama marina.
Inventors/authors/obtainers: Pilar García Jimenez; Rafael Robaina Romero
Entity holder of rights: Universidad de las Palmas de Gran Canaria
Nº of application: ES 2338968 B1
Country of inscription: Spain
Conferral date: 07/04/2011
Operating aut.region/region: Spain

Scientific and technological activities

Scientific production

- 1 H index:** 16
Date of application: 2021
Source of H-Index: WOS
- 2 H index:** 20
Date of application: 2021
Source of H-Index: GOOGLE SCHOLAR
- 3 H index:** 16
Date of application: 2021
Source of H-Index: SCOPUS
- 4 H index:** 19
Date of application: 2021
Source of H-Index: Research Gate



Publications, scientific and technical documents

- 1** Pilar García Jimenez; Diana Del Rosario Santana; Rafael Robaina Romero. Jasmonates and Ethylene Shape Floridoside Synthesis during Carposporogenesis in the Red Seaweed *Grateloupia imbricata*. *Marine Drugs*. 22 - 3, pp. 115. (Spain): MDPI, 2024.
Type of production: Scientific paper **Format:** Journal
Corresponding author: No
- 2** Diana Del Rosario Santana; Rafael Robaina Romero; Pilar García Jimenez. Jasmonates disrupt carrageenan synthesis during carposporogenesis in the red seaweed *Grateloupia imbricata*. *Frontiers in Marine Science*. 10, (Spain): Elsevier, 2023.
Type of production: Scientific paper **Format:** Journal
Corresponding author: No
- 3** Del Rosario Santana; Robaina Romero; García Jiménez. S-Assimilation Influences in Carrageenan Biosynthesis Genes during Ethylene-Induced Carposporogenesis in Red Seaweed *Grateloupia imbricata*. *Marine Drugs*. 20, pp. 436. MDPI, 2022.
Type of production: Scientific paper **Format:** Journal
Corresponding author: No
- 4** Pilar García Jiménez; Sara R Mantesa; Rafael R Robaina. Expression of Genes Related to Carrageenan Synthesis during Carposporogenesis of the Red Seaweed *Grateloupia imbricata*. *Marine Drugs* 18(9):432. 18 - 9, pp. 432. Pilar García-Jimenez *, Sara R. Mantesa and Rafael R. Robaina, 19/08/2020. Available on-line at: <10.3390/md18090432>.
Type of production: Scientific paper **Format:** Journal
Corresponding author: No
- 5** Pilar García Jiménez; Carlos Llorens; Francisco Roig; Rafael R Robaina. Analysis of the Transcriptome of the Red Seaweed *Grateloupia imbricata* with Emphasis on Reproductive Potential. *Marine Drugs*. 16, pp. 490. Pilar García-JiménezCarlos LlorensFrancisco RoigRafael R Robaina, 07/12/2018.
Type of production: Scientific paper **Format:** Journal
- 6** Pilar García Jiménez; Montserrat Montero Fernández; Rafael R Robaina. Analysis of ethylene-induced gene regulation during carposporogenesis in the red seaweed *Grateloupia imbricata* (Rhodophyta). *Journal of Phycology*. 54, pp. 681 - 689. 10/2018.
Type of production: Scientific paper **Format:** Journal
- 7** Maite Zarranz Elso; Pablo Manent; Rafael R Robaina. *Zostera noltii* in the Canary Islands: A Genetic Description for Conservation Purposes. *Journal of Coastal Research*. 34, pp. 1129 - 1135. 09/2018.
Type of production: Scientific paper **Format:** Journal
- 8** Houda Chiheb; Pilar García Jiménez; Rafael Robaina Romero; Mustapha Hassoun; Hassane Riadi. Développement D'un Stock De Semences (Seedstocks) De L'algue Rouge *Gelidium Corneum* (Gelidiaceae, Rhodophyta). *European Scientific Journal*. 14 - 6, pp. 112 - 123. 28/02/2018.
Type of production: Scientific paper **Format:** Journal
- 9** Pilar García Jiménez; Montserrat Montero Del Pino; Rafael R Robaina. Molecular mechanisms underlying *Grateloupia imbricata* (Rhodophyta) carposporogenesis induced by methyl jasmonate. *Journal of Phycology*. 53, pp. 1340 - 1344. 10/2017.
Type of production: Scientific paper **Format:** Journal



- 10** María Abreu; Helena Araujo; Annette Rita; Juliet Coates; Oliver De Clerck; Christos Katsaros; Rafael Robaina; Thomas Wichard; Benedicte Charrier. Furthering knowledge of seaweed growth and development to facilitate sustainable aquaculture. *New Phytologist*. 216 - 4, pp. 967 - 975. 08/2017.
Type of production: Scientific paper **Format:** Journal
- 11** Maite Zarranz; Pablo Manent; Angel Luque; M Ramdani; Rafael R Robaina. Genetic Description and Remote Sensing Techniques as Management Tools for *Zostera noltii* Seagrass Populations along the Atlantic Moroccan Coast. *Journal of Coastal Research*. 33, pp. 78 - 87. 01/01/2017.
Type of production: Scientific paper **Format:** Journal
- 12** Fernando Tuya; Francisco Vila; Oscar Bergasa; Maite Zarranz; Fernando Espino; Rafael R Robaina. Artificial seagrass leaves shield transplanted seagrass seedlings and increase their survivorship. *Aquatic Botany*. 136, pp. 31 - 34. 01/2017.
Type of production: Scientific paper **Format:** Journal
- 13** Pilar García Jiménez; Olegario Brito Romano; Rafael R Robaina. Occurrence of jasmonates during cystocarp development in the red alga *Grateloupia imbricata*. *Journal of Phycology*. 52 - 6, pp. 1085 - 1093. 12/2016.
Type of production: Scientific paper **Format:** Journal
- 14** Montserrat Montero Fernández; Rafael R Robaina; Pilar García Jiménez. In silico characterization of DNA motifs associated with the differential expression of the ornithine decarboxylase gene during in vitro cystocarp development in the red seaweed *Grateloupia imbricata*. *Journal of Plant Physiology*. 195, pp. 31 - 38. Montero-Fernández, Montserrat Robaina, Rafael R. Garcia-Jimenez, Pilar, 2016.
Type of production: Scientific paper **Format:** Journal
- 15** Pilar García Jiménez; Rafael Robaina Romero. On reproduction in red algae: Further research needed at the molecular level. *Frontiers in Plant Science*. 6 - 93, pp. 6 - 8. 2015.
Type of production: Scientific paper **Format:** Journal
- 16** Pilar García Jiménez; Olegario Brito Romano; Rafael Robaina Romero. Production of volatiles by the red seaweed *Gelidium arbuscula* (Rhodophyta): Emission of ethylene and dimethyl sulfide. *Journal of Phycology*. 49, pp. 661 - 669. 2013.
Type of production: Scientific paper **Format:** Journal
- 17** Pilar García Jiménez; Rafael Robaina Romero. Effects of ethylene on tetrasporogenesis in *Pterocliadiella capillacea* (rhodophyta). *Journal of Phycology*. 48, pp. 710 - 715. 2012.
Type of production: Scientific paper **Format:** Journal
- 18** Maite Zarranz Elso; Pilar García Jiménez; Rafael Robaina Romero. Endogenous polyamine content and photosynthetic performance under hypo-osmotic conditions reveal *Cymodocea nodosa* as an obligate halophyte. *Aquatic Biology*. 17, pp. 7 - 17. 2012.
Type of production: Scientific paper **Format:** Journal
- 19** Rafael Robaina Romero; Maite Zarranz Elso; Nieves González Henríquez; Pilar García Jiénez. Hormone-autonomous cell culture from cotyledonary tissue of the marine plant *Cymodocea nodosa*. *Botanica Marina*. 55, pp. 591 - 600. 2012.
Type of production: Scientific paper **Format:** Journal
- 20** Alberto Guzmán; Rafael Robaina; Yolanda Freire; Daniel Robledo. Polyamines increase carpospore output and growth during in vitro cultivation of *Hydropuntia cornea*. *Biotechnology Letters*. 34, pp. 755 - 761. 2012.
Type of production: Scientific paper **Format:** Journal



- 21** Maite Zarranz Elso; Nieves González Henríquez; Pilar García Jiménez; Rafael Robaina Romero. Restoration of *Cymodocea nodosa* (Uchria) Ascherson seagrass meadows through seed propagation: Seed storage and influences of plant hormones and mineral nutrients on seedling growth in vitro. *Botanica Marina*. 53, pp. 439 - 448. 2010.
Type of production: Scientific paper **Format:** Journal
- 22** Maite Zarranz Elso; Nieves González Henríquez; Pilar García Jiménez; Rafael Robaina Romero. Restoration of *Cymodocea nodosa* seagrass meadows through seed propagation: Germination in vitro, seedling culture and field transplants. *Botanica Marina*. 53, pp. 173 - 181. 2010.
Type of production: Scientific paper **Format:** Journal
- 23** Pilar García Jiménez; Federico García Maroto; Jose Antonio Garrido; Cristina Ferrándiz; Rafael R Robaina. Differential expression of the ornithine decarboxylase gene during carposporogenesis in the thallus of the red seaweed *Grateloupia imbricata* (Halymeniaceae). *Journal of Plant Physiology*. 166, pp. 1745 - 1754. 2009.
Type of production: Scientific paper **Format:** Journal
- 24** Pilar García Jiménez; Paul John Geraldino; Sung Ming Boo; Rafael R Robaina. Red alga *Grateloupia imbricata* (Halymeniaceae), a species introduced into the Canary Islands. *Phycological Research*. 56, pp. 166 - 171. 2008.
Type of production: Scientific paper **Format:** Journal
- 25** Alicia Sacramento Trujillo; Pilar García Jiménez; Rafael R Robaina. The polyamine spermine induces cystocarp development in the seaweed *Grateloupia* (Rhodophyta). *Plant Growth Regulation*. 53, pp. 147 - 154. 2007.
Type of production: Scientific paper **Format:** Journal
- 26** Pilar García Jiménez; Pilar Mañó Just; Ancor Delgado Medina; Rafael R Robaina. Transglutaminase activity decrease during acclimation to hyposaline conditions in marine seaweed *Grateloupia doryphora* (Rhodophyta, Halymeniaceae). *Journal of Plant Physiology*. 164, pp. 367 - 379. 2007.
Type of production: Scientific paper **Format:** Journal
- 27** Pilar García Jiménez; Eva Pérez Navarro; Cristo Santana Hernández; Ángel Luque Escalona; Rafael R Robaina. Anatomical and nutritional requirements for induction and sustained growth in vitro of *Cymodocea nodosa* (Uchria) Ascherson. *Aquatic Botany*[ISSN 0304-3770],v. 84, p. 79-84. 84, pp. 79 - 84. 2006.
Type of production: Scientific paper **Format:** Journal
- 28** Jordan Nechev; William Christie; Rafael Robaina; Fernando De Diego; Simeon Popov; Kamen Stefanov. Chemical composition of the sponge *Hymeniacion sanguinea* from the Canary Islands. *Comparative Biochemistry and Physiology - A Molecular and Integrative Physiology*[ISSN 1095-6433],v. 137, p. 365-374. 1371, pp. 365 - 374. Nechev, Jordan Christie, William W. Robaina, Rafael Diego, Fernando de Popov, Simeon Stefanov, Kamen, 2004.
Type of production: Scientific paper **Format:** Journal
- 29** Alicia Sacramento Trujillo; Pilar García Jiménez; Rubén Alcázar; Antonio F Tiburcio; Rafael R Robaina. Influence of polyamines on the sporulation of *Grateloupia* (Halymeniaceae, Rhodophyta). *Journal of Phycology*. 40, pp. 887 - 894. Sacramento Trujillo, Alicia García-Jiménez, Pilar Alcázar, Rubén Tiburcio, Antonio F. Robaina, Rafael R., 2004.
Type of production: Scientific paper **Format:** Journal
- 30** Jordan Nechev; William W Christie; Rafael Robaina; Fernando Marián De Diego; Albena Ivanova; Simeon Popov; Kamen Stefanov. Chemical composition of the sponge *Chondrosia reniformis* from the Canary Islands. *Hydrobiologia*. 4889 - 1-3, pp. 91 - 98. Nechev, Jordan Christie, William W. Robaina, Rafael Marián de Diego, Fernando Ivanova, Albena Popov, Simeon Stefanov, Kamen, 2002.
Type of production: Scientific paper **Format:** Journal
- 31** Jordan Nechev; William W Christie; Rafael Robaina Romero; Simeon Popov; Kamen Stefanov. Lipid composition of the sponge *Verongia aerophoba* from the Canary islands. *European Journal Of Lipid Science And Technology*. 104 - 12, pp. 800 - 807. 2002.



Type of production: Scientific paper

Format: Journal

- 32** Alberto Guzmán Urióstegui; Pilar García Jiménez; Fernando Marián; Daniel; Rafael R Robaina. Polyamines influence maturation in reproductive structures of *Gracilaria cornea* (Gracilariales, Rhodophyta). *Journal of Phycology*. 38, pp. 1169 - 1175. Guzmán-Urióstegui, Alberto García-Jiménez, Pilar Marián, Fernando Robledo, Daniel Robaina, Rafael, 2002.

Type of production: Scientific paper

Format: Journal

- 33** Fernando Marián De Diego; Pilar García Jiménez; Rafael Robaina Romero. Polyamine levels in the seagrass *Cymodocea nodosa*. *Aquatic Botany*. 68 - 2, pp. 179 - 184. 2000.

Type of production: Scientific paper

Format: Journal

- 34** Fernando Marián De Diego; Pilar García Jiménez; Rafael Robaina Romero. Polyamines in marine macroalgae: Levels of putrescine, spermidine and spermine in the thalli and changes in their concentration during glycerol-induced cell growth in vitro. *Physiologia Plantarum*. 110 - 4, pp. 530 - 534. 2000.

Type of production: Scientific paper

Format: Journal

- 35** Alben Ivanova; Rafael Robaina Romero; Jose Antonio Martín García; Kamen Stefanov. Effect of glycerol on the lipids in the red alga *Gratelupia doryphora*. *Grasas y Aceites*. 50, pp. 469 - 471. Ivanova, Alben Robaina, R. R. Martín García, Jose Antonio Stefanov, Kamen, 1999.

Type of production: Scientific paper

Format: Journal

- 36** Pilar García Jiménez; Fernando Marián De Diego; Marta Rodrigo Sanz; Rafael Robaina Romero. Sporulation and sterilization method for axenic culture of *Gelidium canariensis*. *Progress in Industrial Microbiology*. 35, pp. 227 - 229. 1999.

Type of production: Scientific paper

Format: Journal

- 37** Lidia Medina Falcón; Pilar García Jiménez; Ángel Luque Escalona; Rafael Robaina Romero. The community structure of phytoplankton as indicator of coastal water quality in the touristic areas. *Boletim do Museu Municipal do Funchal*. 50 - 288, pp. 91 - 106. 1999.

Type of production: Scientific paper

Format: Journal

- 38** Marta Rodrigo Sanz; Pilar García Jiménez; Rafael Robaina Romero. Influence of plant growth regulators, polyamines and glycerol interaction on growth and morphogenesis of carposporangia of *Grateloupia* cultured in vitro. *Journal of Applied Phycology*. 10, pp. 95 - 100. 1998.

Type of production: Scientific paper

Format: Journal

- 39** Marta Rodrigo Sanz; Rafael Robaina Romero. Stress tolerance of photosynthesis in sporangia of the red alga *Grateloupia doryphora* compared to that of stage III thalli. *Marine Biology*. 128, pp. 689 - 694. 1997.

Type of production: Scientific paper

Format: Journal

- 40** Pilar García Jiménez; Rafael Robaina Romero; Ioannes Tsekos; Ángel Luque Escalona. Glycerol-activated cellular division and biosynthetic activity during growth and morphogenesis of carpospore seedlings of *Grateloupia doryphora* (Cryptonemiales, Rhodophyta). *Phycologia*. 35 - 3, pp. 261 - 269. 1996.

Type of production: Scientific paper

Format: Journal

- 41** Pilar García Jiménez; Rafael Robaina Romero; Ángel Luque Escalona. Light and glycerol driven development of *Grateloupia doryphora* (Rhodophyta) in vitro. *Scientia Marina*. 60, pp. 283 - 289. 1996.

Type of production: Scientific paper

Format: Journal

- 42** Rafael Robaina Romero; Pilar García Jiménez; Isidro Brito Jiménez; Ángel Luque Escalona. Light control of the respiration of exogenous glycerol in the red macroalga *Grateloupia doryphora*. *European Journal of Phycology*. 30, pp. 81 - 86. 1995.



Type of production: Scientific paper

Format: Journal

- 43** Rafael Robaina Romero; Pilar García Jiménez; Ángel Luque Escalona. The Growth Pattern and Structure of Callus from the Red Alga *Laurencia* sp. (Rhodophyta, Ceramiales) Compared to Shoot Regeneration. *Botanica Marina*. 35, pp. 267 - 272. 1992.

Type of production: Scientific paper

Format: Journal

- 44** Rafael Robaina Romero; Pilar García Jiménez; Guillermo García Reina; Ángel Luque Escalona. Morphogenetic effect of glycerol on tissue culture of the red seaweed *Grateloupia doryphora*. *Journal of Applied Phycology*. 2 - 2, pp. 137 - 143. 1990.

Type of production: Scientific paper

Format: Journal

- 45** Rafael Robaina Romero; Guillermo García Reina; Ángel Luque Escalona. The effects of the physical characteristics of the culture medium on the development of red seaweeds in vitro. *Hydrobiologia*. 204/205 - 1, pp. 137 - 142. 1990.

Type of production: Scientific paper

Format: Journal

- 46** Pilar García Jiménez; Rafael Robaina Romero. System Biology. Insight into the Mechanism of Red Alga Reproduction. What Else Is Beyond Cystocarps Development?. pp. 83 - 94. IntechOpen, 2019. Available on-line at: <10.5772/intechopen.83353>. ISBN 9781838808037

Type of production: Book chapter

Format: Book

Corresponding author: Yes

- 47** Pilar García Jiménez; Rafael Robaina Romero. Volatiles in the Aquatic Marine Ecosystem: Ethylene and Related Plant Hormones and Sporulation in Red Seaweeds. *Systems Biology of Marine Ecosystems*. pp. 99 - 116. Springer, 2017. Available on-line at: <DOI: 10.1007/978-3-319-62094-7_5>. ISBN 9783319620923

Type of production: Book chapter

Format: Book

Corresponding author: Yes

- 48** Angel Luque Escalona; Rafael Robaina Romero; Guillermo García Reina. Plant Cell Biology. Characteristics of NaCl-tolerant calli and somaclones of tomato. 18, NATO ASI SERIES CELL BIOLOGY, 1988.

Type of production: Scientific edition

Format: Book

- 49** Guillermo García Reina; Rafael Robaina Romero; Angel Luque Escalona. Plant Cell Biotechnology. Regeneration of thalliclones from *Laurencia* sp (Rhodophyta). 18, pp. 81 - 86. NATO ASI series Cell Biology, 1988.

Type of production: Scientific edition

Format: Book

- 50** Pooja Baweja; Dinabandhu Sajoo; Pilar García Jiménez; Rafael R Robaina. Review: Seaweed tissue culture as applied to biotechnology: Problems, achievements and prospects. *Phycological Research*. 57, pp. 45 - 58. 2009.

Type of production: Bibliographic review

Format: Journal

- 51** Pilar Garcia Jimenez; Rafael Robaina Romero. Editorial: The world of seaweeds. *Frontiers in Marine Science*. 10, (Spain): Elsevier, 2023.

Type of production: Editorial

Format: Journal

Corresponding author: Yes



Science Outreach activities

- 1** **Title of the work:** Hormonas vegetales y macroalgas marinas (Revisión)
Type of event: Boletín Sociedad Científica
Date of event: 2022
Organising entity: Boletín de la Sociedad Española de Biología de las Plantas
City organizing entity: Spain
García Jiménez; Robaina Romero. "Hormonas vegetales y macroalgas marinas".
- 2** **Title of the work:** Una manzana es el fruto del árbol pero ¿qué son las algas que comemos?
Corresponding author: Yes
Date of event: 2021
Organising entity: The Conversation España
City organizing entity: The Conversation España, Spain
García Jiménez; Robaina Romero. "https://theconversation.com/una-manzana-es-el-fruto-del-arbol-pero-que-son-las-algas-que-comemos-163856?utm_source=linkedin&utm_medium=bylinelinkedinbutton".
- 3** **Title of the work:** Barbara McClintock. Preguntar al millo (Zea mays L.) y observar su respuesta
Name of the event: Mujeres que Brillan con Luz Propia
City of event: las palmas de gran canaria, Spain
Date of event: 2020
Organising entity: Universidad de las Palmas de Gran Canaria **Type of entity:** University
City organizing entity: las palmas de gran canaria, Spain
Rafael Robaina Romero. "Mujeres que Brillan con Luz Propia". En: Colección Divulgación Científica. ISBN 978-84-9042-390-5
Legal deposit: GC 401-2020
- 4** **Title of the work:** Método de micropropagación de la especie fanerógama marina Cymodocea Nodosa'
Name of the event: Patents Week
City of event: las palmas de gran canaria, Spain
Date of event: 2018
Organising entity: Museo Elder de la Ciencia **Type of entity:** Museo
City organizing entity: las palmas de gran canaria, Spain
Pilar García Jiménez; Rafael Robaina Romero. Available on-line at:
<<https://www.ulpgc.es/noticia/rector-rafael-robaina-presenta-sus-patentes-patents-week-museo-elder>>.
- 5** **Title of the work:** Papel de las algas en el campo de la alimentación
Name of the event: Blue Innovation: Oceans to feed the planet
City of event: Bruselas, Belgium
Date of event: 2018
Organising entity: Science and Bussines Forum
City organizing entity: Bruselas, Belgium
Rafael Robaina Roemro. Available on-line at:
<<https://www.laprovincia.es/sociedad/2018/03/01/robaina-difunde-bruselas-papel-algas-9509091.html>>.
- 6** **Title of the work:** Seaweed to feed the planet
Name of the event: Spain-Koorea Ocean Forum
City of event: las palmas de gran canaria, Spain



Date of event: 2018

Organising entity: Korean Maritime Institute

City organizing entity: las palmas de gran canaria, Spain

Rafael Robaina Romero. Available on-line at: <<https://www.ulpgc.es/noticia/ulpgc-acoge-spain-korea-ocean-forum-2018-promocion-del-consumo-algas-mercado-europeo>>.

7 Title of the work: Avanzar en el proyecto de cultivo de algas, será el objeto de la reunión entre científicos marroquí y canarios

Name of the event: TechMarat Meeting

City of event: las palmas de gran canaria, Spain

Date of event: 2012

Organising entity: Universidad de las Palmas de Gran Canaria **Type of entity:** University

City organizing entity: las palmas de gran canaria, Spain

"Avanzar en el proyecto de cultivo de algas, será el objeto de la reunión entre científicos marroquí y canarios". Available on-line at: <https://www.eldiario.es/canariasahora/politica/avanzar-proyecto-cientificos-marroquis-canarios_1_5358684.html>.

8 Title of the work: Algas y plantas marinas: esas grandes, y pequeñas, desconocidas

Name of the event: Charlas Divulgativas

Type of event: Conferences given

City of event: las palmas de gran canaria, Spain

Date of event: 2011

Organising entity: EL GABINETE LITERARIO-Centro UNESCO Gran Canaria **Type of entity:** Associations and Groups

City organizing entity: las palmas de gran canaria, Spain

Rafael Robaina Romero. Available on-line at: <<http://hdl.handle.net/10553/5347>>.

9 "Hablemos de Transferencia". En: Canarias 7. 2020. Available on-line at: <<https://www.ulpgc.es/noticia/rector-ulpgc-rafael-robaina-publica-articulo-periodico-canarias7-titulado-hablemos>>.

R&D management and participation in scientific committees

Organization of R&D activities

1 Title of the activity: Simposio

Type of activity: XII Simposium sobre Fitohormonas **Geographical area:** National

Convening entity: Grupo Hormonas Vegetales SEFV

City convening entity: Alcalá de Henares, Spain

Start date: 2012

Duration: 3 days

2 Title of the activity: Reunión

Type of activity: Reunión de expertos preparación propuesta COST Phycomorph **Geographical area:** European Union

Convening entity: Universidad de las Palmas de Gran Canaria **Type of entity:** University

City convening entity: las palmas de gran canaria, Spain

Start date: 2011

Duration: 3 days



- 3** **Title of the activity:** Simposio
Type of activity: XIII Simposium del Bentos Marino **Geographical area:** National
Convening entity: Universidad de las Palmas de Gran Canaria **Type of entity:** University
City convening entity: las palmas de gran canaria, Spain
Start date: 2004 **Duration:** 3 days
- 4** **Title of the activity:** Taller científico (workshop)
Type of activity: II Workshop on Gelidium **Geographical area:** Non EU International
Convening entity: COST EU
City convening entity: Bruselas, Belgium
Start date: 1997 **Duration:** 3 days
- 5** **Title of the activity:** Reunión Internacional
Type of activity: Reunión del Regional de la IOCEA **Geographical area:** Non EU International
Convening entity: International Oceanographic Commission
City convening entity: Paris, France
Start date: 1995 **Duration:** 3 days

R&D management

- 1** **Name of the activity:** Gestión Universitaria
Type of management: Management of body
Performed tasks: Rector
Entity: Universidad de las Palmas de Gran Canaria **Type of entity:** University
Start date: 2017 **Duration:** 4 years
- 2** **Name of the activity:** Gestión Universitaria
Type of management: Management of body
Performed tasks: Vicerrector
Entity: Universidad de las Palmas de Gran Canaria **Type of entity:** University
Start date: 2012 **Duration:** 4 years - 5 months

National and international forums and committees

- 1** **Name of the forum:** Management Commite. COST action FA 1406 (Phycomorph)
Organising entity: COST EU
City organizing entity: Bruselas, Belgium
Start-End date: 2015 - 2019
- 2** **Name of the forum:** Consejo Editorial
Organising entity: Instituto POLitécnico Nacional
City organizing entity: México, Mexico
Start date: 2013



Evaluation and revision of R&D projects and articles

- 1** **Performed tasks:** Revisor
Entity where activity was carried out: Algal Research
Start date: 2022
- 2** **Performed tasks:** Revisor
Entity where activity was carried out: Biomolecules
Start date: 2021
- 3** **Performed tasks:** Revisor
Entity where activity was carried out: Marine Drugs
Start date: 2021
- 4** **Name of the activity:** Evaluación de proyectos científicos
Performed tasks: Evaluador
Entity where activity was carried out: Agence Nationale de la Recherche
City of entity: Paris, France
Type of entity: State agency
Start date: 2014
- 5** **Name of the activity:** Revisión de artículos científicos
Performed tasks: Revisor
Entity where activity was carried out: Journal of Phycology
City of entity: Paris, France
Type of entity: Revista Científica
Start date: 2012
- 6** **Name of the activity:** Revisión de artículos científicos
Performed tasks: Revisor
Entity where activity was carried out: Wiley
City of entity: Hoboken, New Jersey
Type of entity: Editorial
Start date: 2011
- 7** **Name of the activity:** Revisión de artículo científico
Performed tasks: Revisor
Entity where activity was carried out: Chinese Journal of Oceanology and Limnology
City of entity: Qingdao, China
Type of entity: Revista Científica
Start date: 2010
- 8** **Name of the activity:** Revisión de artículos científicos
Performed tasks: Revisor
Entity where activity was carried out: De Gruyter
City of entity: Berlin, Germany
Type of entity: Editorial
Start date: 2010
- 9** **Name of the activity:** Revisión de artículos científicos
Performed tasks: Revisor
Entity where activity was carried out: Universidad y Ciencia
City of entity: Tabasco, Mexico
Type of entity: Editorial



Start date: 2009

10 Name of the activity: Revisor de artículo científico

Performed tasks: Revisor

Entity where activity was carried out:

Springer-Verlag Ibérica, S.A.

Start date: 2009

Type of entity: Business

11 Name of the activity: Revisión de artículo Científico

Performed tasks: Revisor

Entity where activity was carried out: Elsevier

Start date: 2008

12 Name of the activity: Evaluación de proyectos

Performed tasks: Experto evaluador

Entity where activity was carried out: Fondo para la Investigación Científica y Tecnológica (FONCYT)
Argentina

City of entity: Buenos Aires, Argentina

Start date: 2006

13 Name of the activity: Evaluación de proyectos

Performed tasks: Experto evaluador

Entity where activity was carried out: Agencia
Nacional de Evaluación y Prospectiva

Start date: 2004

Type of entity: Agencia estatal

Other achievements

Stays in public or private R&D centres

1 Entity: Universidad de Almería

City of entity: Almería, Spain

Start date: 2004

Goals of the stay: Trabajo científico

Provable tasks: Clonación del gen GiODC de Grateloupia imbricata

Type of entity: University

Duration: 15 days

2 Entity: Universidad de Almería

City of entity: Almería, Spain

Start date: 2003

Goals of the stay: Trabajo científico

Provable tasks: Clonación del gen GiODC del alga Grateloupia imbricata

Type of entity: University

Duration: 3 months

3 Entity: Centro de Investigaciones Avanzadas

Faculty, institute or centre: Departamento de Recursos del Mar

City of entity: Merida, Mexico

Start date: 2003

Goals of the stay: Guest

Provable tasks: Trabajo de campo cultivo de algas e impartición de cursos

Type of entity: Public Research Body

Duration: 1 month



- 4** **Entity:** Institute of organic chemistry
City of entity: Sofia, Bulgaria
Start date: 1993 **Duration:** 1 month
Goals of the stay: Guest
Provable tasks: Determinación de lípidos en el alga *Grateloupia doryphora*
- 5** **Entity:** Duke University Marine Station
City of entity: Beaufort, United States of America
Start date: 1991 **Duration:** 1 month
Goals of the stay: Post-doctoral
Provable tasks: Fotosíntesis en algas medidas con el dispositivo Hansatech
- 6** **Entity:** University California Berkeley **Type of entity:** University
Faculty, institute or centre: Plant Biology
City of entity: Berkeley, United States of America
Start date: 1990 **Duration:** 16 months
Goals of the stay: Post-doctoral
Provable tasks: Estudios enzimáticos en el alga roja *Grateloupia doryphora*

Obtained grants and scholarships

- 1** **Name of the grant:** Movilidad profesorado universitario
Aims: Trabajo científico
Awarding entity: Gobierno de Canarias **Type of entity:** Gobierno
Conferral date: 2003 **Duration:** 3 months
End date: 2003
Entity where activity was carried out: Universidad de Almería
- 2** **Name of the grant:** Becas Postdoctorales
Aims: Post-doctoral
Awarding entity: Gobierno de Canarias **Type of entity:** Gobierno
Conferral date: 1990 **Duration:** 3 months
End date: 1990
Entity where activity was carried out: University of California Berkeley
- 3** **Name of the grant:** Plan de Formación del Personal Investigador
Aims: Pre-doctoral
Awarding entity: MINISTERIO DE EDUCACION Y CIENCIA
Conferral date: 1986 **Duration:** 36 months
End date: 1988
Entity where activity was carried out: Universidad de las Palmas de Gran Canaria
Faculty, institute or centre: Ciencias del Mar (Biología)
- 4** **Name of the grant:** Beca de Colaboración en Departamentos
Aims: Iniciación a la Investigación
Awarding entity: MINISTERIO DE EDUCACION Y CIENCIA
Conferral date: 1984 **Duration:** 9 months
End date: 1985
Entity where activity was carried out: Universidad de La Laguna
Faculty, institute or centre: Departamento de Genética



Scientific societies and professional associations

Name of the society: Sociedad Española de Fisiología Vegetal
City affiliation entity: Alcalá de Henares,
Start date: 1988

Co-operation networks

Name of the network: Phycomorph www.phycomorph.org
Identification of the network: Algas Marinas **Nº of researchers:** 47
City of co-operation network: Roscoff, France
Selection entity: COST Unión Europea **Type of entity:** Programa de Cooperación
City selection entity: Bruselas, Belgium
Tasks carried out: ViceChair
Start date: 2015

Prizes, mentions and distinctions

- 1 Description:** Premio Extraordinario de Doctorado
Awarding entity: Universidad de las Palmas de Gran Canaria **Type of entity:** University
Conferral date: 1990
- 2 Description:** Premio Extraordinario de Licenciatura
Awarding entity: Universidad de La Laguna **Type of entity:** University
Conferral date: 1986

Periods of research activity and knowledge transfer

Certifying entity: Agencia Nacional de Evaluación de la Calidad y Acreditación **Type of entity:** Agencia de evaluación
Date of recognition: 01/01/2021