Memoria de actividades

Instituto Universitario de Investigación en **Biomoléculas** de la Universidad de Cádiz (INBIO)

2021

ÍNDICE

1. CREACIÓN DEL INSTITUTO EN 2017. MOTIVACIÓN DE LA MEMORIA

El Instituto surge de forma natural del trabajo colaborativo que se ha venido realizando a lo largo de los últimos años entre investigadores del ámbito de las ciencias químicas, de las ciencias de la vida, y de la biotecnología. Con la creación de este Instituto, los investigadores pretenden potenciar la colaboración interdisciplinar ya existente entre científicos de diferentes campos, con la finalidad de estudiar el papel de nuevas moléculas, bien obtenidas mediante síntesis, o aisladas a partir de fuentes naturales, en diversos procesos biológicos. Además, se pretende abordar el estudio de su potencial en el desarrollo de agroquímicos y de nuevos fármacos para el tratamiento o diagnóstico de patologías humanas de especial prevalencia.

Aunque la idea surge en el año 2002, la denominación de Instituto de Biomoléculas (INBIO) se comenzó a utilizar para referirse a una unidad independiente en 2012. Desde ese momento, el objetivo principal de todos los profesores-investigadores participantes en la propuesta fue el de aunar esfuerzos para constituirse en un centro de referencia en la preparación, caracterización y estudio del papel que desempeñan macromoléculas y moléculas de bajo peso molecular en procesos celulares de vital importancia para la supervivencia de diferentes organismos biológicos. Además, otro objetivo transversal de los investigadores del Instituto es trabajar conjuntamente en la búsqueda de biomoléculas capaces de modular la actividad de dianas biológicas relevantes para la prevención y tratamiento de patologías animales y vegetales de diversas etiologías.

El 21 de julio de 2017, el Rector de la Universidad de Cádiz, recibe el Certificado de la Secretaría General del Consejo Andaluz de Universidades, acreditativo del Informe Favorable en relación con la creación del Instituto INBIO. En el Decreto 121/2017 de la Consejería de Economía y Conocimiento, de 18 de julio, se hace referencia a la constitución del Instituto como un centro universitario de investigación, y en su artículo 5, página 11, del BOJA nº 139 del 21 de julio de 2017, queda aprobada oficialmente la creación del Instituto Universitario de **Investigación en Biomoléculas** de la Universidad de Cádiz, por parte del Consejo de Gobierno de la Junta de Andalucía.

A partir de ese momento, se está a las indicaciones del Reglamento UCA/CG07/2013 de 25 de junio de 2013, Marco de Funcionamiento de los Institutos Universitarios de Investigación (IUIs) de la Universidad de Cádiz, aprobado por Acuerdo del Consejo de Gobierno de 25 de junio de 2013, y publicado en el BOUCA núm. 162. La primera sesión del Consejo del Instituto de Biomoléculas, es convocada el día 26 de octubre de 2017. En esta sesión, presidida por el Sr. Vicerrector de Investigación de la Universidad de Cádiz, se realiza la votación a Director del Instituto, de acuerdo con el calendario electoral establecido.

La Resolución del Rector UCA/R318RECN/2017, de 5 de diciembre de 2017, nombra al Dr. **Francisco Antonio Macías Domínguez** como **Director del INBIO**, tras la proclamación definitiva como electo en las elecciones a la dirección del Instituto presentada por la Junta Electoral de la Facultad de Ciencias de 31 de octubre de 2017, con efectos económicos y administrativos de 17 de diciembre de 2017 (BOUCA 247, de 13/02/2018). La Resolución del Rector UCA/R008RECN/2018, de 12 de enero de 2018, nombra al Dr. **José Ángel Álvarez Saura** como **Secretario del INBIO** a propuesta del Director, con efectos económicos y administrativos de 16 de enero de 2018 (BOUCA 247, de 13/02/2018).

El 27 de febrero de 2018 se realiza el Acto de Constitución del nuevo Consejo de Instituto, tras haberse llevado a cabo las elecciones a miembros representantes del Consejo celebradas el 4 de diciembre de 2017, convocadas el 14 de noviembre de 2017. En este mismo acto, se realiza la actualización de miembros del INBIO, con aprobación de ceses y altas.

El 19 de diciembre de 2017 se inician las reuniones conducentes a la elaboración del Plan Director del Instituto con el siguiente calendario:

Cronología del Plan Director

- 19 de diciembre de 2017 **Sesión 0.** Sesión informativa y de consenso de metodología y calendario del proceso con Director del Instituto propio consolidado INBIO
- 19 de enero de 2018 **Sesión 1.** Asunción, Misión, Visión y Valores de la Universidad y reflexión sobre el papel de los Institutos. Presentación del Vicerrector de Investigación sobre situación del Instituto, Objetivos Estratégicos de la Universidad, Objetivos del Instituto y compromisos firmados.

Revisión de los objetivos del Instituto y comparación con los cometidos comunes de los institutos de la UCA.

Elaboración de análisis DAFO del Instituto

- 1 de febrero de 2018 **Sesión 2**. Análisis sobre los objetivos, peso y grado de desarrollo de los mismos en el Instituto.

  Propuesta de retos y actuaciones del Instituto para los próximos tres años
- 23 de febrero de 2018 Sesión 3. Ponderación de actuaciones.

  Inicio de elaboración del Cuadro de Seguimiento de Actuaciones
- 16 de marzo de 2018 Reunión del Director del Instituto y Vicerrector de Investigación para completar el Cuadro de Seguimiento de Actuaciones y consensuar los compromisos de Contratos Programas.
- 25 de abril de 2018 **Aprobación en Consejo de Instituto.**

El 19 de octubre de 2021 se celebraron elecciones a la dirección del INBIO, a la concurrieron las candidaturas del anterior director del mismo, el Dr. Francisco Antonio Macías, y la del Dr. Manuel Jiménez Tenorio. Dicho proceso electoral tuvo como resultado la elección del Dr. Manuel Jiménes Tenorio como candidato más votado. Se presentaron alegaciones al resultado de dicha votación que fueron resueltas en primera instancia por la Junta Electoral de la Facultad de Ciencias, y en segunda instancia por la Junta Electoral Central, que ratificaron el resultado del proceso electoral. La Resolución del Rector UCA/R354RECN/2021, de 16 de diciembre de 2021, cesa al Dr. **Francisco Antonio Macías Domínguez** como **Director del INBIO**. Tras la conclusión del proceso electoral, y tras la proclamación definitiva como electo en las elecciones a la dirección del Instituto, la Resolución del Rector UCA/R355RECN/2021 nombra al Dr. **Manuel Jiménez Tenorio** como nuevo **Director del INBIO**, con efectos económicos y administrativos de 17 de diciembre de 2021 (BOUCA Nº 347 de 21 de Diciembre de 2021). La Resolución del Rector UCA/R016RECN/2022, de 14 de enero de 2022, asigna temporalmente las funciones de **Secretario del INBIO** al Dr. **Andrés García Algarra** a propuesta del Director, con efectos económicos y administrativos de 14 de enero de 2022 (BOUCA 349, de 31/01/2022).

El Capítulo III sobre "Seguimiento Anual", del Reglamento Marco de IUIs de la UCA, expresa en su artículo 27 de la "Memoria Anual" que se debe entregar a la Secretaría General describiendo los siguientes aspectos de las actividades del año anterior:

a) Los **miembros del Instituto** a fecha 31 de diciembre del año anterior, con especificación de las bajas e incorporaciones en dicho año.
b) Las **actividades desarrolladas**, los **proyectos**, **contratos** y **convenios financiados**.
c) Las **publicaciones**, **trabajos científicos** y **patentes** realizados por sus miembros.
d) Una **memoria económica** que refleje los ingresos y gastos del año anterior y el presupuesto del presente.

MIEMBROS DEL INBIO A 31/12/2021

El Instituto de Biomoléculas de la Universidad de Cádiz lo integran:

- **9** Grupos de Investigación
- **44** Investigadores y **1** PAS (Garantía Juvenil)
  - **28** Profesores con vinculación permanente en la UCA:
    - **12** Catedráticos de Universidad.
    - **13** Profesores Titulares de Universidad.
    - **1** Catedrático de Escuela Universitaria.
    - **2** Profesores Contratados Doctores.

Total de Sexenios de Investigación (**SI**) acumulados: **119**

Valor medio **SI**/Profesor: **3.97**

Número de investigadores con dos o más Sexenios: **30** (96.7%)

Este cálculo está realizado en base al número de miembros que pueden solicitar sexenios (28) más dos personas que mantienen la actividad investigadora como profesores colaboradores honorarios (con publicaciones a lo largo de 2021). Una investigadora (PCD) ha solicitado por primera vez los sexenios en Diciembre de 2021, encontrándose pendiente de resolución, y por ello la cifra no alcanza el 100%. A esta cifra hay que añadir **2 sexenios de transferencia**, con lo cual el número total de sexenios alcanzaría los **121**.

- **12** Personal sin vinculación permanente en la UCA.
  - **3** Profesores Ayudantes Doctores
  - **6** Profesores Sustitutos Interinos
  - **6** Investigadores (Estudiantes de Doctorado, Becarios y otras figuras contractuales)
  - **1** Contratado Programa Garantía Juvenil

Investigador	Categoría	Área de conocimiento
ALVAREZ SAURA, JOSE ANGEL	TU	QUIMICA FISICA
ARROYO GARCIA, ELENA	TA	BIOQUIMICA Y BIOLOGIA MOLECULAR
ASTOLA GONZALEZ, ANTONIO	TU	BIOQUIMICA Y BIOLOGIA MOLECULAR
AYUSO VILACIDES, JESUS	CEU	QUIMICA FISICA
BOLIVAR PEREZ, JORGE	TU	BIOQUIMICA Y BIOLOGIA MOLECULAR
CALA PERALTA, ANTONIO	PSI	QUIMICA ORGANICA
CASANUEVA MARENCO, MARÍA JOSÉ	PSI	QUÍMICA ANALÍTICA
CASTILLO GONZALEZ, CARMEN ESTHER	CAP. VI-IDR1	QUIMICA INORGANICA
COTÁN GARCÍA, ADRIÁN	CAP. VI	QUÍMICA INORGÁNICA
CHINCHILLA SALCEDO, NURIA	TU	QUIMICA ORGANICA
DE LOS REYES JIMENEZ, CAROLINA	PSI	QUIMICA ORGANICA
DE LOS RIOS HIERRO, ISAAC	TU	QUIMICA INORGANICA
DIAZ DE ALBA, MARGARITA	PAD	QUIMICA ANALITICA
FERNANDEZ-TRUJILLO REY, MARIA JESUS	CU	QUIMICA INORGANICA
GALINDO RIAÑO, MARIA DOLORES	CU	QUIMICA ANALITICA
GARCÍA ALGARRA, ANDRÉS	PAD	QUÍMICA INORGÁNICA
GARCIA BASALLOTE, MANUEL	CU	QUIMICA INORGANICA
GARCIA DURAN, ALEXANDRA	PSI	QUIMICA ORGANICA
GARCIA GALINDO, JUAN CARLOS	TU	QUIMICA ORGANICA
GONZALEZ COLLADO, ISIDRO	CU	QUIMICA ORGANICA
GONZALEZ MOLINILLO, JOSE MARIA	CU	QUIMICA ORGANICA
GRANADO CASTRO, Mª DOLORES	PCD	QUIMICA ANALITICA
GUERRA MARTINEZ, FRANCISCO MIGUEL	TU	QUIMICA ORGANICA
HERNANDEZ GALAN, ROSARIO	CU	QUIMICA ORGANICA
IGARTUBURU CHINCHILLA, JOSE M.	TU	QUIMICA ORGANICA
IZQUIERDO BUENO REINA, INMACULADA	PSI	QUIMICA ORGANICA
JIMENEZ TENORIO, MANUEL	CU	QUIMICA INORGANICA
MACIAS BENÍTEZ, PABLO	FPU	QUÍMICA ORGÁNICA
MACIAS DOMINGUEZ, FRANCISCO A.	CU	QUIMICA ORGANICA
MACIAS SANCHEZ, ANTONIO JOSE	CU	QUIMICA ORGANICA
MAÑEZ MUÑOZ, MARIA ANGELES	TU	QUIMICA INORGANICA
MARTINEZ VALDIVIA, MANUEL JESUS	CU	BIOQUIMICA Y BIOLOGIA MOLECULAR
MORAGA GALINDO, JAVIER	PAD	MICROBIOLOGIA
MORENO DORADO, FRANCISCO JAVIER	TU	QUIMICA ORGANICA
ORTEGA AGÜERA, Mª JESUS	TU	QUIMICA ORGANICA
PENDON MELENDEZ, CARLOS	TU	BIOQUIMICA Y BIOLOGIA MOLECULAR
PÉREZ GAGO, ALBERTO	CAP. VI	QUIMICA INORGANICA
PÉREZ SEGURA, Mª CARMEN	FPI-UCA	QUIMICA INORGANICA
PINEDO RIVILLA, CRISTINA	PCD	QUIMICA ORGANICA
RIAL CUMBRERA, CARLOS	PSI	QUÍMICA ORGÁNICA
RODRÍGUEZ MEJÍAS, FRANCISCO JAVIER	POSTDOC	QUÍMICA ORGÁNICA
SILVA TORRES, JULIÁN	PAS-Garantía Juvenil	INBIO

SIMONET MORALES, ANA MARIA	TU	QUIMICA ORGANICA
VARELA MONTOYA, ROSA MARIA	CU	QUIMICA ORGANICA
ZUBIA MENDOZA, EVA	CU	QUIMICA ORGANICA

2. ACTIVIDADES DESARROLLADAS, TESIS, SEMINARIOS, TAREAS DE DIVULGACIÓN, ETC.

2.1. Actividades desarrolladas en el año 2021

Entre las actividades desarrolladas por el Instituto Universitario de Investigación en Biomoléculas de la Universidad de Cádiz, y por sus Miembros, además de la resolución de incidencias cotidianas o menores, se destacan las acciones o hitos que se muestran a continuación. Se incluyen los datos sobre las tesis doctorales defendidas y/o dirigidas por miembros del Instituto, seminarios y cursos en los que el INBIO ha participado en su organización, aportaciones en eventos divulgativos, estancias de investigación, y contratación de personal del programa de Garantía Juvenil.

Defensas de tesis doctorales

1. **Título**: Compuestos bioactivos de *Annona cherimola mill*. **Doctorando:** María Teresa Gutiérrez Vázquez. **Dirigido** por: Francisco Antonio Macías Domínguez y Manuel Jesús Martínez Valdivia. **Año**: 2021.
2. **Título**: Diseño de sistemas de encapsulación de productos bioactivos para mejorar sus propiedades físico-químicas y su aplicación en sistemas agronómicos o farmacológicos. **Doctorando:** Francisco Javier Rodríguez Mejías. **Dirigido** por: Francisco Antonio Macías Domínguez y José María González Molinillo. **Año**: 2021.
3. **Título**: Extracción de moléculas bioactivas de las hojas de girasol (*Helianthus annuus*) utilizando disolventes a alta presión **Doctorando:** Fabio Armando Fuentes Gandara. **Dirigido** por: Francisco Antonio Macías Domínguez y Ascensión Torres Martínez. **Año**: 2021.

Seminarios, jornadas y cursos

- **Seminarios**

- Seminarios INBIO (online): *"Diterpenos como modelos para el estudio de su efecto sobre las células progenitoras neurales"*, por D. Abdellah Ezzanad, 4 Noviembre 2021. Facultad de Ciencias de Puerto Real, Cádiz.

➢ **Cursos**

- Short Intensive Course (online) realizado en el marco de la Universidad Europea de los Mares - SEA-EU: "*Biochemical Ecology and Terpenes from Essential Oils*" (1 ECTS). 3 al 19 de Mayo de 2021. Impartido por Juan Carlos García Galindo (INBIO-UCA) e Igor Jerkovic (Universidad de Split, Croacia).
- Curso de formación para el manejo del equipo **Spray-Drier B-290 y B-90, y Nanoencapsulador B-390**. 13-14 de mayo de 2021. Facultad de Ciencias de Puerto Real, Cádiz.
- Curso de formación para el manejo del equipo **ITC (Isothermal Titration Calorimetry)**. 25 de junio de 2021. Facultad de Ciencias de Puerto Real, Cádiz.
- Curso de **RMN (en los Servicios Centrales).** A lo largo de 2021. Facultad de Ciencias de Puerto Real, Cádiz.

Divulgación

- **CIENCIAS AROUND YOU 2021:** No celebrado en 2021 debido al COVID.
- **CAFÉ CON CIENCIA 2021:** Esta actividad está recogida en el VII Plan de Divulgación de la Ciencia y del Conocimiento de la UCA, perteneciente a la Unidad de Cultura Científica y de la Innovación (UCC+i), del Vicerrectorado de Política Científica y Tecnológica de la Universidad de Cádiz, y que ha sido cofinanciado por la Fundación Española para la Ciencia y la Tecnología (FECYT). En 2021 esta iniciativa ha contado con la participación de 44 investigadores de la Universidad de Cádiz y más de 500 alumnos de secundaria y bachillerato de la provincia pertenecientes a 13 centros educativos. Por parte del INBIO, participaron los

investigdores Jun Carlos G. Galindo y Manuel J. Tenorio con la mesa "*Los venenos en la naturaleza: ¿un peligro o una genialidad de la evolución?*"

Estancias de Investigación

- **Salientes**

Investigador/a: Pablo Macías Benítez

Centro: Université de Bretagne Occidentale (UBO) - Brest, Francia, Grupo de investigación: "Macrocycles Azotés et Coordination" (UMR CNRS 6521-COSM).

Contacto Centro: Raphäel Tripier, Hélène Bernard

Duración de la estancia: 15/09/2021 a 17/12/2021

Programa: Erasmus+ KA103

Investigador/a: Mª Dolores Galindo Riaño

Centro: Universidad de Granada.

Contacto Centro: Máster en Ciencias y Tecnologías Químicas-KHEMIA. Módulo: Avances en Química.

Duración de la estancia: 14/02/2021 a 18/02/2021

Programa: Profesora invitada Máster en Ciencias y Tecnologías Químicas-KHEMIA, Asignatura: Especiación Química.

- **Visitantes**

1) **Investigador/a**: Ikran Es-sbata

Centro: Universidad Moulay Ismail (Meknes, Marruecos)

Duración de la estancia: 2019-2021 (Doctorado)

Programa: Convenio UCA- Universidad Moulay Ismail

Contacto INBIO: Dr. Antonio Astola González

2) **Investigador/a**: Ana Herráez Pérez

Centro: Museo Nacional de Ciencias Naturales-CSIC

Duración de la estancia: 18 a 22 de Octubre 2021

Programa: FPI

Contacto INBIO: Prof. Manuel Jiménez Tenorio

Plan de contratación Garantía Juvenil

Incorporación el 31 de Marzo de 2021 de D. JULIÁN SILVA TORRES, como técnico adscrito al INBIO en el marco del programa de contratación Garantía Juvenil.

3. PROYECTOS, CONTRATOS Y CONVENIOS FINANCIADOS

A continuación, se presentan los proyectos y contratos I+D+i liderados en la Universidad de Cádiz por investigadores del INBIO, que tuvieron al menos una parte de su desarrollo durante el año 2021.

La cuantía de los ingresos obtenidos mediante los proyectos de investigación competitivos de financiación pública activos en 2021 supone la cantidad de 1.030.788 EUR, a los que habría que añadir otros 379.364,18 EUR adicionales correspondientes a proyectos FEDER-UCA. Los ingresos por contratos con distintas entidades públicas o privadas tramitados a través de la Oficina de Transferencia de Resultados de la Investigación (OTRI) de la UCA en las que actuaron algunos Miembros del INBIO como responsables, ascienden a 42.643 ,56 euros originados por 4 contratos.

Proyectos de financiación pública regional y nacional vigentes en 2021

- **BIOESTIMULADORES DE PLANTAS PARÁSITAS. NUEVAS ALTERNATIVAS PARA SU CONTROL EN CULTIVOS DE INTERÉS.**

Código: AGL2017-88083-R

Programa financiador: PN / PLAN ESTATAL PROYECTOS I+D+I / PR / 2017

Entidad financiadora: MINISTERIO DE CIENCIA E INNOVACIÓN

Responsable: MACÍAS DOMÍNGUEZ, FRANCISCO ANTONIO; GONZALEZ MOLINILLO, JOSE MARIA

Fecha inicio: 1/1/2018

Fecha fin: 30/9/2021

Cuantía total: 129.000,00 €

- **PREPARACIÓN Y NANOENCAPSULACIÓN DE HÍBRIDOS DE FITOTOXINAS NATURALES DE POTENCIAL APLICACIÓN EN AGRICULTURA.**

Código: PID2020-115747RB-I00

Programa financiador: PN / PLAN ESTATAL PROYECTOS I+D+I / PR / 2020-059

Entidad financiadora: MINISTERIO DE CIENCIA E INNOVACIÓN

Responsable: MACÍAS DOMÍNGUEZ, FRANCISCO ANTONIO; GONZALEZ MOLINILLO, JOSE MARIA

Fecha inicio: 1/9/2021

Fecha fin: 31/8/2024

Cuantía total: 199.650,00 €

- **ESTUDIOS CINÉTICO-MECANÍSTICOS SOBRE PROCESOS CATALÍTICOS DE OXIDACIÓN E HIDROGENACIÓN Y REACCIONES RELACIONADAS.**

Código: PID2019-107006GB-C22

Programa financiador: PN / PE-GENERACIÓN-CONOCIMIENTO / PR / 2019-079

Entidad financiadora: MINISTERIO DE CIENCIA, INNOVACIÓN Y UNIVERSIDADES

Responsable: GARCIA BASALLOTE, MANUEL

Fecha inicio: 1/6/2020

Fecha fin: 31/5/2023

Cuantía total: 84.700€

- **DESARROLLO DE DITERPENOS COMO AGENTES PROMOTORES DE LA REGENERACIÓN NEURONAL.**

Código: P18-RT-2655

Programa financiador: PAI / PAIDI2020 / PR / 2018-104

Entidad financiadora: CONSEJERÍA DE ECONOMÍA, INNOVACIÓN Y CIENCIA – JUNTA DE ANDALUCÍA

Responsable: HERNANDEZ GALAN, ROSARIO

Fecha inicio: 1/1/2020

Fecha fin: 31/3/2023

Cuantía total: 119.800€

- **CARACTERIZACIÓN DE NUEVAS DIANAS MOLECULARES DE BOTRYTIS CINEREA MEDIANTE TÉCNICAS OMICAS. UNA APROXIMACIÓN AL CONTROL DE LAS INFECCIONES CAUSADAS POR ESTE FITOPATÓGENO.**

Código: RTI2018-097356-B-C21

Programa financiador: PN / PE-RETOS / PR / 2018-102

Entidad financiadora: MINISTERIO DE CIENCIA, INNOVACIÓN Y UNIVERSIDADES

Responsable: GONZÁLEZ COLLADO, ISIDRO

Fecha inicio: 1/1/2019

Fecha fin: 30/06/2022

Cuantía total: 139.150€

- **DITERPENOS COMO NUEVOS MODELOS DE FÁRMACOS EN TERAPIAS DE REGENERACIÓN NEURONAL.**

Código: RTI2018-099908-B-C22

Programa financiador: PN / PE-RETOS / PR / 2018-102

Entidad financiadora: MINISTERIO DE CIENCIA, INNOVACIÓN Y UNIVERSIDADES

Responsable: HERNANDEZ GALÁN, ROSARIO

Fecha inicio: 1/1/2019

Fecha fin: 31/12/2022

Cuantía total: 54.450€

- **UNA APROXIMACIÓN TEÓRICO-EXPERIMENTAL A LA ACTIVACIÓN REVERSIBLE DE H_2.**

Código: FEDER-UCA18-106840

Programa financiador: PN / PE-RETOS / PR / 2018-102

Entidad financiadora: CONSEJERÍA DE ECONOMÍA Y CONOCIMIENTO – JUNTA DE ANDALUCÍA

Responsable: GARCÍA ALGARRA, ANDRÉS

Fecha inicio: 01/04/2020

Fecha fin: 31/12/2021

Cuantía total: 49.938€

- **HACIA CATALIZADORES HOMO Y HETERO DIATÓMICOS DE AU-PD SOPORTADOS SOBRE ÓXIDOS: SÍNTESIS, CATACTERIZACIÓN ATÓMICA Y ACTIVIDAD EN LA REACCIÓN DE OXIDACIÓN SELECTIVA DE ALCOHOLES.**

Código: PID2019-110018GA-I00

Programa financiador: PN / PE-GENERACIÓN-CONOCIMIENTO / PR / 2019-079

Entidad financiadora: MINISTERIO DE CIENCIA, INNOVACIÓN Y UNIVERSIDADES

Responsable: CASTILLO GONZÁLEZ, CARMEN ESTHER

Fecha inicio: 01/06/2020

Fecha fin: 31/05/2023

Cuantía total: 96.800€

- **EXPLORANDO LA FICOSFERA: INTERACCIONES ENTRE FITOPLANCTON PRODUCTOR DE ALDEHÍDOS POLIINSATURADOS Y SUS PROCARIOTAS**

ASOCIADOS.

Código: RTI2018-101272-B-I00

Programa financiador: PN / PE-RETOS / PR / 2018-102

Entidad financiadora: MINISTERIO DE CIENCIA, INNOVACIÓN Y UNIVERSIDADES

Responsable: ORTEGA AGÜERA, MARÍA JESÚS

Fecha inicio: 01/01/2019

Fecha fin: 30/09/2022

Cuantía total: 157.300€

Proyectos de financiación pública local (UCA) vigentes en 2021

- **ESTUDIO DEL METABOLISMO SECUNDARIO DEL HONGO FITOPATÓGENO EUTYPA LATA. IDENTIFICACIÓN DE NUEVAS DIANAS BIOLÓGICAS Y DESARROLLO DE NUEVAS ESTRATEGIAS PARA SU CONTROL.**

Código: FEDER-UCA18-108645

Programa financiador: Investigadores Emergentes UCA

Entidad financiadora: PROYECTOS I+D+I / FEDER-UCA18-10864

Responsable: PINEDO RIVILLA, CRISTINA

Fecha inicio: 01/04/2020

Fecha fin: 31/03/2023

Cuantía total: 70.000,18€

- **ESTUDIO DEL METABOLISMO SECUNDARIO DE LOS HONGOS DE ORIGEN MARINO "EMERICELLOPSIS MARITIMA" Y "PURPEREOCILLIUM LILACINUM" COMO FUENTE DE NUEVOS COMPUESTOS CON ACTIVIDAD FARMACOLÓGICA.**

Código: CEIJ19-C06.1

Programa financiador: Jóvenes Investigadores

Entidad financiadora: CEIMAR

Responsable: PINEDO RIVILLA, CRISTINA

Fecha inicio: 22/11/2019

Fecha fin: 30/11/2021

Cuantía total: 4000€

- **CONTROL TERMO-CINÉTICO DE PRECURSORES MOLECULARES EN DISOLUCIÓN PARA LA PREPARACIÓN EFICIENTE DE CATALIZADORES MEDIO-AMBIENTALES AVANZADOS.**

Código: FEDER-UCA18-106753

Programa financiador: Investigadores Emergentes UCA

Entidad financiadora: PROYECTOS I+D+I / FEDER-UCA18-106753

Responsable: CASTILLO GONZÁLEZ, CARMEN ESTHER

Fecha inicio: 01/04/2020

Fecha fin: 31/03/2023

Cuantía total: 150.364€

APPLICATION OF NEW INTEGRATED IMAGING TOOLS TO IDENTIFY THERAPEUTICS FOR CILIARY GENETIC DISORDERS (CILIOPATHIES)

Código: FEDER-UCA18-108266

Programa financiador: Investigadores Emergentes UCA

Entidad financiadora: PROYECTOS I+D+I / FEDER-UCA18-106753

Responsable: REALES RODRÍGUEZ, ELENA (Investigadora novel); MACÍAS DOMÍNGUEZ, FRANCISCO ANTONIO (Investigador senior)

Fecha inicio: 2020

Fecha fin: 2023

Cuantía total: 155.000€

Contratos con industrias y organismos nacionales e internacionales

- **SÍNTESIS DEL ALÉRGENO 2-METOXI-6-PENTIL-1,4-BENZOQUINONA (PRIMINA-CAS 15121-94-5)**

Código: OT2021/138

Razón social: ADL BIONATUR SOLUTIONS SA (BIONATURIS)

Responsable: MORENO DORADO, FRANCISCO JAVIER

Fecha inicio: 16/12/2021

Fecha fin: 16/12/2022

Cuantía total: 12.100,00 €

Costes indirectos: 1.000,00 €

- **BIOVALORIZACIÓN DE GLICERINA TÉCNICA PARA LA OBTENCIÓN DE ETANOL**

  Código: OT2021/060

  Razón social: BIOAGRICAN ADCI S.L

  Responsable: BOLIVAR PEREZ, JORGE

  Fecha inicio: 01/07/2021

  Fecha fin: 31/01/2022

  Cuantía total: 10.276,06 €

  Costes indirectos: 849,26 €

- **SÍNTESIS DEL ALÉRGENO 2-METOXI-6-PENTIL-1,4-BENZOQUINONA (PRIMINA-CAS 15121-94-5)**

  Código: OT2020/105

  Razón social: ADL BIONATUR SOLUTIONS SA (BIONATURIS)

  Responsable: MORENO DORADO, FRANCISCO JAVIER

  Fecha inicio: 16/11/2020

  Fecha fin: 16/11/2021

  Cuantía total: 12.100,00 €

  Costes indirectos: 1.000,00 €

- **VALORIZACION DE LOS ARRIBAZONES DEL ALGA INVASORA RUGULOPTERIX OKAMURAE COMO INGREDIENTE PARA LA ALIMENTACION DE ESPECIES DE ACUICULTURA: APLICACIÓN EN EL CULTIVO DE DORADA (VALINVA-BREAM)**

  Código: OT2019/135

  Razón social: LifeBIOENCAPSULATION, S.L.

  Responsable: ASTOLA GONZALEZ, ANTONIO

  Fecha inicio: 01/12/2019

  Fecha fin: 31/07/2021

  Cuantía total: 8.167,50 €

  Costes indirectos: 675,00 €

Adquisición e instalación de nuevos equipos de infraestructura científica a lo largo de 2021

Durante el año 2021 se han adquirido/instalado los siguientes equipamientos en las dependencias del INBIO en la Facultad de Ciencias:

- Conjunto compuesto por MINISPRAY DRYER B-290, NANOSPRAY B-90 ADVANCED, ENCAPSULADOR B-395 PRO y GENERADOR DE NITRÓGENO ZEFIRO 25 (Nº etiqueta **0100003091**)
- BAÑO DE ULTRASONIDOS 6,9 L C/CALEFACCIÓN S 70 H 1002140 ELMA (Nº etiqueta **1520024622**)
- TAMIZADORA VIBRADORA DIGITAL 200/203 M FTL-0200 FILTRA (Nº etiqueta **1520024726**)
- ULTRACONGELADOR VERTICAL (Nº etiqueta **1520024579**)

4. PUBLICACIONES, TRABAJOS CIENTÍFICOS Y REGISTROS DE LA PROPIEDAD

Sexenios concedidos

Se detallan el número total de sexenios concedidos a los investigadores del Instituto en 2021.

Investigador	Nº Sexenios
García Basallote, Manuel	6
González Collado, Isidro	6
Macías Domínguez, Francisco Antonio	6
Martínez Valdivia, Manuel Jesús	6
*Puerta Vizcaíno, Mª Carmen**	*6*
*Valerga Jiménez, Pedro Sixto**	*6*
Fernández-Trujillo Rey, María Jesús	5
González Molinillo, José María	5
Hernández Galán, Rosario	5
Jiménez Tenorio, Manuel	5
Zubia Mendoza, Eva	5
Bolívar Pérez, Jorge	4
García Galindo, Juan Carlos	4
Guerra Martínez, Francisco Miguel	4
Macías Sánchez, Antonio José	4
Mañez Muñoz, María Angeles	4
Moreno Dorado, Francisco Javier	4
Ortega Agüera, Mª Jesús	4
Pendón Meléndez, Carlos	4+1 transf.
Simonet Morales, Ana María	4
Varela Montoya, Rosa María	4+1 transf.
Astola González, Antonio	3
Galindo Riaño, María Dolores	3
Álvarez Saura, José Angel	2
Ayuso Vilacides, Jesús	2
Chinchilla Salcedo, Nuria	2
De los Ríos Hierro, Isaac	2
Granado Castro, Mª Dolores	2
Igartuburu Chinchilla, José Manuel	2
Total Sexenios	119 + 2 transf.

** Los profesores M. Carmen Puerta y Pedro Valerga se han incluído al tratarse de profesores colaboradores honorarios que continúan en activo en grupo PAIDI.*

Producción científica detallada en 2021

La producción científica de los investigadores del INBIO a lo largo de 2021 incluye 2 patentes, 2 capítulos de libro, 50 publicaciones en revistas indexadas, la gran mayoría de ellas (42, ca. 80%) pertenecientes al primer cuartil, y 3 publicaciones en la categoría "otros" (erratas).

Patentes

1. **Título de la patente:** Procedimiento de obtención de una composición farmacéutica empleando acetogeninas con micelas poliméricas supramoleculares para el tratamiento de cáncer de piel

Autores de la patente: Rodríguez Mejías, F. J.; Martínez Valdivia, M. J.; Macías Domínguez, F. A.; Gutiérrez Vázquez, M. T.; González Molinillo, J. M.; García Durán, A.

Publicación principal: ES2854523A1 (21-09-2021)

Solicitudes: P202031011 (06-10-2020)

INVENES: https://consultas2.oepm.es/InvenesWeb/detalle?referencia=P202031011

Año: 2021

2. **Título de la patente:** Procedimiento de obtención de una composición farmacéutica empleando acetogeninas con micelas poliméricas supramoleculares para el tratamiento de cáncer de piel

Autores de la patente: Gutiérrez Vázquez, M. T.; Rodríguez Mejías, F. J. ; García Durán, A.; González Molinillo, J. M.; Macías Domínguez, F. A.; Martínez Valdivia, M. J.

Publicación principal: ES2826205A1 (17-05-2021)

Solicitudes: P201900173 (15-11-2019)

INVENES: https://consultas2.oepm.es/InvenesWeb/detalle?referencia=P201900173

Año: 2021

Capítulos de libro

1. **Título del capítulo:** Fish embryonic stem cells as tools for chronobiological and

endocrinological studies

Autores del capítulo: Vergés Castillo, A., Pendon Melendez, C., Muñoz Cueto, J. A., & Martín Robles, Á. J.

Título del libro: Advances in Comparative Endocrinology: Proceedings from communications presented at the XII Conference of the Iberian Association for Comparative Endocrinology (AIEC)

Página inicial: 47

Página final: 50

Editorial: Universidade do Algarve

ISBN: 978-989-9023-31-4

Año: 2021

2. **Título del capítulo:** Escherichia coli, the workhorse cell factory for the production of chemicals

Autores del capítulo: Valle, A., & Bolívar, J.

Título del libro: Microbial Cell Factories Engineering for Production of Biomolecules

Página inicial: 115

Página final: 137

Editorial: Elsevier

ISBN: 9780128214770

Año: 2021

Publicaciones en revistas 2021

1. Herrera, Matias, Soares, Ribeiro, Moreira, Salamanca, Jerez-Cepa, Mancera, & Astola. (2021). Effect of amino acid supplementation and stress on expression of molecular markers in meagre (*Argyrosomus regius*). Aquaculture, 534. https://doi.org/10.1016/j.aquaculture.2020.736238
2. Moraga, J., Izquierdo-Bueno Reina, I., Pinedo, C., Hernández-Galán, R., Viaud, M., & Collado, I. G. (2021). Impairment of botrydial production in *Botrytis cinerea* allows the isolation of undescribed polyketides and reveals new insights

into the botcinins biosynthetic pathway. Phytochemistry, 183. https://doi.org/10.1016/j.phytochem.2020.112627

3. Simonet, A. M., Durán, A. G., Pérez, A. J., & Macías, F. A. (2021). Features in the NMR spectra of the aglycones of *Agave* spp. saponins. HMBC method for aglycone identification (HMAI). Phytochemical Analysis, 32(1), 38-61. John Wiley and Sons Ltd. https://doi.org/10.1002/pca.2946
4. Hernán, G., Ortega, M. J., Henderson, J., Alós, J., Boyer, K., Cimon, S., Combes, V., Cusson, M., Hereu, C. M., Hessing-Lewis, M., Hovel, K., Jorgensen, P., Kiriakopolos, S., Kollars, N., O´Connor, M. I., Olsen, J., Reynolds, P. L., Ruesink, J., Voigt, E., & Tomas, F. (2021). Latitudinal variation in plant defence against herbivory in a marine foundation species does not follow a linear pattern: The importance of resource availability. Global Ecology and Biogeography, 30(1), 220-234. https://doi.org/10.1111/geb.13217
5. Falatová, B., Ferreiro-González, M., Calle, J. L. P., Álvarez, J. Á., & Palma, M. (2021). Discrimination of ignitable liquid residues in burned petroleum-derived substrates by using HS-MS eNose and chemometrics. Sensors (Switzerland), 21(3), 1-12. https://doi.org/10.3390/s21030801
6. Guillamón, E., Oliva, M., Andrés, J., Llusar, R., Pedrajas, E., Safont, V. S., Algarra, A. G., & Basallote, M. G. (2021). Catalytic Hydrogenation of Azobenzene in the Presence of a Cuboidal Mo_3S_4 Cluster via an Uncommon Sulfur-Based H_2 Activation Mechanism. ACS Catalysis, 11(2), 608-614. https://doi.org/10.1021/acscatal.0c05299
7. Castillo, C. E., Gamba, I., Vicens, L., Clémancey, M., Latour, J.-M., Costas, M., & Basallote, M. G. (2021). Spin State Tunes Oxygen Atom Transfer towards $Fe^{IV}O$ Formation in Fe^{II} Complexes. Chemistry - A European Journal, 27(15), 4946-4954. https://doi.org/10.1002/chem.202004921
8. Mejías, F. J. R., Trasobares, S., Varela, R. M., Molinillo, J. M. G., Calvino, J. J., & Macías, F. A. (2021). One-step encapsulation of ortho-disulfides in functionalized zinc MOF. Enabling metal–organic frameworks in agriculture. ACS Applied Materials and Interfaces, 13(7), 7997-8005. https://doi.org/10.1021/acsami.0c21488

9. Soto-Varela, Z. E., Cabrera, G., Romero, A., Cantero, D., Valle, A., & Bolivar, J. (2021). Identification of enzymatic bottlenecks for the aerobic production of malate from glycerol by the systematic gene overexpression of anaplerotic enzymes in escherichia coli. International Journal of Molecular Sciences, 22(5), 1-17. https://doi.org/10.3390/ijms22052266
10. Celaj, O., Durán, A. G., Cennamo, P., Scognamiglio, M., Fiorentino, A., Esposito, A., & D'Abrosca, B. (2021). Correction to: Phloroglucinols from Myrtaceae: attractive targets for structural characterization, biological properties and synthetic procedures (Phytochemistry Reviews, (2021), 20, 1, (259-299), 10.1007/s11101-020-09697-2). En Phytochemistry Reviews (Vol. 20, Número 1, p. 301). Springer Science and Business Media B.V. https://doi.org/10.1007/s11101-020-09706-4
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14. Mejías, F. J. R., Durán, A. G., Zorrilla, J. G., Varela, R. M., Molinillo, J. M. G., Valdivia, M. M., & Macías, F. A. (2021). Acyl Derivatives of Eudesmanolides To Boost their Bioactivity: An Explanation of Behavior in the Cell Membrane Using a Molecular Dynamics Approach. ChemMedChem, 16(8), 1297-1307. https://doi.org/10.1002/cmdc.202000783
15. Domínguez-García, S., Gómez-Oliva, R., Geribaldi-Doldán, N., Hierro-Bujalance, C., Sendra, M., Ruiz, F. A., Carrascal, L., Macías-Sánchez, A. J., Verástegui, C., Hernández-Galán, R., García-Alloza, M., Nunez-Abades, P., & Castro, C. (2021). Effects of classical PKC activation on hippocampal neurogenesis and cognitive performance: mechanism of action. Neuropsychopharmacology, 46(6), 1207-1219. https://doi.org/10.1038/s41386-020-00934-y
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17. Casal-Porras, I., Zubía, E., & Brun, F. G. (2021). Dilkamural: A novel chemical weapon involved in the invasive capacity of the alga *Rugulopteryx okamurae* in the Strait of Gibraltar. Estuarine, Coastal and Shelf Science, 257. https://doi.org/10.1016/j.ecss.2021.107398
18. Durán, A. G., Gutiérrez, M. T., Mejías, F. J. R., Molinillo, J. M. G., & Macías, F. A. (2021). An overview of the chemical characteristics, bioactivity and achievements regarding the therapeutic usage of acetogenins from *Annona cherimola* mill. Molecules, 26(10). MDPI AG. https://doi.org/10.3390/molecules26102926

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20. Silva, E. R., Igartuburu, J. M., Overbeck, G. E., Soares, G. L. G., & Macías, F. A. (2021). Are phytotoxic effects of *Eucalyptus saligna* (Myrtaceae) essential oil related to its major compounds? Australian Journal of Botany, 69(3), 174-183. https://doi.org/10.1071/BT20082
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22. Bolivar-Anillo, H. J., González-Rodríguez, V. E., Cantoral, J. M., García-Sánchez, D., Collado, I. G., & Garrido, C. (2021). Endophytic bacteria *Bacillus subtilis*, isolated from zea mays, as potential biocontrol agent against *Botrytis cinerea*. Biology, 10(6). https://doi.org/10.3390/biology10060492
23. Carbú, M., Moraga, J., Cantoral, J. M., Collado, I. G., & Garrido, C. (2021). Correction to: Recent approaches on the genomic analysis of the phytopathogenic fungus *Colletotrichum* spp. (Phytochemistry Reviews, (2020), 19, 3, (589-601), 10.1007/s11101-019-09608-0). En Phytochemistry Reviews (Vol. 20, Número 4, pp. 869-873). Springer Science and Business Media B.V. https://doi.org/10.1007/s11101-020-09716-2
24. Cala, A., Salcedo, J. R., Torres, A., Varela, R. M., Molinillo, J. M. G., & Macías, F. A. (2021). A study on the phytotoxic potential of the seasoning herb marjoram (*Origanum majorana* L.) leaves. Molecules, 26(11). https://doi.org/10.3390/molecules26113356
25. Vergès-Castillo, González-Vargas, Muñoz-Cueto, Martín-Robles, & Pendon. (2021). Establishment and characterisation of single cell-derived embryonic stem cell lines from the gilthead seabream, *Sparus aurata*. Comparative Biochemistry and Physiology Part - B: Biochemistry and Molecular Biology, 256. https://doi.org/10.1016/j.cbpb.2021.110626

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Coordination Chemistry Reviews, 443. Elsevier B.V. https://doi.org/10.1016/j.ccr.2021.213997

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36. Casal-Porras, I., Jiménez-Ramos, R., Zubía, E., & Brun, F. G. (2021). Importance of the chemical defenses and sugars in the feeding preference of *Paracentrotus lividus* over two sympatric template seagrass species. Estuarine, Coastal and Shelf Science, 259. https://doi.org/10.1016/j.ecss.2021.107466
37. Cid, R., & Bolívar, J. (2021). Platforms for production of protein-based vaccines: From classical to next-generation strategies. Biomolecules, 11(8). MDPI AG. https://doi.org/10.3390/biom11081072
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Sesquiterpenoids and a Study of Their Phytotoxic Activity. Journal of Natural Products, 84(8), 2295-2302. https://doi.org/10.1021/acs.jnatprod.1c00396

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51. Durán, A. G., Benito, J., Macías, F. A., & Simonet, A. M. (2021). Agave steroidal saponins as potential bioherbicides. Agronomy, 11(12). https://doi.org/10.3390/agronomy11122404
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Impacto de las publicaciones en revistas indexadas en 2021

Revista	Mejor cuartil SJR	Categorías SJR	Nº Artículos
ACS Catalysis	Q1	Catalysis (Q1)	1
ACS Applied Materials and Interfaces	Q1	Materials Science (Q1); Medicine (Q1); Nanoscience and Nanotechnology (Q1)	1
Agronomy	Q1	Agronomy and Crop Science	5
Aquaculture	Q1	Aqucatic Science	1
Animals	Q1	Veterinary (Q1): Animal Science and Zoology (Q2)	1
Australian Journal of Botany	Q2	Plant Science (Q2); Ecology, Evolution, Behavior and Systematics (Q3)	1
Biology	Q1	Agricultural and Biological Sciences (Q1); Biochemistry, Genetics and Molecular Biology (Q1); Immunology and Microbiology (Q1)	1
Bioelectrochemistry	Q1	Biophysics (Q2); Electrochemistry (Q2); Physical and Theoretical Chemistry (Q1); Medicine (Q2)	1
Biomolecules	Q2	Biochemistry (Q2); Molecular Biology (Q2)	1
Biomass Conversion and Biorefinery	Q2	Renewable Energy, Sustainability and the Environment (Q2)	1
Chemistry – A European Journal	Q2	Catalysis| Organic Chemistry	1
Catalysis Today	Q1	Catalysis (Q2); Chemistry (Q1)	1
ChemMedChem	Q2	Biochemistry| Molecular Medicine| Organic Chemistry| General Pharmacology, Toxicology and Pharmaceutics| Drug Discovery| Pharmacology	1
Comparative Biochemistry and Physiology Part - B: Biochemistry and Molecular Biology	Q2	Animal Science and Zoology (Q2); Aquatic Science (Q2); Biochemistry (Q3); Molecular Biology (Q3); Physiology (Q3)	1
Coordination Chemistry Reviews	Q1	Inorganic Chemistry| Physical and Theoretical Chemistry| Materials Chemistry	1
Estuarine, Coastal and Shelf Science	Q1	Aquatic Science (Q1); Oceanography (Q1)	2
European Journal Of Inorganic Chemistry	Q2	Inorganic Chemistry	1
Foods	Q2	Food Science| Plant Science| Microbiology| Health (social science)| Health Professions (miscellaneous)	1
GigaScience	Q1	Computer Science Applications (Q1); Health Informatics (Q1)	1
Global Ecology and Biogeography	Q1	Ecology (Q1); Ecology, Evolution, Behavior and Systematics (Q1); Global and Planetary Change (Q1)	1
International Journal of Molecular Sciences	Q1	Molecular Biology| Catalysis| Inorganic Chemistry| Organic Chemistry| Physical and Theoretical Chemistry| Spectroscopy| Computer Science Applications	1
International Journal Of Hydrogen Energy	Q1	Energy Engineering and Power Technology (Q1); Fuel Technology (Q1); Renewable Energy, Sustainability and the Environment (Q1); Condensed Matter Physics (Q1)	1

International Journal of Environmental Research and Public Health	Q2	Health, Toxicology and Mutagenesis (Q2); Pollution (Q2); Public Health, Environmental and Occupational Health (Q2)	1
Journal Of Agricultural And Food Chemistry	Q1	Agricultural and Biological Sciences (miscellaneous) (Q1); Chemistry (miscellaneous) (Q1)	1
Journal of Fungi	Q1	Ecology, Evolution, Behavior and Systematics (Q1); Plant Science (Q1); Microbiology (Q1)	1
Journal of Medicinal Chemistry	Q1	Molecular Medicine (Q1); Drug Discovery (Q1)	1
Journal Of Natural Products	Q1	Analytical Chemistry (Q1); Complementary and Alternative Medicine (Q1); Drug Discovery (Q1); Organic Chemistry (Q1); Pharmaceutical Science (Q1); Pharmacology (Q1); Molecular Medicine (Q2)	2
Journal Of Organic Chemistry	Q1	Organic Chemistry (Q1)	1
Marine Drugs	Q1	Drug Discovery (Q1)	1
Molecules	Q1	Medicine (miscellaneous) (Q1); Organic Chemistry (Q2)	5
Nature Reviews Drug Discovery	Q1	Medicine (miscellaneous) (Q1); Drug Discovery (Q1); Pharmacology (Q1)	1
Neuropsychopharmacology	Q1	Psychiatry and Mental Health| Pharmacology	1
Organometallics	Q1	Inorganic Chemistry (Q1); Organic Chemistry (Q1); Physical and Theoretical Chemistry (Q1)	2
Phytochemical Analysis	Q2	Food Science| Plant Science| Biochemistry| Molecular Medicine| Analytical Chemistry| Complementary and Alternative Medicine| Drug Discovery	1
Phytochemistry	Q1	Horticulture (Q1); Medicine (miscellaneous) (Q1); Plant Science (Q1); Biochemistry (Q2); Molecular Biology (Q3)	1
Phytochemistry Reviews	Q1	Plant Science (Q1); Biotechnology (Q1)	3
Plant Cell and Environment	Q1	Plant Science| Physiology	1
Polymers	Q1	Chemistry (miscellaneous) (Q1); Polymers and Plastics (Q1)	1
Sensors	Q2	Biochemistry (Q3); Analytical Chemistry (Q2); Information Systems (Q2); Electrical and Electronic Engineering (Q2); Medicine (Q2); Atomic and Molecular Physics, And Optics (Q2)	1
Zooloogica Scripta	Q1	Animal Science and Zoology| Ecology, Evolution, Behavior and Systematics| Genetics| Molecular Biology	1

Informe de citas en el período 2017 - 2021

Año Pub.	Citas	Título	Nombre
2017	36	Authentication of virgin olive oil by a novel curve resolution approach combined with visible spectroscopy	ALVAREZ SAURA, JOSE ANGEL
2017	13	Characterization and Differentiation of Petroleum-Derived Products by E-Nose Fingerprints	ALVAREZ SAURA, JOSE ANGEL
2017	15	Complexation of sesquiterpene lactones with cyclodextrins: synthesis and effects on their activities on parasitic weeds	ALVAREZ SAURA, JOSE ANGEL
2017	11	Validation of an HS-MS method for direct determination and classification of ignitable liquids	ALVAREZ SAURA, JOSE ANGEL
2018	10	An Electronic Nose Based Method for the Discrimination of Weathered Petroleum-Derived Products	ALVAREZ SAURA, JOSE ANGEL
2019	33	Escape Class Room: Can You Solve a Crime Using the Analytical Process?	ALVAREZ SAURA, JOSE ANGEL
2019	9	Extraction of Antioxidants from Blackberry (*Rubus ulmifolius* L.): Comparison between Ultrasound- and Microwave-Assisted Extraction Techniques	ALVAREZ SAURA, JOSE ANGEL
2019	15	FT-IR, Vis spectroscopy, color and multivariate analysis for the control of ageing processes in distinctive Spanish wines	ALVAREZ SAURA, JOSE ANGEL
2019	1	OTP-PRL: an app for occupational risk prevention in policing activities	ALVAREZ SAURA, JOSE ANGEL
2020	0	A legal and forensic medicine approach to police physical intervention techniques in high-risk situations	ALVAREZ SAURA, JOSE ANGEL
2020	10	Extraction of anthocyanins and total phenolic compounds from açai (euterpe oleracea mart.) using an experimental design methodology. part 1: Pressurized liquid extraction	ALVAREZ SAURA, JOSE ANGEL
2020	5	Extraction of anthocyanins and total phenolic compounds from Açai (Euterpe oleracea Mart.) using an experimental design methodology. Part 2: Ultrasound-assisted extraction	ALVAREZ SAURA, JOSE ANGEL
2020	8	Extraction of anthocyanins and total phenolic compounds from açai (euterpe oleracea mart.) using an experimental design methodology. part 3: Microwave-assisted extraction	ALVAREZ SAURA, JOSE ANGEL
2020	12	Optimization of a novel method based on ultrasound-assisted extraction for the quantification of anthocyanins and total phenolic compounds in blueberry samples (Vaccinium corymbosum l.)	ALVAREZ SAURA, JOSE ANGEL
2020	8	Optimization of analytical ultrasound-assisted methods for the extraction of total phenolic compounds and anthocyanins from sloes (Prunus spinosa L.)	ALVAREZ SAURA, JOSE ANGEL
2021	0	A methodology based on ft-ir data combined with random forest model to generate spectralprints for the characterization of high-quality vinegars	ALVAREZ SAURA, JOSE ANGEL
2021	2	Discrimination of ignitable liquid residues in burned petroleum-derived substrates by using HS-MS eNose and chemometrics	ALVAREZ SAURA, JOSE ANGEL
2017	15	Molecular performance of Prl and Gh/Igf1 axis in the Mediterranean meager, Argyrosomus regius, acclimated to different rearing salinities	ASTOLA GONZALEZ, ANTONIO
2021	0	Corrigendum to "Effect of amino acid supplementation and stress on expression of molecular markers in meagre (Argyrosomus regius)" (Aquaculture (2021) 534, (736238), (S0044848620339442), (10.1016/j.aquaculture.2020.736238))	ASTOLA GONZALEZ, ANTONIO
2021	0	Effect of amino acid supplementation and stress on expression of molecular markers in meagre (Argyrosomus regius)	ASTOLA GONZALEZ, ANTONIO
2021	0	Osmoregulatory plasticity of juvenile greater amberjack (Seriola dumerili) to environmental salinity	ASTOLA GONZALEZ, ANTONIO
2017	36	Authentication of virgin olive oil by a novel curve resolution approach combined with visible spectroscopy	AYUSO VILACIDES, JESUS
2017	13	Characterization and Differentiation of Petroleum-Derived Products by E-	AYUSO

		Nose Fingerprints	VILACIDES, JESUS
2017	15	Complexation of sesquiterpene lactones with cyclodextrins: synthesis and effects on their activities on parasitic weeds	AYUSO VILACIDES, JESUS
2017	11	Validation of an HS-MS method for direct determination and classification of ignitable liquids	AYUSO VILACIDES, JESUS
2018	10	An Electronic Nose Based Method for the Discrimination of Weathered Petroleum-Derived Products	AYUSO VILACIDES, JESUS
2018	7	Study of the Weathering Process of Gasoline by eNose	AYUSO VILACIDES, JESUS
2019	15	FT-IR, Vis spectroscopy, color and multivariate analysis for the control of ageing processes in distinctive Spanish wines	AYUSO VILACIDES, JESUS
2019	1	OTP-PRL: an app for occupational risk prevention in policing activities	AYUSO VILACIDES, JESUS
2020	0	A legal and forensic medicine approach to police physical intervention techniques in high-risk situations	AYUSO VILACIDES, JESUS
2020	2	Evaluation of the police operational tactical procedures for reducing officer injuries resulting from physical interventions in problematic arrests. The case of the municipal police of Cádiz (Spain)	AYUSO VILACIDES, JESUS
2020	10	Extraction of anthocyanins and total phenolic compounds from açai (euterpe oleracea mart.) using an experimental design methodology. part 1: Pressurized liquid extraction	AYUSO VILACIDES, JESUS
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2020	8	Optimization of analytical ultrasound-assisted methods for the extraction of total phenolic compounds and anthocyanins from sloes (Prunus spinosa L.)	AYUSO VILACIDES, JESUS
2021	0	A methodology based on ft-ir data combined with random forest model to generate spectralprints for the characterization of high-quality vinegars	AYUSO VILACIDES, JESUS
2017	4	Heterologous expression of the human Phosphoenol Pyruvate Carboxykinase (hPEPCK-M) improves hydrogen and ethanol synthesis in the Escherichia coli dcuD mutant when grown in a glycerol-based medium	BOLIVAR PEREZ, JORGE
2017	9	The atheroma plaque secretome stimulates the mobilization of endothelial progenitor cells ex vivo	BOLIVAR PEREZ, JORGE
2019	4	A genetically engineered Escherichia coli strain overexpressing the nitroreductase NfsB is capable of producing the herbicide D-DIBOA with 100% molar yield	BOLIVAR PEREZ, JORGE
2019	5	Evidence for Escherichia coli DcuD carrier dependent FOF1-ATPase activity during fermentation of glycerol	BOLIVAR PEREZ, JORGE
2019	8	Main Variables Affecting a Chemical-Enzymatic Method to Obtain Protein and Amino Acids from Resistant Microalgae	BOLIVAR PEREZ, JORGE
2019	11	Metabolic engineering for the optimization of hydrogen production in Escherichia coli: A review	BOLIVAR PEREZ, JORGE
2019	4	Overexpression of the nitroreductase NfsB in an E. coli strain as a whole-cell biocatalyst for the production of chlorinated analogues of the natural herbicide DIBOA	BOLIVAR PEREZ, JORGE
2020	6	A novel PKC activating molecule promotes neuroblast differentiation and delivery of newborn neurons in brain injuries	BOLIVAR PEREZ, JORGE
2020	0	Optimization of the biocatalysis for D-DIBOA synthesis using a quick and sensitive new spectrophotometric quantification method	BOLIVAR PEREZ, JORGE
2020	8	Versatile method to obtain protein- and/or amino acid-enriched extracts from fresh biomass of recalcitrant microalgae without mechanical pretreatment	BOLIVAR PEREZ, JORGE
2021	0	Co-overexpression of the malate dehydrogenase (Mdh) and the malic	BOLIVAR PEREZ,

		enzyme A (MaeA) in several Escherichia coli mutant backgrounds increases malate redirection towards hydrogen production	JORGE
2021	1	Escherichia coli Dcu C4-dicarboxylate transporters dependent proton and potassium fluxes and FOF1-ATPase activity during glucose fermentation at pH 7.5	BOLIVAR PEREZ, JORGE
2021		Escherichia coli, the workhorse cell factory for the production of chemicals	BOLIVAR PEREZ, JORGE
2021	0	Identification of enzymatic bottlenecks for the aerobic production of malate from glycerol by the systematic gene overexpression of anaplerotic enzymes in escherichia coli	BOLIVAR PEREZ, JORGE
2021	1	Platforms for production of protein-based vaccines: From classical to next-generation strategies	BOLIVAR PEREZ, JORGE
2017	15	Complexation of sesquiterpene lactones with cyclodextrins: synthesis and effects on their activities on parasitic weeds	CALA PERALTA, ANTONIO
2017	9	Gibberellic and kaurenoic hybrid strigolactone mimics for seed germination of parasitic weeds	CALA PERALTA, ANTONIO
2017	11	Preparation and phytotoxicity study of lappalone from dehydrocostuslactone	CALA PERALTA, ANTONIO
2017	6	STRUCTURE-ACTIVITY RELATIONSHIP STUDY OF DITERPENES FOR TREATMENT OF ALZHEIMER'S DISEASE	CALA PERALTA, ANTONIO
2018	10	(+)-epi-Epoformin, a Phytotoxic Fungal Cyclohexenepoxide: Structure Activity Relationships	CALA PERALTA, ANTONIO
2018	5	A Novel Electron Microscopic Characterization of Core/Shell Nanobiostimulator Against Parasitic Plants	CALA PERALTA, ANTONIO
2020	3	Synthesis of Active Strigolactone Analogues Based on Eudesmane- And Guaiane-Type Sesquiterpene Lactones	CALA PERALTA, ANTONIO
2021	2	A study on the phytotoxic potential of the seasoning herb marjoram (Origanum majorana L.) leaves	CALA PERALTA, ANTONIO
2019	9	Easy Access to Alkoxy, Amino, Carbamoyl, Hydroxy, and Thiol Derivatives of Sesquiterpene Lactones and Evaluation of Their Bioactivity on Parasitic Weeds	CALA PERALTA, ANTONIO
2018	7	A separation and preconcentration process for metal speciation using a liquid membrane: A case study for iron speciation in seawater	CASANUEVA MARENCO, MARIA JOSE
2018	1	Coupled transport of Pb(II) ions through a bulk liquid membrane as a preconcentration method for saline natural waters	CASANUEVA MARENCO, MARIA JOSE
2018	29	Delineating sources of groundwater recharge in an arsenic-affected Holocene aquifer in Cambodia using stable isotope-based mixing models	CASANUEVA MARENCO, MARIA JOSE
2019	13	Contrasting sorption behaviours affecting groundwater arsenic concentration in Kandal Province, Cambodia	CASANUEVA MARENCO, MARIA JOSE
2019	3	Coupling liquid membrane and flow-injection technique as an analytical strategy for copper analysis in saline water	CASANUEVA MARENCO, MARIA JOSE
2019	6	Disposable optical sensor for Al(III) ions determination by coupled colorimetric solid-phase extraction-reflectance spectroscopy in leachates from cookware, antacids and hygienic care products	CASANUEVA MARENCO, MARIA JOSE
2020	8	A polymer inclusion membrane for the simultaneous determination of Cu(II), Ni(II) and Cd(II) ions from natural waters	CASANUEVA MARENCO, MARIA JOSE
2020	8	Design and optimization of a single-use optical sensor based on a polymer inclusion membrane for zinc determination in drinks, food supplement and foot health care products	CASANUEVA MARENCO, MARIA JOSE
2021	2	Comprehensive assessment and potential ecological risk of trace element pollution (As, ni, co and cr) in aquatic environmental samples from an industrialized area	CASANUEVA MARENCO, MARIA JOSE
2021	0	Sensing Cd(II) Using a Disposable Optical Sensor Based on a Schiff Base Immobilisation on a Polymer-Inclusion Membrane. Applications in Water	CASANUEVA MARENCO, MARIA

		and Art Paint Samples	JOSE
2021	0	Sherry wine industry by-product as potential biosorbent for the removal of Cr(VI) from aqueous medium	CASANUEVA MARENCO, MARIA JOSE
2017	3	Iron(II) Complexes with Scorpiand-Like Macrocyclic Polyamines: Kinetico-Mechanistic Aspects of Complex Formation and Oxidative Dehydrogenation of Coordinated Amines	CASTILLO GONZALEZ, CARMEN ESTHER
2018	27	Acid-Triggered O-O Bond Heterolysis of a Nonheme Fe-III(OOH) Species for the Stereospecific Hydroxylation of Strong C-H Bonds	CASTILLO GONZALEZ, CARMEN ESTHER
2018	6	Electrochemical Generation and Spectroscopic Characterization of the Key Rhodium(III) Hydride Intermediates of Rhodium Poly(bipyridyl) H2-Evolving Catalysts	CASTILLO GONZALEZ, CARMEN ESTHER
2019	13	Cobalt(II) Pentaaza-Macrocyclic Schiff Base Complex as Catalyst for Light-Driven Hydrogen Evolution in Water: Electrochemical Generation and Theoretical Investigation of the One-Electron Reduced Species	CASTILLO GONZALEZ, CARMEN ESTHER
2020	1	The Mechanism of the Intramolecular Hydrocarbyl Metathesis within a Planar Triruthenium Cluster: Combining Core Flexibility with Hydride Mobility	CASTILLO GONZALEZ, CARMEN ESTHER
2021	0	Bifunctional W/NH Cuboidal Aminophosphino W3S4 Cluster Hydrides: The Puzzling Behaviour behind the Hydridic-Protonic Interplay	CASTILLO GONZALEZ, CARMEN ESTHER
2021	0	Spin State Tunes Oxygen Atom Transfer towards FeIVO Formation in FeII Complexes	CASTILLO GONZALEZ, CARMEN ESTHER
2017	10	Chemical evidence for the effect of Urochloa ruziziensis on glyphosate-resistant soybeans	CHINCHILLA SALCEDO, NURIA
2017	7	Phytotoxic studies of naphthoquinone intermediates from the synthesis of the natural product Naphthotectone	CHINCHILLA SALCEDO, NURIA
2018	13	Influence of lipophilicity in O-acyl and O-alkyl derivatives of juglone and lawsone: a structure-activity relationship study in the search for natural herbicide models	CHINCHILLA SALCEDO, NURIA
2018	1	Qualitative Study on the Production of the Allelochemicals Benzoxazinones by Inducing Polyploidy in Gramineae with Colchicine	CHINCHILLA SALCEDO, NURIA
2019	2	Preparation and Phytotoxicity Evaluation of 11,13-Dehydro seco-Guaianolides	CHINCHILLA SALCEDO, NURIA
2019	10	Resistance modulatory and efflux-inhibitory activities of capsaicinoids and capsinoids	CHINCHILLA SALCEDO, NURIA
2019	7	Structure-activity relationship studies on naphthoquinone analogs. The search for new herbicides based on natural products	CHINCHILLA SALCEDO, NURIA
2021	0	Absorption and elimination of the allelochemical mboa by weeds during seedling growth	CHINCHILLA SALCEDO, NURIA
2021	1	How different cooking methods affect the phenolic composition of sweet potato for human consumption (Ipomea batata (l.) lam)	CHINCHILLA SALCEDO, NURIA
2017	11	Biomarker responses of Cu-induced toxicity in European seabass &ITDicentrarchus&IT &ITlabrax&IT: Assessing oxidative stress and histopathological alterations	DIAZ DE ALBA, MARGARITA ISABEL
2018	7	A separation and preconcentration process for metal speciation using a liquid membrane: A case study for iron speciation in seawater	DIAZ DE ALBA, MARGARITA ISABEL
2019	3	Assessing trace-element mobility in Algeciras Bay (Spain) sediments by acid and complexing screening	DIAZ DE ALBA, MARGARITA ISABEL
2019	3	Coupling liquid membrane and flow-injection technique as an analytical strategy for copper analysis in saline water	DIAZ DE ALBA, MARGARITA ISABEL
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		Cu(II), Ni(II) and Cd(II) ions from natural waters	MARGARITA ISABEL
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2021	0	Sherry wine industry by-product as potential biosorbent for the removal of Cr(VI) from aqueous medium	DIAZ DE ALBA, MARGARITA ISABEL
2017	1	Studies on the Reactivity of the [W3S4Br3(edpp)(3)](+) [edpp = (2-aminoethyl)diphenylphosphine] Cluster Cation towards Bases: The Active Role of the Amino Group	FERNANDEZ-TRUJILLO REY, MARIA JESUS
2018	7	Cuboidal Mo3S4 Clusters as a Platform for Exploring Catalysis: A Three-Center Sulfur Mechanism for Alkyne Semihydrogenation	FERNANDEZ-TRUJILLO REY, MARIA JESUS
2018	8	Pitfalls in the ABTS Peroxidase Activity Test: Interference of Photochemical Processes	FERNANDEZ-TRUJILLO REY, MARIA JESUS
2019	3	Proton-assisted air oxidation mechanisms of iron(II) bis-thiosemicarbazone complexes at physiological pH: a kinetico-mechanistic study	FERNANDEZ-TRUJILLO REY, MARIA JESUS
2020	3	Benchmarking of DFT methods using experimental free energies and volumes of activation for the cycloaddition of alkynes to cuboidal Mo3S4 clusters	FERNANDEZ-TRUJILLO REY, MARIA JESUS
2020	3	Salen-manganese complexes for controlling ROS damage: Neuroprotective effects, antioxidant activity and kinetic studies	FERNANDEZ-TRUJILLO REY, MARIA JESUS
2021	0	Bifunctional W/NH Cuboidal Aminophosphino W3S4 Cluster Hydrides: The Puzzling Behaviour behind the Hydridic-Protonic Interplay	FERNANDEZ-TRUJILLO REY, MARIA JESUS
2017	11	Biomarker responses of Cu-induced toxicity in European seabass &ITDicentrarchus&IT &ITlabrax&IT: Assessing oxidative stress and histopathological alterations	GALINDO RIAÑO, MARIA DOLORES
2018	7	A separation and preconcentration process for metal speciation using a liquid membrane: A case study for iron speciation in seawater	GALINDO RIAÑO, MARIA DOLORES
2018	1	Coupled Transport of Pb(II) Ions Through a Bulk Liquid Membrane as a Preconcentration Method for Saline Natural Waters	GALINDO RIAÑO, MARIA DOLORES
2018	17	Water quality in the tropical Andes hotspot: The Yacuambi river (southeastern Ecuador)	GALINDO RIAÑO, MARIA DOLORES
2019	3	Assessing trace-element mobility in Algeciras Bay (Spain) sediments by acid and complexing screening	GALINDO RIAÑO, MARIA DOLORES
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2020	8	Design and optimization of a single-use optical sensor based on a polymer inclusion membrane for zinc determination in drinks, food supplement and foot health care products	GALINDO RIAÑO, MARIA DOLORES
2021	2	Comprehensive assessment and potential ecological risk of trace element pollution (As, ni, co and cr) in aquatic environmental samples from an industrialized area	GALINDO RIAÑO, MARIA DOLORES
2021	0	Sensing Cd(II) Using a Disposable Optical Sensor Based on a Schiff Base Immobilisation on a Polymer-Inclusion Membrane. Applications in Water and Art Paint Samples	GALINDO RIAÑO, MARIA DOLORES

2021	0	Sherry wine industry by-product as potential biosorbent for the removal of Cr(VI) from aqueous medium	GALINDO RIAÑO, MARIA DOLORES
2021	1	Activation of Dichloromethane by a Bis-NHC Cp*Ru Complex: Formation of a Pentamethyl(chloromethyl)cyclopentadiene Ligand	GARCIA ALGARRA, ANDRES
2021	0	Bifunctional W/NH Cuboidal Aminophosphino W3S4 Cluster Hydrides: The Puzzling Behaviour behind the Hydridic-Protonic Interplay	GARCIA ALGARRA, ANDRES
2021	4	Catalytic Hydrogenation of Azobenzene in the Presence of a Cuboidal Mo3S4Cluster via an Uncommon Sulfur-Based H2Activation Mechanism	GARCIA ALGARRA, ANDRES
2017	3	Computational Insights Into the Reactivity at the Sulfur Atoms of M3S4 (M = Mo, W) Clusters: The Mechanism of [3 + 2] Cycloaddition With Alkynes	GARCÍA ALGARRA, ANDRÉS
2017	1	Computational insights into the S3 transfer reaction: A special case of double group transfer reaction featuring bicyclically delocalized aromatic transition state geometries	GARCÍA ALGARRA, ANDRÉS
2017	5	Computational Insights on the Mechanism of H2 Activation at Ir2S2(PPh3)4: A Combination of Multiple Reaction Pathways Involving Facile H Migration Processes	GARCÍA ALGARRA, ANDRÉS
2017	10	Kinetic Analysis and Mechanism of the Hydrolytic Degradation of Squaramides and Squaramic Acids	GARCÍA ALGARRA, ANDRÉS
2017	44	Mechanistic Elucidation of Zirconium-Catalyzed Direct Amidation	GARCÍA ALGARRA, ANDRÉS
2017	1	Studies on the Reactivity of the [W3S4Br3(edpp)3]+ [edpp = (2-aminoethyl)diphenylphosphine] Cluster Cation towards Bases: The Active Role of the Amino Group	GARCÍA ALGARRA, ANDRÉS
2018	10	Coordination Chemistry of Cu2+ Complexes of Small N-Alkylated Tetra-azacyclophanes with SOD Activity	GARCÍA ALGARRA, ANDRÉS
2018	7	Cuboidal Mo3S4 Clusters as a Platform for Exploring Catalysis: A Three-Center Sulfur Mechanism for Alkyne Semihydrogenation	GARCÍA ALGARRA, ANDRÉS
2018	12	Mixed Explicit-Implicit Solvation Approach for Modeling of Alkane Complexation in Water-Soluble Self-Assembled Capsules	GARCÍA ALGARRA, ANDRÉS
2019	3	Proton-assisted air oxidation mechanisms of iron(ii) bis-thiosemicarbazone complexes at physiological pH: a kinetico-mechanistic study	GARCÍA ALGARRA, ANDRÉS
2020	3	Benchmarking of DFT methods using experimental free energies and volumes of activation for the cycloaddition of alkynes to cuboidal Mo3S4 clusters	GARCÍA ALGARRA, ANDRÉS
2020	3	Computational studies of the solid-state molecular organometallic (SMOM) chemistry of Rh σ-alkane complexes	GARCÍA ALGARRA, ANDRÉS
2020	1	The Mechanism of the Intramolecular Hydrocarbyl Metathesis within a Planar Triruthenium Cluster: Combining Core Flexibility with Hydride Mobility	GARCÍA ALGARRA, ANDRÉS
2017	3	Computational Insights Into the Reactivity at the Sulfur Atoms of M3S4 (M = Mo, W) Clusters: The Mechanism of [3 + 2] Cycloaddition With Alkynes	GARCIA BASALLOTE, MANUEL
2017	1	Hydroxylated phosphines as ligands for chalcogenide clusters: self assembly, transformations and stabilization	GARCIA BASALLOTE, MANUEL
2017	3	Iron(II) Complexes with Scorpiand-Like Macrocyclic Polyamines: Kinetico-Mechanistic Aspects of Complex Formation and Oxidative Dehydrogenation of Coordinated Amines	GARCIA BASALLOTE, MANUEL
2017	10	Kinetic Analysis and Mechanism of the Hydrolytic Degradation of Squaramides and Squaramic Acids	GARCIA BASALLOTE, MANUEL
2017	4	Pb2+ complexes of small-cavity azamacrocyclic ligands: thermodynamic and kinetic studies	GARCIA BASALLOTE, MANUEL
2017	1	Studies on the Reactivity of the [W3S4Br3(edpp)(3)](+) [edpp = (2-aminoethyl)diphenylphosphine] Cluster Cation towards Bases: The Active Role of the Amino Group	GARCIA BASALLOTE, MANUEL
2018	27	Acid-Triggered O-O Bond Heterolysis of a Nonheme Fe-III(OOH) Species for the Stereospecific Hydroxylation of Strong C-H Bonds	GARCIA BASALLOTE, MANUEL

2018	10	Coordination Chemistry of Cu2+ Complexes of Small N-Alkylated Tetra-azacyclophanes with SOD Activity	GARCIA BASALLOTE, MANUEL
2018	7	Cuboidal Mo3S4 Clusters as a Platform for Exploring Catalysis: A Three-Center Sulfur Mechanism for Alkyne Semihydrogenation	GARCIA BASALLOTE, MANUEL
2018	4	Methylation as an effective way to generate SOD-activity in copper complexes of scorpiand-like azamacrocyclic receptors	GARCIA BASALLOTE, MANUEL
2018	8	Pitfalls in the ABTS Peroxidase Activity Test: Interference of Photochemical Processes	GARCIA BASALLOTE, MANUEL
2019	3	Proton-assisted air oxidation mechanisms of iron(II) bis-thiosemicarbazone complexes at physiological pH: a kinetico-mechanistic study	GARCIA BASALLOTE, MANUEL
2020	3	Benchmarking of DFT methods using experimental free energies and volumes of activation for the cycloaddition of alkynes to cuboidal Mo3S4 clusters	GARCIA BASALLOTE, MANUEL
2020	3	Salen-manganese complexes for controlling ROS damage: Neuroprotective effects, antioxidant activity and kinetic studies	GARCIA BASALLOTE, MANUEL
2021	0	Bifunctional W/NH Cuboidal Aminophosphino W3S4 Cluster Hydrides: The Puzzling Behaviour behind the Hydridic-Protonic Interplay	GARCIA BASALLOTE, MANUEL
2021	4	Catalytic Hydrogenation of Azobenzene in the Presence of a Cuboidal Mo3S4Cluster via an Uncommon Sulfur-Based H2Activation Mechanism	GARCIA BASALLOTE, MANUEL
2021	0	Spin State Tunes Oxygen Atom Transfer towards FeIVO Formation in FeII Complexes	GARCIA BASALLOTE, MANUEL
2017	10	Bioactivity and quantitative analysis of isohexenylnaphthazarins in root periderm of two Echium spp.: *E-plantagineum* and *E-gaditanum*	GARCIA DURAN, ALEXANDRA
2018	13	Influence of lipophilicity in O-acyl and O-alkyl derivatives of juglone and lawsone: a structure-activity relationship study in the search for natural herbicide models	GARCIA DURAN, ALEXANDRA
2018	3	Synthesis of (+/-)-3,4-dimethoxybenzyl-4-methyloctanoate as a novel internal standard for capsinoid determination by HPLC-ESI-MS/MS(QTOF)	GARCIA DURAN, ALEXANDRA
2019	9	Provitamin supramolecular polymer micelle with pH responsiveness to control release, bioavailability enhancement and potentiation of cytotoxic efficacy	GARCIA DURAN, ALEXANDRA
2019	10	Resistance modulatory and efflux-inhibitory activities of capsaicinoids and capsinoids	GARCIA DURAN, ALEXANDRA
2019	7	Structure-activity relationship studies on naphthoquinone analogs. The search for new herbicides based on natural products	GARCIA DURAN, ALEXANDRA
2020	4	Allelopathy: The Chemical Language of Plants	GARCIA DURAN, ALEXANDRA
2020	4	Bio-guided isolation of acetogenins from annona cherimola deciduous leaves: Production of nanocarriers to boost the bioavailability properties	GARCIA DURAN, ALEXANDRA
2020	1	Quantification of Strigolactones	GARCIA DURAN, ALEXANDRA
2021	1	Acyl Derivatives of Eudesmanolides To Boost their Bioactivity: An Explanation of Behavior in the Cell Membrane Using a Molecular Dynamics Approach	GARCIA DURAN, ALEXANDRA
2021	0	Agave steroidal saponins as potential bioherbicides	GARCIA DURAN, ALEXANDRA
2021	1	An overview of the chemical characteristics, bioactivity and achievements regarding the therapeutic usage of acetogenins from annona cherimola mill.	GARCIA DURAN, ALEXANDRA
2021	0	Correction to: Phloroglucinols from Myrtaceae: attractive targets for	GARCIA DURAN,

		structural characterization, biological properties and synthetic procedures (Phytochemistry Reviews, (2021), 20, 1, (259-299), 10.1007/s11101-020-09697-2)	ALEXANDRA
2021	1	Dereplication of Bioactive Spirostane Saponins from Agave macroacantha	GARCIA DURAN, ALEXANDRA
2021	2	Features in the NMR spectra of the aglycones of Agave spp. saponins. HMBC method for aglycone identification (HMAI)	GARCIA DURAN, ALEXANDRA
2021	9	Phloroglucinols from Myrtaceae: attractive targets for structural characterization, biological properties and synthetic procedures	GARCIA DURAN, ALEXANDRA
2017	6	The joint action in the bioactivity studies of Antarctic lichen Umbilicaria antarctica: Synergic-biodirected isolation in a preliminary holistic ecological study	GARCIA GALINDO, JUAN CARLOS
2021	1	Activation of Dichloromethane by a Bis-NHC Cp*Ru Complex: Formation of a Pentamethyl(chloromethyl)cyclopentadiene Ligand	GARCIA GALINDO, JUAN CARLOS
2017	4	Lathyrane Diterpenes from the Latex of Euphorbia laurifolia	GONZALEZ COLLADO, ISIDRO
2017	10	Mild Epoxidation of Allylic Alcohols Catalyzed by Titanium(III) Complexes: Selectivity and Mechanism	GONZALEZ COLLADO, ISIDRO
2017	2	The botryane sesquiterpenoid metabolism of the fungus Botrytis cinerea	GONZALEZ COLLADO, ISIDRO
2017	2	The formation of sesquiterpenoid presilphiperfolane and cameroonane metabolites in the Bcbot4 null mutant of Botrytis cinerea	GONZALEZ COLLADO, ISIDRO
2018	19	Biosynthesis of abscisic acid in fungi: identification of a sesquiterpene cyclase as the key enzyme in Botrytis cinerea	GONZALEZ COLLADO, ISIDRO
2018	12	Cp2Ti(III)Cl and Analogues as Sustainable Templates in Organic Synthesis	GONZALEZ COLLADO, ISIDRO
2018	11	Isotopic Labeling Studies Reveal the Patulin Detoxification Pathway by the Biocontrol Yeast Rhodotorula kratochvilovae LS11	GONZALEZ COLLADO, ISIDRO
2018	5	Metabolism of Antifungal Thiochroman-4-ones by Trichoderma viride and Botrytis cinerea	GONZALEZ COLLADO, ISIDRO
2018	2	Phenotypic Effects and Inhibition of Botrydial Biosynthesis Induced by Different Plant-Based Elicitors in Botrytis cinerea	GONZALEZ COLLADO, ISIDRO
2018	7	Relevance of the deletion of the Tatri4 gene in the secondary metabolome of Trichoderma arundinaceum	GONZALEZ COLLADO, ISIDRO
2018	5	Structural and biosynthetic studies on eremophilenols related to the phytoalexin capsidiol, produced by Botrytis cinerea	GONZALEZ COLLADO, ISIDRO
2018	5	The sesquiterpene botrydial from Botrytis cinerea induces phosphatidic acid production in tomato cell suspensions	GONZALEZ COLLADO, ISIDRO
2019	22	A GC-MS untargeted metabolomics approach for the classification of chemical differences in grape juices based on fungal pathogen	GONZALEZ COLLADO, ISIDRO
2019	13	Botcinic acid biosynthesis in Botrytis cinerea relies on a subtelomeric gene cluster surrounded by relics of transposons and is regulated by the Zn(2)Cys(6) transcription factor BcBoa13	GONZALEZ COLLADO, ISIDRO
2019	9	Natural Compounds That Modulate the Development of the Fungus Botrytis cinerea and Protect Solanum lycopersicum	GONZALEZ COLLADO, ISIDRO
2019	5	Synthesis of Trichodermin Derivatives and Their Antimicrobial and Cytotoxic Activities	GONZALEZ COLLADO, ISIDRO
2019	14	The current status on secondary metabolites produced by plant pathogenic Colletotrichum species	GONZALEZ COLLADO, ISIDRO
2020	0	Biocatalytic preparation of chloroindanol derivatives. Antifungal activity and detoxification by the phytopathogenic fungus botrytis cinerea	GONZALEZ COLLADO, ISIDRO
2020	5	Botrydial confers Botrytis cinerea the ability to antagonize soil and phyllospheric bacteria	GONZALEZ COLLADO, ISIDRO
2020	2	Botrytis species as biocatalysts	GONZALEZ COLLADO, ISIDRO
2020	0	Correction to: Recent approaches on the genomic analysis of the phytopathogenic fungus Colletotrichum spp. (Phytochemistry Reviews, (2020), 19, 3, (589-601), 10.1007/s11101-019-09608-0)	GONZALEZ COLLADO, ISIDRO
2020	17	Endophytic microorganisms for biocontrol of the phytopathogenic fungus Botrytis cinerea	GONZALEZ COLLADO, ISIDRO

2020	1	Identification of the Sesquiterpene Cyclase Involved in the Biosynthesis of (+)-4-Epi-eremophil-9-en-11-ol Derivatives Isolated from Botrytis cinerea	GONZALEZ COLLADO, ISIDRO
2020	0	Recent approaches on the genomic analysis of the phytopathogenic fungus Colletotrichum spp.	GONZALEZ COLLADO, ISIDRO
2021	0	Correction to: Recent approaches on the genomic analysis of the phytopathogenic fungus Colletotrichum spp. (Phytochemistry Reviews, (2020), 19, 3, (589-601), 10.1007/s11101-019-09608-0)	GONZALEZ COLLADO, ISIDRO
2021	2	Endophytic bacteria bacillus subtilis, isolated from zea mays, as potential biocontrol agent against botrytis cinerea	GONZALEZ COLLADO, ISIDRO
2021	0	Impairment of botrydial production in Botrytis cinerea allows the isolation of undescribed polyketides and reveals new insights into the botcinins biosynthetic pathway	GONZALEZ COLLADO, ISIDRO
2021	5	Methylene-Linked Bis-NHC Half-Sandwich Ruthenium Complexes: Binding of Small Molecules and Catalysis toward Ketone Transfer Hydrogenation	GONZALEZ COLLADO, ISIDRO
2021	0	Synthesis, fungitoxic activity against botrytis cinerea and phytotoxicity of alkoxyclovanols and alkoxyisocaryolanols	GONZALEZ COLLADO, ISIDRO
2017	10	Bioactivity and quantitative analysis of isohexenylnaphthazarins in root periderm of two Echium spp.: E-plantagineum and E-gaditanum	GONZALEZ MOLINILLO, JOSE MARIA
2017	10	Chemical evidence for the effect of Urochloa ruziziensis on glyphosate-resistant soybeans	GONZALEZ MOLINILLO, JOSE MARIA
2017	15	Complexation of sesquiterpene lactones with cyclodextrins: synthesis and effects on their activities on parasitic weeds	GONZALEZ MOLINILLO, JOSE MARIA
2017	9	Gibberellic and kaurenoic hybrid strigolactone mimics for seed germination of parasitic weeds	GONZALEZ MOLINILLO, JOSE MARIA
2017	7	Phytotoxic studies of naphthoquinone intermediates from the synthesis of the natural product Naphthotectone	GONZALEZ MOLINILLO, JOSE MARIA
2017	17	Phytotoxicity Study on Bidens sulphurea Sch Bip. as a Preliminary Approach for Weed Control	GONZALEZ MOLINILLO, JOSE MARIA
2017	11	Preparation and phytotoxicity study of lappalone from dehydrocostuslactone	GONZALEZ MOLINILLO, JOSE MARIA
2017	6	STRUCTURE-ACTIVITY RELATIONSHIP STUDY OF DITERPENES FOR TREATMENT OF ALZHEIMER'S DISEASE	GONZALEZ MOLINILLO, JOSE MARIA
2018	10	(+)-epi-Epoformin, a Phytotoxic Fungal Cyclohexenepoxide: Structure Activity Relationships	GONZALEZ MOLINILLO, JOSE MARIA
2018	5	A Novel Electron Microscopic Characterization of Core/Shell Nanobiostimulator Against Parasitic Plants	GONZALEZ MOLINILLO, JOSE MARIA
2018	15	Ecological Relevance of the Major Allelochemicals in Lycopersicon esculentum Roots and Exudates	GONZALEZ MOLINILLO, JOSE MARIA
2018	13	Influence of lipophilicity in O-acyl and O-alkyl derivatives of juglone and lawsone: a structure-activity relationship study in the search for natural herbicide models	GONZALEZ MOLINILLO, JOSE MARIA
2018	1	Qualitative Study on the Production of the Allelochemicals Benzoxazinones by Inducing Polyploidy in Gramineae with Colchicine	GONZALEZ MOLINILLO, JOSE MARIA
2018	3	Synthesis of (+/-)-3,4-dimethoxybenzyl-4-methyloctanoate as a novel internal standard for capsinoid determination by HPLC-ESI-MS/MS(QTOF)	GONZALEZ MOLINILLO, JOSE MARIA
2019	13	A new UHPLC-MS/MS method for the direct determination of	GONZALEZ

		strigolactones in root exudates and extracts	MOLINILLO, JOSE MARIA
2019	9	Easy Access to Alkoxy, Amino, Carbamoyl, Hydroxy, and Thiol Derivatives of Sesquiterpene Lactones and Evaluation of Their Bioactivity on Parasitic Weeds	GONZALEZ MOLINILLO, JOSE MARIA
2019	11	Effect of flavonoids isolated from Tridax procumbens on the growth and toxin production of Microcystis aeruginos	GONZALEZ MOLINILLO, JOSE MARIA
2019	6	Facile synthesis of anhydrojudaicin and 11,13-dehydroanhydrojudaicin, two eudesmanolide-skeleton lactones with potential allelopathic activity	GONZALEZ MOLINILLO, JOSE MARIA
2019	2	Hydrolysable Tannins and Biological Activities of Meriania hernandoi and Meriania nobilis (Melastomataceae)	GONZALEZ MOLINILLO, JOSE MARIA
2019	4	In Situ Eco Encapsulation of Bioactive Agrochemicals within Fully Organic Nanotubes	GONZALEZ MOLINILLO, JOSE MARIA
2019	20	Influence of Genotype and Harvest Time on the Cynara cardunculus L. Sesquiterpene Lactone Profile	GONZALEZ MOLINILLO, JOSE MARIA
2019	7	Phytotoxicity Study of Ortho-Disubstituted Disulfides and Their Acyl Derivatives	GONZALEZ MOLINILLO, JOSE MARIA
2019	2	Preparation and Phytotoxicity Evaluation of 11,13-Dehydro seco-Guaianolides	GONZALEZ MOLINILLO, JOSE MARIA
2019	9	Provitamin supramolecular polymer micelle with pH responsiveness to control release, bioavailability enhancement and potentiation of cytotoxic efficacy	GONZALEZ MOLINILLO, JOSE MARIA
2019	69	Recent advances in allelopathy for weed control: from knowledge to applications	GONZALEZ MOLINILLO, JOSE MARIA
2019	10	Resistance modulatory and efflux-inhibitory activities of capsaicinoids and capsinoids	GONZALEZ MOLINILLO, JOSE MARIA
2019	7	Structure-activity relationship studies on naphthoquinone analogs. The search for new herbicides based on natural products	GONZALEZ MOLINILLO, JOSE MARIA
2019	5	Synthesis and antimicrobial activity of some benzoxazinoids derivatives of 2-nitrophenol and 3-hydroxy-2-nitropyridine	GONZALEZ MOLINILLO, JOSE MARIA
2019	24	The extraction procedure improves the allelopathic activity of cardoon (Cynara cardunculus var. altilis) leaf allelochemicals	GONZALEZ MOLINILLO, JOSE MARIA
2020	4	Allelopathic activity of Thapsia garganica L. leaves on lettuce and weeds, and identification of the active principles	GONZALEZ MOLINILLO, JOSE MARIA
2020	4	Allelopathy: The Chemical Language of Plants	GONZALEZ MOLINILLO, JOSE MARIA
2020	4	Bio-guided isolation of acetogenins from annona cherimola deciduous leaves: Production of nanocarriers to boost the bioavailability properties	GONZALEZ MOLINILLO, JOSE MARIA
2020	3	Effect of shading on the sesquiterpene lactone content and phytotoxicity of cultivated cardoon leaf extracts	GONZALEZ MOLINILLO, JOSE MARIA
2020	2	Evaluation of the Phytotoxicity of Urochloa humidicola Roots by Bioassays and Microscopic Analysis. Characterization of New Compounds	GONZALEZ MOLINILLO, JOSE MARIA
2020	1	Genotype and harvest time affect the allelopathic activity of Cynara cardunculus L. extracts on Amaranthus retroflexus L. And Portulaca	GONZALEZ MOLINILLO, JOSE

		oleracea L.	MARIA
2020	7	Phytochemical Study of Safflower Roots (Carthamus tinctorius) on the Induction of Parasitic Plant Germination and Weed Control	GONZALEZ MOLINILLO, JOSE MARIA
2020	1	Quantification of Strigolactones	GONZALEZ MOLINILLO, JOSE MARIA
2020	0	Selective Ring Opening of Ethylbenzene on Bifunctional Catalyst Pt–Ir over Hierarchical USY Zeolite	GONZALEZ MOLINILLO, JOSE MARIA
2020	0	Study by NMR of Liquid-Phase Alkylation of Toluene with Hex-1-ene: Effect of Catalyst on Selectivity	GONZALEZ MOLINILLO, JOSE MARIA
2020	3	Synthesis of Active Strigolactone Analogues Based on Eudesmane- And Guaiane-Type Sesquiterpene Lactones	GONZALEZ MOLINILLO, JOSE MARIA
2020	1	Synthesis of Vlasouliolides: A Pathway toward Guaiane-Eudesmane C17/C15Dimers by Photochemical and Michael Additions	GONZALEZ MOLINILLO, JOSE MARIA
2020	1	Toxicity and anti-promastigote activity of benzoxazinoid analogs against leishmania (Viannia) braziliensis and leishmania (Leishmania) infantum	GONZALEZ MOLINILLO, JOSE MARIA
2021	2	A study on the phytotoxic potential of the seasoning herb marjoram (Origanum majorana L.) leaves	GONZALEZ MOLINILLO, JOSE MARIA
2021	0	Absorption and elimination of the allelochemical mboa by weeds during seedling growth	GONZALEZ MOLINILLO, JOSE MARIA
2021	1	Acyl Derivatives of Eudesmanolides To Boost their Bioactivity: An Explanation of Behavior in the Cell Membrane Using a Molecular Dynamics Approach	GONZALEZ MOLINILLO, JOSE MARIA
2021	1	Allelopathic activity of strigolactones on the germination of parasitic plants and arbuscular mycorrhizal fungi growth	GONZALEZ MOLINILLO, JOSE MARIA
2021	1	An overview of the chemical characteristics, bioactivity and achievements regarding the therapeutic usage of acetogenins from annona cherimola mill.	GONZALEZ MOLINILLO, JOSE MARIA
2021	0	Bioactive diterpenes from the brazilian native plant (Moquiniastrum pulchrum) and their application in weed control	GONZALEZ MOLINILLO, JOSE MARIA
2021	2	One-step encapsulation of ortho-disulfides in functionalized zinc MOF. Enabling metal−organic frameworks in agriculture	GONZALEZ MOLINILLO, JOSE MARIA
2021	0	Pharmacological activities of aminophenoxazinones	GONZALEZ MOLINILLO, JOSE MARIA
2021	0	Search of New Tools for Weed Control Using Piptocarpha rotundifolia, a Dominant Species in the Cerrado	GONZALEZ MOLINILLO, JOSE MARIA
2021	2	Sunflower metabolites involved in resistance mechanisms against broomrape	GONZALEZ MOLINILLO, JOSE MARIA
2021	0	Synthesis of Pertyolides A, B, and C: A Synthetic Procedure to C17-Sesquiterpenoids and a Study of Their Phytotoxic Activity	GONZALEZ MOLINILLO, JOSE MARIA
2017	11	Biomarker responses of Cu-induced toxicity in European seabass &ITDicentrarchus&IT &ITlabrax&IT: Assessing oxidative stress and histopathological alterations	GRANADO CASTRO, Mª DOLORES
2018	7	A separation and preconcentration process for metal speciation using a liquid membrane: A case study for iron speciation in seawater	GRANADO CASTRO, Mª

			DOLORES
2018	**1**	**Coupled Transport of Pb(II) Ions Through a Bulk Liquid Membrane as a Preconcentration Method for Saline Natural Waters**	**GRANADO CASTRO, Mª DOLORES**
2019	**3**	**Coupling liquid membrane and flow-injection technique as an analytical strategy for copper analysis in saline water**	**GRANADO CASTRO, Mª DOLORES**
2019	**6**	**Disposable optical sensor for Al(III) ions determination by coupled colorimetric solid-phase extraction-reflectance spectroscopy in leachates from cookware, antacids and hygienic care products**	**GRANADO CASTRO, Mª DOLORES**
2020	**8**	**A polymer inclusion membrane for the simultaneous determination of Cu(II), Ni(II) and Cd(II) ions from natural waters**	**GRANADO CASTRO, Mª DOLORES**
2020	**8**	**Design and optimization of a single-use optical sensor based on a polymer inclusion membrane for zinc determination in drinks, food supplement and foot health care products**	**GRANADO CASTRO, Mª DOLORES**
2021	**2**	**Comprehensive assessment and potential ecological risk of trace element pollution (As, ni, co and cr) in aquatic environmental samples from an industrialized area**	**GRANADO CASTRO, MARIA DOLORES**
2021	**0**	**Sensing Cd(II) Using a Disposable Optical Sensor Based on a Schiff Base Immobilisation on a Polymer-Inclusion Membrane. Applications in Water and Art Paint Samples**	**GRANADO CASTRO, MARIA DOLORES**
2021	**0**	**Sherry wine industry by-product as potential biosorbent for the removal of Cr(VI) from aqueous medium**	**GRANADO CASTRO, MARIA DOLORES**
2018	**17**	**Low temperature prepared copper-iron mixed oxides for the selective CO oxidation in the presence of hydrogen**	**GUERRA MARTINEZ, FRANCISCO MIGUEL**
2020	**5**	**Microwave-Enhanced Coupling of Carboxylic Acids with Liquid Ketones and Cyclic Ethers Using Tetrabutylammonium Iodide/ t-Butyl Hydroperoxide**	**GUERRA MARTINEZ, FRANCISCO MIGUEL**
2021	**0**	**Copper-Catalyzed Microwave-Expedited Oxyphosphorylation of Alkynes with Diethyl Phosphite and t-Butyl Hydroperoxide Synthesis of Densely Functionalized Phosphonylated Indenones**	**GUERRA MARTINEZ, FRANCISCO MIGUEL**
2021	**0**	**Copper-iron mixed oxide supported onto cordierite honeycomb as a heterogeneous catalyst in the Kharasch-Sosnovsky oxidation of cyclohexene**	**GUERRA MARTINEZ, FRANCISCO MIGUEL**
2017	**11**	**ELAC (3,12-di-O-acetyl-8-O-tigloilingol), a plant-derived lathyrane diterpene, induces subventricular zone neural progenitor cell proliferation through PKC beta activation**	**HERNANDEZ GALAN, ROSARIO**
2017	**22**	**Gaditanone, a Diterpenoid Based on an Unprecedented Carbon Skeleton Isolated from Euphorbia gaditana**	**HERNANDEZ GALAN, ROSARIO**
2017	**4**	**Lathyrane Diterpenes from the Latex of Euphorbia laurifolia**	**HERNANDEZ GALAN, ROSARIO**
2017	**10**	**Mild Epoxidation of Allylic Alcohols Catalyzed by Titanium(III) Complexes: Selectivity and Mechanism**	**HERNANDEZ GALAN, ROSARIO**
2017	**2**	**The formation of sesquiterpenoid presilphiperfolane and cameroonane metabolites in the Bcbot4 null mutant of Botrytis cinerea**	**HERNANDEZ GALAN, ROSARIO**
2018	**12**	**Cp2Ti(III)Cl and Analogues as Sustainable Templates in Organic Synthesis**	**HERNANDEZ GALAN, ROSARIO**
2018	**5**	**Structural and biosynthetic studies on eremophilenols related to the phytoalexin capsidiol, produced by Botrytis cinerea**	**HERNANDEZ GALAN, ROSARIO**
2019	**6**	**Lathyrane, Premyrsinane, and Related Diterpenes from Euphorbia boetica: Effect on in Vitro Neural Progenitor Cell Proliferation**	**HERNANDEZ GALAN, ROSARIO**
2020	**6**	**A novel PKC activating molecule promotes neuroblast differentiation and delivery of newborn neurons in brain injuries**	**HERNANDEZ GALAN, ROSARIO**

2020	2	Bond reactivity indices approach analysis of the [2+2] cycloaddition of jatrophane skeleton diterpenoids from Euphorbia gaditana Coss to tetracyclic gaditanone	HERNANDEZ GALAN, ROSARIO
2020	2	Synthesis of degraded limonoid analogs as new antibacterial scaffolds against staphylococcus aureus	HERNANDEZ GALAN, ROSARIO
2021	3	Effects of classical PKC activation on hippocampal neurogenesis and cognitive performance: mechanism of action	HERNANDEZ GALAN, ROSARIO
2021	0	Impairment of botrydial production in Botrytis cinerea allows the isolation of undescribed polyketides and reveals new insights into the botcinins biosynthetic pathway	HERNANDEZ GALAN, ROSARIO
2021	0	Phorbol Diesters and 12-Deoxy-16-hydroxyphorbol 13,16-Diesters Induce TGFα Release and Adult Mouse Neurogenesis	HERNANDEZ GALAN, ROSARIO
2020	4	Bioherbicide Potential of Eucalyptus saligna Leaf Litter Essential Oil	IGARTUBURU CHINCHILLA, JOSE MANUEL
2021	1	Allelopathic activity of strigolactones on the germination of parasitic plants and arbuscular mycorrhizal fungi growth	IGARTUBURU CHINCHILLA, JOSE MANUEL
2021	1	Are phytotoxic effects of Eucalyptus saligna (Myrtaceae) essential oil related to its major compounds?	IGARTUBURU CHINCHILLA, JOSE MANUEL
2018	19	Biosynthesis of abscisic acid in fungi: identification of a sesquiterpene cyclase as the key enzyme in Botrytis cinerea	IZQUIERDO BUENO REINA, INMACULADA CONCEPCION
2018	7	Relevance of the deletion of the Tatri4 gene in the secondary metabolome of Trichoderma arundinaceum	IZQUIERDO BUENO REINA, INMACULADA CONCEPCION
2021	0	Impairment of botrydial production in Botrytis cinerea allows the isolation of undescribed polyketides and reveals new insights into the botcinins biosynthetic pathway	IZQUIERDO-BUENO REINA, INMACULADA CONCEPCION
2017	4	A question of rank: DNA sequences and radula characters reveal a new genus of cone snails (Gastropoda: Conidae)	JIMENEZ TENORIO, MANUEL
2017	9	Mitogenomic phylogeny of cone snails endemic to Senegal	JIMENEZ TENORIO, MANUEL
2017	12	Phylogenetic relationships of cone snails endemic to Cabo Verde based on mitochondrial genomes	JIMENEZ TENORIO, MANUEL
2018	8	Cationic R-Substituted-Indenyl Nickel(II) Complexes of Arsine and Stibine Ligands: Synthesis, Characterization, and Catalytic Behavior in the Oligomerization of Styrene	JIMENEZ TENORIO, MANUEL
2018	18	Conotoxin Diversity in Chelyconus ermineus (Born, 1778) and the Convergent Origin of Piscivory in the Atlantic and Indo-Pacific Cones	JIMENEZ TENORIO, MANUEL
2018	0	Notes on Afonsoconus Tucker & Tenorio, 2013 (Gastropoda, Conidae), with description of a new species from the Southwestern Indian Ocean	JIMENEZ TENORIO, MANUEL
2018	0	The genus Cerion (Gastropoda: Pulmonata: Cerionidae) on San Salvador [Watling Island], Bahamas: A geometric morphometric analysis of shell morphology	JIMENEZ TENORIO, MANUEL
2019	13	Conidae phylogenomics and evolution	JIMENEZ TENORIO, MANUEL
2019	11	Conotoxin Diversity in the Venom Gland Transcriptome of the Magician's Cone, Pionoconus magus	JIMENEZ TENORIO, MANUEL

2019	3	Evolutionary drivers of group foraging: A new framework for investigating variance in food intake and reproduction	JIMENEZ TENORIO, MANUEL
2020	5	Comparative transcriptomics of the venoms of continental and insular radiations of West African cones: West African cone venom transcriptomes	JIMENEZ TENORIO, MANUEL
2020	1	Searching for indicators of age, sex and population in european mouflon mandibles	JIMENEZ TENORIO, MANUEL
2020	8	Taxonomic revision of West African cone snails (Gastropoda: Conidae) based upon mitogenomic studies: Implications for conservation	JIMENEZ TENORIO, MANUEL
2021	1	Activation of Dichloromethane by a Bis-NHC Cp*Ru Complex: Formation of a Pentamethyl(chloromethyl)cyclopentadiene Ligand	JIMENEZ TENORIO, MANUEL
2021	0	Copper-Catalyzed Microwave-Expedited Oxyphosphorylation of Alkynes with Diethyl Phosphite and t-Butyl Hydroperoxide Synthesis of Densely Functionalized Phosphonylated Indenones	JIMENEZ TENORIO, MANUEL
2021	5	Methylene-Linked Bis-NHC Half-Sandwich Ruthenium Complexes: Binding of Small Molecules and Catalysis toward Ketone Transfer Hydrogenation	JIMENEZ TENORIO, MANUEL
2021	1	Mitogenomic phylogeny of mud snails of the mostly Atlantic/Mediterranean genus Tritia (Gastropoda: Nassariidae)	JIMENEZ TENORIO, MANUEL
2021	1	The genome of the venomous snail Lautoconus ventricosus sheds light on the origin of conotoxin diversity	JIMENEZ TENORIO, MANUEL
2020	5	Microwave-Enhanced Coupling of Carboxylic Acids with Liquid Ketones and Cyclic Ethers Using Tetrabutylammonium Iodide/ t-Butyl Hydroperoxide	MACÍAS BENÍTEZ, PABLO
2021	0	Copper-Catalyzed Microwave-Expedited Oxyphosphorylation of Alkynes with Diethyl Phosphite and t-Butyl Hydroperoxide Synthesis of Densely Functionalized Phosphonylated Indenones	MACÍAS BENÍTEZ, PABLO
2017	9	Alibertia edulis (LC Rich.) AC Rich - A potent diuretic arising from Brazilian indigenous species	MACIAS DOMINGUEZ, FRANCISCO ANTONIO
2017	10	Bioactivity and quantitative analysis of isohexenylnaphthazarins in root periderm of two Echium spp.: E-plantagineum and E-gaditanum	MACIAS DOMINGUEZ, FRANCISCO ANTONIO
2017	13	Chemical evidence for the effect of Urochloa ruziziensis on glyphosate-resistant soybeans	MACIAS DOMINGUEZ, FRANCISCO ANTONIO
2017	15	Complexation of sesquiterpene lactones with cyclodextrins: synthesis and effects on their activities on parasitic weeds	MACIAS DOMINGUEZ, FRANCISCO ANTONIO
2017	9	Gibberellic and kaurenoic hybrid strigolactone mimics for seed germination of parasitic weeds	MACIAS DOMINGUEZ, FRANCISCO ANTONIO
2017	7	Phytotoxic studies of naphthoquinone intermediates from the synthesis of the natural product Naphthotectone	MACIAS DOMINGUEZ, FRANCISCO ANTONIO
2017	17	Phytotoxicity Study on Bidens sulphurea Sch Bip. as a Preliminary Approach for Weed Control	MACIAS DOMINGUEZ, FRANCISCO ANTONIO

2017	11	Preparation and phytotoxicity study of lappalone from dehydrocostuslactone	MACIAS DOMINGUEZ, FRANCISCO ANTONIO
2017	6	STRUCTURE-ACTIVITY RELATIONSHIP STUDY OF DITERPENES FOR TREATMENT OF ALZHEIMER'S DISEASE	MACIAS DOMINGUEZ, FRANCISCO ANTONIO
2017	6	The joint action in the bioactivity studies of Antarctic lichen Umbilicaria antarctica: Synergic-biodirected isolation in a preliminary holistic ecological study	MACIAS DOMINGUEZ, FRANCISCO ANTONIO
2018	10	(+)-epi-Epoformin, a Phytotoxic Fungal Cyclohexenepoxide: Structure Activity Relationships	MACIAS DOMINGUEZ, FRANCISCO ANTONIO
2018	5	A Novel Electron Microscopic Characterization of Core/Shell Nanobiostimulator Against Parasitic Plants	MACIAS DOMINGUEZ, FRANCISCO ANTONIO
2018	15	Ecological Relevance of the Major Allelochemicals in Lycopersicon esculentum Roots and Exudates	MACIAS DOMINGUEZ, FRANCISCO ANTONIO
2018	13	Influence of lipophilicity in O-acyl and O-alkyl derivatives of juglone and lawsone: a structure-activity relationship study in the search for natural herbicide models	MACIAS DOMINGUEZ, FRANCISCO ANTONIO
2018	1	Qualitative Study on the Production of the Allelochemicals Benzoxazinones by Inducing Polyploidy in Gramineae with Colchicine	MACIAS DOMINGUEZ, FRANCISCO ANTONIO
2018	3	Synthesis of (+/-)-3,4-dimethoxybenzyl-4-methyloctanoate as a novel internal standard for capsinoid determination by HPLC-ESI-MS/MS(QTOF)	MACIAS DOMINGUEZ, FRANCISCO ANTONIO
2019	13	A new UHPLC-MS/MS method for the direct determination of strigolactones in root exudates and extracts	MACIAS DOMINGUEZ, FRANCISCO ANTONIO
2019	8	Bioassay-Guided Isolation of Fungistatic Compounds from *Mimosa caesalpiniifolia* Leaves	MACIAS DOMINGUEZ, FRANCISCO ANTONIO
2019	9	Easy Access to Alkoxy, Amino, Carbamoyl, Hydroxy, and Thiol Derivatives of Sesquiterpene Lactones and Evaluation of Their Bioactivity on Parasitic Weeds	MACIAS DOMINGUEZ, FRANCISCO ANTONIO
2019	11	Effect of flavonoids isolated from *Tridax procumbens* on the growth and toxin production of *Microcystis aeruginos*	MACIAS DOMINGUEZ, FRANCISCO ANTONIO
2019	6	Facile synthesis of anhydrojudaicin and 11,13-dehydroanhydrojudaicin, two eudesmanolide-skeleton lactones with potential allelopathic activity	MACIAS DOMINGUEZ, FRANCISCO ANTONIO
2019	2	Hydrolysable Tannins and Biological Activities of *Meriania hernandoi* and *Meriania nobilis* (Melastomataceae)	MACIAS DOMINGUEZ, FRANCISCO ANTONIO

2019	4	In Situ Eco Encapsulation of Bioactive Agrochemicals within Fully Organic Nanotubes	MACIAS DOMINGUEZ, FRANCISCO ANTONIO
2019	20	Influence of Genotype and Harvest Time on the Cynara cardunculus L. Sesquiterpene Lactone Profile	MACIAS DOMINGUEZ, FRANCISCO ANTONIO
2019	7	Phytotoxicity Study of Ortho-Disubstituted Disulfides and Their Acyl Derivatives	MACIAS DOMINGUEZ, FRANCISCO ANTONIO
2019	2	Preparation and Phytotoxicity Evaluation of 11,13-Dehydro seco-Guaianolides	MACIAS DOMINGUEZ, FRANCISCO ANTONIO
2019	9	Provitamin supramolecular polymer micelle with pH responsiveness to control release, bioavailability enhancement and potentiation of cytotoxic efficacy	MACIAS DOMINGUEZ, FRANCISCO ANTONIO
2019	69	Recent advances in allelopathy for weed control: from knowledge to applications	MACIAS DOMINGUEZ, FRANCISCO ANTONIO
2019	10	Resistance modulatory and efflux-inhibitory activities of capsaicinoids and capsinoids	MACIAS DOMINGUEZ, FRANCISCO ANTONIO
2019	14	Selective fractionation and isolation of allelopathic compounds from Helianthus annuus L. leaves by means of high-pressure techniques	MACIAS DOMINGUEZ, FRANCISCO ANTONIO
2019	7	Structure-activity relationship studies on naphthoquinone analogs. The search for new herbicides based on natural products	MACIAS DOMINGUEZ, FRANCISCO ANTONIO
2019	5	Synthesis and antimicrobial activity of some benzoxazinoids derivatives of 2-nitrophenol and 3-hydroxy-2-nitropyridine	MACIAS DOMINGUEZ, FRANCISCO ANTONIO
2019	24	The extraction procedure improves the allelopathic activity of cardoon (*Cynara cardunculus* var. altilis) leaf allelochemicals	MACIAS DOMINGUEZ, FRANCISCO ANTONIO
2019	18	The Specialized Roles in Carotenogenesis and Apocarotenogenesis of the Phytoene Synthase Gene Family in Saffron	MACIAS DOMINGUEZ, FRANCISCO ANTONIO
2020	4	Allelopathy: The Chemical Language of Plants	MACIAS DOMINGUEZ, FRANCISCO ANTONIO
2020	4	Bio-guided isolation of acetogenins from annona cherimola deciduous leaves: Production of nanocarriers to boost the bioavailability properties	MACIAS DOMINGUEZ, FRANCISCO ANTONIO
2020	4	Bioherbicide Potential of Eucalyptus saligna Leaf Litter Essential Oil	MACIAS DOMINGUEZ, FRANCISCO ANTONIO

2020	3	Effect of shading on the sesquiterpene lactone content and phytotoxicity of cultivated cardoon leaf extracts	MACIAS DOMINGUEZ, FRANCISCO ANTONIO
2020	2	Evaluation of the Phytotoxicity of Urochloa humidicola Roots by Bioassays and Microscopic Analysis. Characterization of New Compounds	MACIAS DOMINGUEZ, FRANCISCO ANTONIO
2020	11	Exogenous strigolactones impact metabolic profiles and phosphate starvation signalling in roots	MACIAS DOMINGUEZ, FRANCISCO ANTONIO
2020	1	Genotype and harvest time affect the allelopathic activity of Cynara cardunculus L. extracts on Amaranthus retroflexus L. And Portulaca oleracea L.	MACIAS DOMINGUEZ, FRANCISCO ANTONIO
2020	7	Phytochemical Study of Safflower Roots (Carthamus tinctorius) on the Induction of Parasitic Plant Germination and Weed Control	MACIAS DOMINGUEZ, FRANCISCO ANTONIO
2020	1	Quantification of Strigolactones	MACIAS DOMINGUEZ, FRANCISCO ANTONIO
2020	3	Synthesis of Active Strigolactone Analogues Based on Eudesmane- And Guaiane-Type Sesquiterpene Lactones	MACIAS DOMINGUEZ, FRANCISCO ANTONIO
2020	1	Synthesis of Vlasouliolides: A Pathway toward Guaiane-Eudesmane C17/C15Dimers by Photochemical and Michael Additions	MACIAS DOMINGUEZ, FRANCISCO ANTONIO
2020	1	Toxicity and anti-promastigote activity of benzoxazinoid analogs against leishmania (Viannia) braziliensis and leishmania (Leishmania) infantum	MACIAS DOMINGUEZ, FRANCISCO ANTONIO
2021	3	A study on the phytotoxic potential of the seasoning herb marjoram (Origanum majorana L.) leaves	MACIAS DOMINGUEZ, FRANCISCO ANTONIO
2021	0	Absorption and elimination of the allelochemical mboa by weeds during seedling growth	MACIAS DOMINGUEZ, FRANCISCO ANTONIO
2021	1	Acyl Derivatives of Eudesmanolides To Boost their Bioactivity: An Explanation of Behavior in the Cell Membrane Using a Molecular Dynamics Approach	MACIAS DOMINGUEZ, FRANCISCO ANTONIO
2021	0	Agave steroidal saponins as potential bioherbicides	MACIAS DOMINGUEZ, FRANCISCO ANTONIO
2021	1	Allelopathic activity of strigolactones on the germination of parasitic plants and arbuscular mycorrhizal fungi growth	MACIAS DOMINGUEZ, FRANCISCO ANTONIO
2021	1	An overview of the chemical characteristics, bioactivity and achievements regarding the therapeutic usage of acetogenins from annona cherimola mill.	MACIAS DOMINGUEZ, FRANCISCO ANTONIO

2021	1	Are phytotoxic effects of Eucalyptus saligna (Myrtaceae) essential oil related to its major compounds?	MACIAS DOMINGUEZ, FRANCISCO ANTONIO
2021	0	Bioactive diterpenes from the brazilian native plant (Moquiniastrum pulchrum) and their application in weed control	MACIAS DOMINGUEZ, FRANCISCO ANTONIO
2021	1	Dereplication of Bioactive Spirostane Saponins from Agave macroacantha	MACIAS DOMINGUEZ, FRANCISCO ANTONIO
2021	2	Features in the NMR spectra of the aglycones of Agave spp. saponins. HMBC method for aglycone identification (HMAI)	MACIAS DOMINGUEZ, FRANCISCO ANTONIO
2021	2	Features in the NMR spectra of the aglycones of Agave spp. saponins. HMBC method for aglycone identification (HMAI)	MACIAS DOMINGUEZ, FRANCISCO ANTONIO
2021	340	Natural products in drug discovery: advances and opportunities	MACIAS DOMINGUEZ, FRANCISCO ANTONIO
2021	2	One-step encapsulation of ortho-disulfides in functionalized zinc MOF. Enabling metal−organic frameworks in agriculture	MACIAS DOMINGUEZ, FRANCISCO ANTONIO
2021	0	Pharmacological activities of aminophenoxazinones	MACIAS DOMINGUEZ, FRANCISCO ANTONIO
2021	0	Search of New Tools for Weed Control Using Piptocarpha rotundifolia, a Dominant Species in the Cerrado	MACIAS DOMINGUEZ, FRANCISCO ANTONIO
2021	1	Structure, bioactivity and analytical methods for the determination of yucca saponins	MACIAS DOMINGUEZ, FRANCISCO ANTONIO
2021	2	Sunflower metabolites involved in resistance mechanisms against broomrape	MACIAS DOMINGUEZ, FRANCISCO ANTONIO
2021	0	Synthesis of Pertyolides A, B, and C: A Synthetic Procedure to C17-Sesquiterpenoids and a Study of Their Phytotoxic Activity	MACIAS DOMINGUEZ, FRANCISCO ANTONIO
2017	11	ELAC (3,12-di-O-acetyl-8-O-tigloilingol), a plant-derived lathyrane diterpene, induces subventricular zone neural progenitor cell proliferation through PKC beta activation	MACIAS SANCHEZ, ANTONIO JOSE
2017	22	Gaditanone, a Diterpenoid Based on an Unprecedented Carbon Skeleton Isolated from Euphorbia gaditana	MACIAS SANCHEZ, ANTONIO JOSE
2017	4	Lathyrane Diterpenes from the Latex of Euphorbia laurifolia	MACIAS SANCHEZ, ANTONIO JOSE
2017	2	The botryane sesquiterpenoid metabolism of the fungus Botrytis cinerea	MACIAS SANCHEZ, ANTONIO JOSE

2018	2	Phenotypic Effects and Inhibition of Botrydial Biosynthesis Induced by Different Plant-Based Elicitors in Botrytis cinerea	MACIAS SANCHEZ, ANTONIO JOSE
2018	5	Structural and biosynthetic studies on eremophilenols related to the phytoalexin capsidiol, produced by Botrytis cinerea	MACIAS SANCHEZ, ANTONIO JOSE
2019	6	Lathyrane, Premyrsinane, and Related Diterpenes from Euphorbia boetica: Effect on in Vitro Neural Progenitor Cell Proliferation	MACIAS SANCHEZ, ANTONIO JOSE
2020	6	A novel PKC activating molecule promotes neuroblast differentiation and delivery of newborn neurons in brain injuries	MACIAS SANCHEZ, ANTONIO JOSE
2020	2	Bond reactivity indices approach analysis of the [2+2] cycloaddition of jatrophane skeleton diterpenoids from Euphorbia gaditana Coss to tetracyclic gaditanone	MACIAS SANCHEZ, ANTONIO JOSE
2021	3	Effects of classical PKC activation on hippocampal neurogenesis and cognitive performance: mechanism of action	MACIAS SANCHEZ, ANTONIO JOSE
2021	0	Phorbol Diesters and 12-Deoxy-16-hydroxyphorbol 13,16-Diesters Induce TGFα Release and Adult Mouse Neurogenesis	MACIAS SANCHEZ, ANTONIO JOSE
2021	0	Synthesis, fungitoxic activity against botrytis cinerea and phytotoxicity of alkoxyclovanols and alkoxyisocaryolanols	MACIAS SANCHEZ, ANTONIO JOSE
2018	10	Coordination Chemistry of Cu2+ Complexes of Small N-Alkylated Tetra-azacyclophanes with SOD Activity	MAÑEZ MUÑOZ, MARIA ANGELES
2018	4	Methylation as an effective way to generate SOD-activity in copper complexes of scorpiand-like azamacrocyclic receptors	MAÑEZ MUÑOZ, MARIA ANGELES
2018	8	Pitfalls in the ABTS Peroxidase Activity Test: Interference of Photochemical Processes	MAÑEZ MUÑOZ, MARIA ANGELES
2020	3	Salen-manganese complexes for controlling ROS damage: Neuroprotective effects, antioxidant activity and kinetic studies	MAÑEZ MUÑOZ, MARIA ANGELES
2017	10	Bioactivity and quantitative analysis of isohexenylnaphthazarins in root periderm of two Echium spp.: E-plantagineum and E-gaditanum	MARTINEZ VALDIVIA, MANUEL JESUS
2019	9	Provitamin supramolecular polymer micelle with pH responsiveness to control release, bioavailability enhancement and potentiation of cytotoxic efficacy	MARTINEZ VALDIVIA, MANUEL JESUS
2020	4	Bio-guided isolation of acetogenins from annona cherimola deciduous leaves: Production of nanocarriers to boost the bioavailability properties	MARTINEZ VALDIVIA, MANUEL JESUS
2020	1	Proteomics characterization of CENP-B epitope in Moroccan scleroderma patients with anti-centromere autoantibodies	MARTINEZ VALDIVIA, MANUEL JESUS
2021	1	Acyl Derivatives of Eudesmanolides To Boost their Bioactivity: An Explanation of Behavior in the Cell Membrane Using a Molecular Dynamics Approach	MARTINEZ VALDIVIA, MANUEL JESUS
2017	2	The formation of sesquiterpenoid presilphiperfolane and cameroonane metabolites in the Bcbot4 null mutant of Botrytis cinerea	MORAGA GALINDO, JAVIER
2018	5	Phenotypic Effects and Inhibition of Botrydial Biosynthesis Induced by Different Plant-Based Elicitors in Botrytis cinerea	MORAGA GALINDO, JAVIER
2018	7	Relevance of the deletion of the Tatri4 gene in the secondary metabolome of Trichoderma arundinaceum	MORAGA GALINDO, JAVIER
2018	5	Structural and biosynthetic studies on eremophilenols related to the phytoalexin capsidiol, produced by Botrytis cinerea	MORAGA GALINDO, JAVIER
2018	5	The sesquiterpene botrydial from Botrytis cinerea induces phosphatidic acid production in tomato cell suspensions	MORAGA GALINDO, JAVIER
2019	22	A GC-MS untargeted metabolomics approach for the classification of chemical differences in grape juices based on fungal pathogen	MORAGA GALINDO, JAVIER
2019	13	Botcinic acid biosynthesis in Botrytis cinerea relies on a subtelomeric gene	MORAGA

		cluster surrounded by relics of transposons and is regulated by the Zn(2)Cys(6) transcription factor BcBoa13	GALINDO, JAVIER
2019	9	Natural Compounds That Modulate the Development of the Fungus Botrytis cinerea and Protect Solanum lycopersicum	MORAGA GALINDO, JAVIER
2020	3	Bacteriophages as an Up-and-Coming Alternative to the Use of Sulfur Dioxide in Winemaking	MORAGA GALINDO, JAVIER
2020	0	Biocatalytic preparation of chloroindanol derivatives. Antifungal activity and detoxification by the phytopathogenic fungus botrytis cinerea	MORAGA GALINDO, JAVIER
2020	20	Biodegradation and toxicity reduction of nonylphenol, 4-tert-octylphenol and 2,4-dichlorophenol by the ascomycetous fungus *Thielavia* sp HJ22: Identification of fungal metabolites and proposal of a putative pathway	MORAGA GALINDO, JAVIER
2020	5	Botrydial confers Botrytis cinerea the ability to antagonize soil and phyllospheric bacteria	MORAGA GALINDO, JAVIER
2020	2	Botrytis species as biocatalysts	MORAGA GALINDO, JAVIER
2020	0	Recent approaches on the genomic analysis of the phytopathogenic fungus Colletotrichum spp.	MORAGA GALINDO, JAVIER
2020	14	The current status on secondary metabolites produced by plant pathogenic Colletotrichum species	MORAGA GALINDO, JAVIER
2021	0	Correction to: Recent approaches on the genomic analysis of the phytopathogenic fungus Colletotrichum spp. (Phytochemistry Reviews, (2020), 19, 3, (589-601), 10.1007/s11101-019-09608-0)	MORAGA GALINDO, JAVIER
2021	0	Impairment of botrydial production in Botrytis cinerea allows the isolation of undescribed polyketides and reveals new insights into the botcinins biosynthetic pathway	MORAGA GALINDO, JAVIER
2020	5	Microwave-Enhanced Coupling of Carboxylic Acids with Liquid Ketones and Cyclic Ethers Using Tetrabutylammonium Iodide/ t-Butyl Hydroperoxide	MORENO DORADO, FRANCISCO JAVIER
2021	0	Copper-Catalyzed Microwave-Expedited Oxyphosphorylation of Alkynes with Diethyl Phosphite and t-Butyl Hydroperoxide Synthesis of Densely Functionalized Phosphonylated Indenones	MORENO DORADO, FRANCISCO JAVIER
2021	0	Copper-iron mixed oxide supported onto cordierite honeycomb as a heterogeneous catalyst in the Kharasch-Sosnovsky oxidation of cyclohexene	MORENO DORADO, FRANCISCO JAVIER
2017	8	5-Alkylresorcinol Derivatives from the Bryozoan Schizomavella mamillata: Isolation, Synthesis, and Antioxidant Activity	ORTEGA AGÜERA, Mª JESUS
2017	26	Future warmer seas: increased stress and susceptibility to grazing in seedlings of a marine habitat-forming species	ORTEGA AGÜERA, Mª JESUS
2017	20	Global and local disturbances interact to modify seagrass palatability	ORTEGA AGÜERA, Mª JESUS
2017	6	Profiling of phenolic natural products in the seagrass zostera noltei by UPLC-MS	ORTEGA AGÜERA, Mª JESUS
2018	13	Analytical determination of the reducing and stabilization agents present in different Zostera noltii extracts used for the biosynthesis of gold nanoparticles	ORTEGA AGÜERA, Mª JESUS
2018	9	First report on vertical distribution of dissolved polyunsaturated aldehydes in marine coastal waters	ORTEGA AGÜERA, Mª JESUS
2018	12	Macroecological patterns of the phytoplankton production of polyunsaturated aldehydes	ORTEGA AGÜERA, Mª JESUS
2018	6	The Large Jellyfish Rhizostoma luteum as Sustainable a Resource for Antioxidant Properties, Nutraceutical Value and Biomedical Applications	ORTEGA AGÜERA, Mª JESUS
2020	4	Types and distribution of bioactive polyunsaturated aldehydes in a gradient from mesotrophic to oligotrophic waters in the Alborán Sea (Western Mediterranean)	ORTEGA AGÜERA, Mª JESUS
2021	1	Latitudinal variation in plant defence against herbivory in a marine foundation species does not follow a linear pattern: The importance of resource availability	ORTEGA AGÜERA, Mª JESUS

2021	0	Establishment and characterisation of single cell-derived embryonic stem cell lines from the gilthead seabream, Sparus aurata	PENDON MELENDEZ, CARLOS
2021		Fish embryonic stem cells as tools for chronobiological and endocrinological studies	PENDON MELENDEZ, CARLOS
2017	24	Patulin Degradation by the Biocontrol Yeast Sporobolomyces sp Is an Inducible Process	PINEDO RIVILLA, CRISTINA
2018	11	Isotopic Labeling Studies Reveal the Patulin Detoxification Pathway by the Biocontrol Yeast Rhodotorula kratochvilovae LS11	PINEDO RIVILLA, CRISTINA
2018	5	Metabolism of Antifungal Thiochroman-4-ones by Trichoderma viride and Botrytis cinerea	PINEDO RIVILLA, CRISTINA
2018	5	Structural and biosynthetic studies on eremophilenols related to the phytoalexin capsidiol, produced by Botrytis cinerea	PINEDO RIVILLA, CRISTINA
2019	15	Optimization of ultrasound-assisted extraction of bioactive compounds from jabuticaba (Myrciaria cauliflora) fruit through a Box-Behnken experimental design	PINEDO RIVILLA, CRISTINA
2019	14	The current status on secondary metabolites produced by plant pathogenic *Colletotrichum* species	PINEDO RIVILLA, CRISTINA
2020	0	Biocatalytic preparation of chloroindanol derivatives. Antifungal activity and detoxification by the phytopathogenic fungus *Botrytis cinerea*	PINEDO RIVILLA, CRISTINA
2020	2	*Botrytis* species as biocatalysts	PINEDO RIVILLA, CRISTINA
2021	0	Impairment of botrydial production in Botrytis cinerea allows the isolation of undescribed polyketides and reveals new insights into the botcinins biosynthetic pathway	PINEDO RIVILLA, CRISTINA
2017	8	5-Alkylresorcinol derivatives from the bryozoan Schizomavella mamillata: Isolation, synthesis, and antioxidant Activity	REYES JIMENEZ, CAROLINA DE LOS
2018	20	Microalgae-derived oxylipins decrease inflammatory mediators by regulating the subcellular location of NF kappa B and PPAR-gamma	REYES JIMENEZ, CAROLINA DE LOS
2018	11	Topical Application of Glycolipids from Isochrysis galbana Prevents Epidermal Hyperplasia in Mice	REYES JIMENEZ, CAROLINA DE LOS
2020	5	Anticancer Activities of Meroterpenoids Isolated from the Brown Alga Cystoseira usneoides against the Human Colon Cancer Cells HT-29	REYES JIMENEZ, CAROLINA DE LOS
2020	8	Meroterpenoids from the brown alga cystoseira usneoides as potential anti-inflammatory and lung anticancer agents	REYES JIMENEZ, CAROLINA DE LOS
2021	0	Diterpenoids from the brown alga rugulopteryx okamurae and their anti-inflammatory activity	REYES JIMENEZ, CAROLINA DE LOS
2021	0	Phorbol Diesters and 12-Deoxy-16-hydroxyphorbol 13,16-Diesters Induce TGFα Release and Adult Mouse Neurogenesis	REYES JIMENEZ, CAROLINA DE LOS
2021	1	Allelopathic activity of strigolactones on the germination of parasitic plants and arbuscular mycorrhizal fungi growth	RIAL CUMBRERA, CARLOS
2021	0	Pharmacological activities of aminophenoxazinones	RIAL CUMBRERA, CARLOS
2021	0	Search of New Tools for Weed Control Using Piptocarpha rotundifolia, a Dominant Species in the Cerrado	RIAL CUMBRERA, CARLOS
2021	2	Sunflower metabolites involved in resistance mechanisms against broomrape	RIAL CUMBRERA, CARLOS
2021	0	Synthesis of Pertyolides A, B, and C: A Synthetic Procedure to C17-Sesquiterpenoids and a Study of Their Phytotoxic Activity	RIAL CUMBRERA, CARLOS
2017	10	Bioactivity and quantitative analysis of isohexenylnaphthazarins in root periderm of two Echium spp.: E. plantagineum and E. gaditanum	RIAL CUMBRERAS, CARLOS

2018	15	Ecological Relevance of the Major Allelochemicals in Lycopersicon esculentum Roots and Exudates	RIAL CUMBRERAS, CARLOS
2019	13	A new UHPLC-MS/MS method for the direct determination of strigolactones in root exudates and extracts	RIAL CUMBRERAS, CARLOS
2019	9	Easy Access to Alkoxy, Amino, Carbamoyl, Hydroxy, and Thiol Derivatives of Sesquiterpene Lactones and Evaluation of Their Bioactivity on Parasitic Weeds	RIAL CUMBRERAS, CARLOS
2019	6	Facile synthesis of anhydrojudaicin and 11,13-dehydroanhydrojudaicin, two eudesmanolide-skeleton lactones with potential allelopathic activity	RIAL CUMBRERAS, CARLOS
2019	2	Hydrolysable Tannins and Biological Activities of Meriania hernandoi and Meriania nobilis (Melastomataceae)	RIAL CUMBRERAS, CARLOS
2019	20	Influence of Genotype and Harvest Time on the Cynara cardunculus L. Sesquiterpene Lactone Profile	RIAL CUMBRERAS, CARLOS
2019	8	Phosphate acquisition efficiency in wheat is related to root:shoot ratio, strigolactone levels, and PHO2 regulation	RIAL CUMBRERAS, CARLOS
2019	24	The extraction procedure improves the allelopathic activity of cardoon (Cynara cardunculus var. altilis) leaf allelochemicals	RIAL CUMBRERAS, CARLOS
2019	18	The specialized roles in carotenogenesis and apocarotenogenesis of the phytoene synthase gene family in saffron	RIAL CUMBRERAS, CARLOS
2020	3	Effect of shading on the sesquiterpene lactone content and phytotoxicity of cultivated cardoon leaf extracts	RIAL CUMBRERAS, CARLOS
2020	11	Exogenous strigolactones impact metabolic profiles and phosphate starvation signalling in roots	RIAL CUMBRERAS, CARLOS
2020	1	Genotype and harvest time affect the allelopathic activity of Cynara cardunculus L. extracts on Amaranthus retroflexus L. And Portulaca oleracea L.	RIAL CUMBRERAS, CARLOS
2020	7	Phytochemical Study of Safflower Roots (Carthamus tinctorius) on the Induction of Parasitic Plant Germination and Weed Control	RIAL CUMBRERAS, CARLOS
2020	1	Quantification of Strigolactones	RIAL CUMBRERAS, CARLOS
2020	3	Synthesis of Active Strigolactone Analogues Based on Eudesmane- And Guaiane-Type Sesquiterpene Lactones	RIAL CUMBRERAS, CARLOS
2019	18	Isomerization of allylic alcohols in water catalyzed by transition metal complexes	RIOS HIERRO, ISAAC DE LOS
2019	12	New Findings in Metal Complexes with Antiproliferative Activity Containing 1,3,5-Triaza-7-phosphaadamantane (PTA) and Derivative Ligands	RIOS HIERRO, ISAAC DE LOS
2021	1	New achievements on C-C bond formation in water catalyzed by metal complexes	RIOS HIERRO, ISAAC DE LOS
2021	1	Acyl Derivatives of Eudesmanolides To Boost their Bioactivity: An Explanation of Behavior in the Cell Membrane Using a Molecular Dynamics Approach	RODRIGUEZ MEJIAS, FRANCISCO JAVIER
2021	1	An overview of the chemical characteristics, bioactivity and achievements regarding the therapeutic usage of acetogenins from annona cherimola mill.	RODRIGUEZ MEJIAS, FRANCISCO JAVIER

2021	2	One-step encapsulation of ortho-disulfides in functionalized zinc MOF. Enabling metal−organic frameworks in agriculture	RODRIGUEZ MEJIAS, FRANCISCO JAVIER
2017	9	Alibertia edulis (LC Rich.) AC Rich - A potent diuretic arising from Brazilian indigenous species	SIMONET MORALES, ANA MARIA
2019	8	Bioassay-Guided Isolation of Fungistatic Compounds from Mimosa caesalpiniifolia Leaves	SIMONET MORALES, ANA MARIA
2021	0	Agave steroidal saponins as potential bioherbicides	SIMONET MORALES, ANA MARIA
2021	1	Dereplication of Bioactive Spirostane Saponins from Agave macroacantha	SIMONET MORALES, ANA MARIA
2021	2	Features in the NMR spectra of the aglycones of Agave spp. saponins. HMBC method for aglycone identification (HMAI)	SIMONET MORALES, ANA MARIA
2021	1	Structure, bioactivity and analytical methods for the determination of yucca saponins	SIMONET MORALES, ANA MARIA
2017	10	Bioactivity and quantitative analysis of isohexenylnaphthazarins in root periderm of two Echium spp.: E-plantagineum and E-gaditanum	VARELA MONTOYA, ROSA MARIA
2017	10	Chemical evidence for the effect of Urochloa ruziziensis on glyphosate-resistant soybeans	VARELA MONTOYA, ROSA MARIA
2017	7	Phytotoxic studies of naphthoquinone intermediates from the synthesis of the natural product Naphthotectone	VARELA MONTOYA, ROSA MARIA
2017	17	Phytotoxicity Study on Bidens sulphurea Sch Bip. as a Preliminary Approach for Weed Control	VARELA MONTOYA, ROSA MARIA
2018	15	Ecological Relevance of the Major Allelochemicals in Lycopersicon esculentum Roots and Exudates	VARELA MONTOYA, ROSA MARIA
2019	13	A new UHPLC-MS/MS method for the direct determination of strigolactones in root exudates and extracts	VARELA MONTOYA, ROSA MARIA
2019	9	Easy Access to Alkoxy, Amino, Carbamoyl, Hydroxy, and Thiol Derivatives of Sesquiterpene Lactones and Evaluation of Their Bioactivity on Parasitic Weeds	VARELA MONTOYA, ROSA MARIA
2019	11	Effect of flavonoids isolated from Tridax procumbens on the growth and toxin production of Microcystis aeruginos	VARELA MONTOYA, ROSA MARIA
2019	6	Facile synthesis of anhydrojudaicin and 11,13-dehydroanhydrojudaicin, two eudesmanolide-skeleton lactones with potential allelopathic activity	VARELA MONTOYA, ROSA MARIA
2019	2	Hydrolysable Tannins and Biological Activities of Meriania hernandoi and Meriania nobilis (Melastomataceae)	VARELA MONTOYA, ROSA MARIA
2019	4	In Situ Eco Encapsulation of Bioactive Agrochemicals within Fully Organic Nanotubes	VARELA MONTOYA, ROSA MARIA
2019	20	Influence of Genotype and Harvest Time on the Cynara cardunculus L. Sesquiterpene Lactone Profile	VARELA MONTOYA, ROSA MARIA
2019	0	Microwave-Assisted Extraction of Ricinine from Ricinus communis Leaves	VARELA MONTOYA, ROSA MARIA

2019	8	Phosphate acquisition efficiency in wheat is related to root:shoot ratio, strigolactone levels, and PHO2 regulation	VARELA MONTOYA, ROSA MARIA
2019	7	Phytotoxicity Study of Ortho-Disubstituted Disulfides and Their Acyl Derivatives	VARELA MONTOYA, ROSA MARIA
2019	2	Preparation and Phytotoxicity Evaluation of 11,13-Dehydro seco-Guaianolides	VARELA MONTOYA, ROSA MARIA
2019	14	Selective fractionation and isolation of allelopathic compounds from Helianthus annuus L. leaves by means of high-pressure techniques	VARELA MONTOYA, ROSA MARIA
2019	24	The extraction procedure improves the allelopathic activity of cardoon (Cynara cardunculus var. altilis) leaf allelochemicals	VARELA MONTOYA, ROSA MARIA
2019	18	The Specialized Roles in Carotenogenesis and Apocarotenogenesis of the Phytoene Synthase Gene Family in Saffron	VARELA MONTOYA, ROSA MARIA
2020	3	Effect of shading on the sesquiterpene lactone content and phytotoxicity of cultivated cardoon leaf extracts	VARELA MONTOYA, ROSA MARIA
2020	2	Evaluation of the Phytotoxicity of Urochloa humidicola Roots by Bioassays and Microscopic Analysis. Characterization of New Compounds	VARELA MONTOYA, ROSA MARIA
2020	11	Exogenous strigolactones impact metabolic profiles and phosphate starvation signalling in roots	VARELA MONTOYA, ROSA MARIA
2020	1	Genotype and harvest time affect the allelopathic activity of Cynara cardunculus L. extracts on Amaranthus retroflexus L. And Portulaca oleracea L.	VARELA MONTOYA, ROSA MARIA
2020	7	Phytochemical Study of Safflower Roots (Carthamus tinctorius) on the Induction of Parasitic Plant Germination and Weed Control	VARELA MONTOYA, ROSA MARIA
2020	1	Quantification of Strigolactones	VARELA MONTOYA, ROSA MARIA
2020	3	Synthesis of Active Strigolactone Analogues Based on Eudesmane- And Guaiane-Type Sesquiterpene Lactones	VARELA MONTOYA, ROSA MARIA
2021	2	A study on the phytotoxic potential of the seasoning herb marjoram (Origanum majorana L.) leaves	VARELA MONTOYA, ROSA MARIA
2021	1	Acyl Derivatives of Eudesmanolides To Boost their Bioactivity: An Explanation of Behavior in the Cell Membrane Using a Molecular Dynamics Approach	VARELA MONTOYA, ROSA MARIA
2021	1	Allelopathic activity of strigolactones on the germination of parasitic plants and arbuscular mycorrhizal fungi growth	VARELA MONTOYA, ROSA MARIA
2021	0	Bioactive diterpenes from the brazilian native plant (Moquiniastrum pulchrum) and their application in weed control	VARELA MONTOYA, ROSA MARIA
2021	2	One-step encapsulation of ortho-disulfides in functionalized zinc MOF. Enabling metal−organic frameworks in agriculture	VARELA MONTOYA, ROSA MARIA
2021	0	Pharmacological activities of aminophenoxazinones	VARELA MONTOYA, ROSA MARIA
2021	0	Search of New Tools for Weed Control Using Piptocarpha rotundifolia, a Dominant Species in the Cerrado	VARELA MONTOYA, ROSA MARIA

2021	1	Structure, bioactivity and analytical methods for the determination of yucca saponins	VARELA MONTOYA, ROSA MARIA
2021	2	Sunflower metabolites involved in resistance mechanisms against broomrape	VARELA MONTOYA, ROSA MARIA
2021	0	Synthesis of Pertyolides A, B, and C: A Synthetic Procedure to C17-Sesquiterpenoids and a Study of Their Phytotoxic Activity	VARELA MONTOYA, ROSA MARIA
2017	8	5-Alkylresorcinol Derivatives from the Bryozoan Schizomavella mamillata: Isolation, Synthesis, and Antioxidant Activity	ZUBIA MENDOZA, EVA
2017	6	Profiling of Phenolic Natural Products in the Seagrass Zostera noltei by UPLC-MS	ZUBIA MENDOZA, EVA
2020	1	Amentadione is a new modulating agent for osteoarthritis in an ex-vivo co-culture preclinical assay	ZUBIA MENDOZA, EVA
2020	5	Anticancer Activities of Meroterpenoids Isolated from the Brown Alga Cystoseira usneoides against the Human Colon Cancer Cells HT-29	ZUBIA MENDOZA, EVA
2020	8	Meroterpenoids from the brown alga cystoseira usneoides as potential anti-inflammatory and lung anticancer agents	ZUBIA MENDOZA, EVA
2021	2	Dilkamural: A novel chemical weapon involved in the invasive capacity of the alga Rugulopteryx okamurae in the Strait of Gibraltar	ZUBIA MENDOZA, EVA
2021	0	Diterpenoids from the brown alga rugulopteryx okamurae and their anti-inflammatory activity	ZUBIA MENDOZA, EVA
2021	1	Importance of the chemical defenses and sugars in the feeding preference of Paracentrotus lividus over two sympatric template seagrass species	ZUBIA MENDOZA, EVA

5. Memoria económica: ingresos y gastos de 2021 y presupuesto de 2022

Año 2021

(Se adjunta en el Anexo I el estado de cuentas de la unidad correspondiente a 2021)

CONCEPTO	INGRESOS	CONCEPTO	GASTOS	REMANENTES
Remanentes 2020	66.200,90	Reparaciones	7.695,79	
Contrato programa (CP) pendientes	11.076,45	Material fungible de laboratorio	4.947,28	
Renovación Contrato programa	20.000,00	Suministro de equipos (Inventariable)	8.013,00	
Indemnización robo	294,55	Participación licencias software	578,51	
Remanente costes indirectos	5.195,54	Retención de crédito de no disponibilidad	4.110,00	
CRÉDITO TOTAL	**102.767,44**		**25.344,58**	**77.422,86**

Presupuesto Año 2022:

CONCEPTO	INGRESOS	CONCEPTO	GASTOS	ESTIMACIÓN A CIERRE	REMANENTES
Remanentes 2021 + Reserva gasto	80.896,01	reserva gastos ejercicio anterior	3.473,15		
Contrato programa (ESTIMACIÓN) Pendiente asignación	20.000,00	Reparaciones	1.586,61	9.000	
Costes indirectos: 30% C.I. Proyectos	7.707,51	Material fungible de laboratorio	856,69	6.000	
Costes indirectos: 30% C.I. Contratos	9,00	Suministro de equipos (Inventariable)	1.544,12	10.000	
Costes indirectos: Sexenios (119 x 30€)	3.570,00	otros suministros	235,95	1.500	
		Participación licencias software		1.900	
		Premio de Reconocimiento al Investigador Emergente del año (RIEA)		600	
		Seminarios INBIO		3.000	
		Plan Propio Investigación INBIO		18.000	
		Otros gastos y Servicios		2.500	
CRÉDITO TOTAL	**112.182,52**		**7.696,52**	**52.500**	**51.986,00**

ANEXO I

ESTADO DE CUENTAS DE LA UNIDAD

CORRESPONDIENTE A 2021