

HORIZON  
2020

# A global initiative to understand gypsum ecosystem ecology

## Fact Sheet

### Project Information

#### GYPWORLD

Grant agreement ID: 777803

[Project website](#)

#### DOI

[10.3030/777803](https://doi.org/10.3030/777803)

Project closed

#### EC signature date

21 November 2017

#### Start date

1 January 2018

#### End date

31 October 2023

#### Funded under

EXCELLENT SCIENCE - Marie Skłodowska-Curie Actions

#### Total cost

€ 747 000,00

#### EU contribution

€ 724 500,00

#### Coordinated by

AGENCIA ESTATAL CONSEJO  
SUPERIOR DE  
INVESTIGACIONES CIENTIFICAS



Spain

## Objective

Gypsum soils occur worldwide and represent natural laboratories of evolution and ecology. The unusual mineral content of gypsum soils is a significant barrier to the growth of most plants, and yet these soils host highly diverse endemic floras that have evolved independently on five continents. Nevertheless, these ecosystems are poorly understood compared to those of other unusual substrates. Little is known about the conservation status of gypsum floras, the potential impact of climate change on them, and their responses to mitigation and restoration. We propose an integrated global study of the ecology and evolution of plant and lichen life on gypsum, including eight gypsum-rich regions from four continents that differ in

geological origin, climate, and flora. We will 1) assess the plant and lichen diversity of gypsum; 2) investigate the evolutionary origins and assembly of these floras; 3) evaluate potential adaptive mechanisms on gypsum, the functional structure of gypsum plant and lichen communities, and the processes regulating gypsum ecosystem function; 4) analyse the responses of gypsum communities to global change drivers and explore how gypsum ecosystem restoration/conservation may help mitigate the effects of global change; 5) promote the study of gypsum ecosystems; and 6) communicate the ecological and conservation value of these ecosystems to the public. With the involvement of gypsum experts from 18 academic and non-academic organizations from 11 countries, this project provides an innovative, integrative, and interdisciplinary approach to address key questions in gypsum ecosystem ecology, evolution, and management. The project thus strengthens existing international collaborative networks and consolidates Europe's leadership in gypsum ecosystem research, including management and conservation plans and the identification of traits for crop improvement on gypsum soils, enhancing its attractiveness as a leading destination for related R&D

## Fields of science (EuroSciVoc)

[natural sciences](#) > [biological sciences](#) > [microbiology](#) > [mycology](#) > **[ethnolichenology](#)**

[engineering and technology](#) > [environmental engineering](#) > [ecosystem-based management](#) > **[ecological restoration](#)**

[natural sciences](#) > [biological sciences](#) > **[evolutionary biology](#)**

[natural sciences](#) > [biological sciences](#) > [ecology](#) > **[ecosystems](#)**

[natural sciences](#) > [earth and related environmental sciences](#) > [atmospheric sciences](#) > [climatology](#) > **[climatic changes](#)**



## Keywords

[gypsum ecosystems](#)

[evolution](#)

[conservation](#)

[ecological restoration](#)

[ecophysiology](#)

[functional ecology](#)

[community ecology](#)

[plant-plant interactions](#)

[plants](#)

[lichens](#)

[endemic flora](#)

## Programme(s)

## Topic(s)

[MSCA-RISE-2017 - Research and Innovation Staff Exchange](#)

## Call for proposal

[H2020-MSCA-RISE-2017](#)

[See other projects for this call](#)

## Funding Scheme

[MSCA-RISE - Marie Skłodowska-Curie Research and Innovation Staff Exchange \(RISE\)](#)

## Coordinator



### AGENCIA ESTATAL CONSEJO SUPERIOR DE INVESTIGACIONES CIENTIFICAS

Net EU contribution

€ 247 500,00

Total cost

€ 261 000,00

Address

**CALLE SERRANO 117**

**28006 Madrid**

 **Spain** 

Region

**Comunidad de Madrid > Comunidad de Madrid > Madrid**

Activity type

**Research Organisations**

Links

[Contact the organisation](#)  [Website](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

## Participants (7)

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### UNIVERSIDAD REY JUAN CARLOS

Spain

Net EU contribution

€ 225 000,00

Address

**CALLE TULIPAN**

**28933 Mostoles**

Region

**Comunidad de Madrid > Comunidad de Madrid > Madrid**

Activity type

**Higher or Secondary Education Establishments**

Links

[Contact the organisation](#) [Website](#)

[Participation in EU R&I programmes](#)

[HORIZON collaboration network](#)

Total cost

€ 234 000,00

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### UNIVERSIDAD DE ALMERIA

Spain

Net EU contribution

€ 135 000,00

Address

**CARRETERA SACRAMENTO CANADA**

**04120 Almeria**

Region

**Sur > Andalucía > Almería**

Activity type

**Higher or Secondary Education Establishments**

Links

[Contact the organisation](#) [Website](#)

[Participation in EU R&I programmes](#)

Total cost

€ 135 000,00

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## UNIVERSIDADE DE COIMBRA

 Portugal

Net EU contribution

€ 9 000,00

Address

**PACO DAS ESCOLAS**

**3004-531 Coimbra** 

Activity type

**Higher or Secondary Education Establishments**

Links

[Contact the organisation](#)  [Website](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

€ 9 000,00

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## UNIVERSITA DEGLI STUDI MEDITERRANEA DI REGGIO CALABRIA

 Italy

Net EU contribution

€ 27 000,00

Address

**VIA SALITA MELISSARI FEO DI VITO**

**89124 Reggio Calabria** 

Region

**Sud > Calabria > Reggio di Calabria**

Activity type

**Higher or Secondary Education Establishments**

Links

[Contact the organisation](#)  [Website](#) 

[Participation in EU R&I programmes](#) 

Total cost

€ 27 000,00

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## ANOIKTO PANEPISTIMIO KYPROU (OPEN UNIVERSITY OF CYPRUS)

 Cyprus

Net EU contribution

€ 13 500,00

Address

YANNOU KRANIDIOTI AV 33 2ND FL  
2220 Lefkosia 

Region

Κύπρος > Κύπρος > Κύπρος

Activity type

Higher or Secondary Education Establishments

Links

[Contact the organisation](#)  [Website](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

€ 13 500,00

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## YPOURGEIO GEORGIAS, AGROTIKIS ANAPTYXIS KAI PERIVALLONTOS

 Cyprus

Net EU contribution

€ 4 500,00

Address

Athalassa  
1417 Nicosia 

Region

Κύπρος > Κύπρος > Κύπρος

Activity type

Public bodies (excluding Research Organisations and Secondary or Higher Education Establishments)

Links

[Contact the organisation](#)  [Website](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

€ 4 500,00



## ANKARA UNIVERSITESI

 Türkiye

Net EU contribution

€ 63 000,00

Address

**DOGOL CADDESI**

**06100 Tandoğan Ankara** 

Region

**Batı Anadolu > Ankara > Ankara**

Activity type

**Higher or Secondary Education Establishments**

Links

[Contact the organisation](#)  [Website](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

€ 63 000,00

## Partners (11)



**PARTNER** 

**TARBIAT MODARES UNIVERSITY (INSTRUCTOR'S TRAINING UNIVERSITY)**

 Iran

Net EU contribution

€ 0,00

Address

## INTERSECTION OF SHAHID CHAMRAN AND JALAL AL AHMAD HIGHWAY

14115 175 TEHRAN 

Activity type

**Higher or Secondary Education Establishments**

Links

[Contact the organisation](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

**No data**



**PARTNER** 

**FERDOWSI UNIVERSITY OF MASHHAD**

 Iran

Net EU contribution

**€ 0,00**

Address

**ADMIN. BLDG. UNIVERSITY CAMPUS AZADI SQ**

**9177948974 MASHHAD** 

Activity type

**Higher or Secondary Education Establishments**

Links

[Contact the organisation](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

**No data**



**PARTNER** 

**UNIVERSITY OF TEHRAN**

 Iran

Net EU contribution

**€ 0,00**

Address

ENGHELAB ISLAMI AVENUE, CENTRAL ADMINISTRATION BUILDING  
14174 TEHRAN 

Activity type

**Higher or Secondary Education Establishments**

Links

[Contact the organisation](#)  [Website](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

**No data**

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**PARTNER** 

**UNIVERSIDAD NACIONAL AUTONOMA DE MEXICO (UNAM)**

 Mexico

Net EU contribution

**€ 0,00**

Address

**AV. UNIVERSIDAD 3000, COYOACAN**

**04510 CIUDAD DE MEXICO** 

Activity type

**Higher or Secondary Education Establishments**

Links

[Contact the organisation](#)  [Website](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

**No data**

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**PARTNER** 

**JOHN CARROLL UNIVERSITY**

 United States

Net EU contribution

**€ 0,00**

Address

1 JOHN CARROLL BOULEVARD AD 250  
44118-4581 University Heights 

Activity type

**Higher or Secondary Education Establishments**

Links

[Contact the organisation](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

**No data**

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**PARTNER** 

**OBERLIN COLLEGE**

 United States

Net EU contribution

**€ 0,00**

Address

**173 WEST LORAIN STREET**

**44074 Oberlin** 

Activity type

**Higher or Secondary Education Establishments**

Links

[Contact the organisation](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

**No data**

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**PARTNER** 

**The Regents of New Mexico State University**

 United States

Net EU contribution

**€ 0,00**

Address

Corner of Espina Street & Stewart Street  
NM 88003-8001 Las Cruces 

Activity type

**Higher or Secondary Education Establishments**

Links

[Contact the organisation](#)  [Website](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

**No data**



**PARTNER** 

**UNIVERSIDAD NACIONAL DE LA PAMPA**

 Argentina

Net EU contribution

**€ 0,00**

Address

**CORONEL GIL 353**  
**6300 Santa Rosa** 

Activity type

**Higher or Secondary Education Establishments**

Links

[Contact the organisation](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

**No data**



**PARTNER** 

**UNIVERSIDAD DE CONCEPCION**

 Chile

Net EU contribution

**€ 0,00**

Address

VICTOR LAMAS 1290  
4070386 Concepcion 

Activity type

**Higher or Secondary Education Establishments**

Links

[Contact the organisation](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

**No data**



**PARTNER** 

**DEPARTMENT OF BIODIVERSITY CONSERVATION AND ATTRACTIONS**

 Australia

Net EU contribution

**€ 0,00**

Address

**17 DICK PERRY AVENUE**  
**6983 Bentley Delivery Centre** 

Activity type

**Research Organisations**

Links

[Contact the organisation](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

**No data**



**PARTNER** 

**NOORDWES-UNIVERSITEIT**

 South Africa

Net EU contribution

**€ 0,00**

Address

HOFFMAN STREET 11  
2531 Potchefstroom 

Activity type

**Higher or Secondary Education Establishments**

Links

[Contact the organisation](#)  [Website](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

**No data**

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**Permalink:** <https://cordis.europa.eu/project/id/777803>

European Union, 2025