



3rd INTERNATIONAL WORKSHOP GYPWORLD

A Global initiative to understand gypsum ecosystem ecology



9-13 MAY 2022 - ALMERÍA (SPAIN)

Programme

<https://www.ual.es/como-llegar> (How to get)

Monday-09/05/22 – d/m/y

- 9.00-9.30 Registration (CITE III, see FILE "HOW_TO_GET_UAL)
- 9.30-11.00 GIS and niche modelling training course (CITE III, classroom number 3)
- 11.00-11.30 BREAK
- 11.30-13.30 GIS and niche modelling training course
- 13.30-15.00 LUNCH
- 15.00-19.30 VISIT to Arboleas-*LAPIS_SPECULARIS* – Guided by staff from the town hall of Arboleas
- 19.30-20.00 SNACK OFFERED BY THE CITY COUNCIL OF ARBOLEAS

Tuesday - 10/05/22 – d/m/y

- 9.00-10.00 Opening ceremony
Chairman: Helga Ochoterena
- 10.00-10.45 KEY SPEAKER Dr. Urgamal Magsar (Head of Laboratory of the Plant Systematics and Phylogenetic, Botanic Garden and Research Institute, Mongolian Academy of Sciences, Mongolia) – "Current plant diversity, vegetation characteristics and conservation status of Mongolia".
- 10.45-11.15 BREAK
- 11.15-12.00 KEY SPEAKER Prof. Undrakh-Od Baatar (Head, Central Asian Soil Science Society, Mongolia) – "Distribution of GYPSISOLS in Mongolia and its main plant vegetation".
- 12.00-13.30 ORAL SESSION I
- 12.00-12.15 Hilda Flores Olvera. *Drymaria series lyropetala* (Caryophyllaceae), a gypsophilous North American complex: taxonomic advances.
- 12.15-12.30 Mario Blanco Sánchez. Contrasting adaptive strategies and genetic variation in two dominant gypsophiles in response to drought.
- 12.30-12.45 Sara Palacio Blasco. Recent and ancient evolutionary events shaped the plant elemental composition of edaphisms. A phylogeny-wide analysis of Iberian and Chihuahuan Desert gypsum plants.
- 12.45-13.00 Roberto López Rubio. Are phylogenetic and functional distance good predictors of plant-plant competition? A common garden experiment with Mediterranean shrub species.

13.00-13.15 Michael J. Moore. Niche evolution in the Nyctagineae: a group with an ancestral affinity for gypsum?

13.30-15.00 LUNCH

15.00-15.30 POSTER SESSION I

Chairman: Antonio Mendoza-Fernández

15.30-16.15 KEY SPEAKER Prof. Khabibullo Shomurodov (Institute of Botany, Academy of Science of the Republic of Uzbekistan, Taskent, Uzbekistan) – “Gypsophilous Vascular Plants of Uzbekistan: taxonomic composition, endemism and the state of rare species population”.

16.15-17.00 ORAL SESSION II

16.15-16.30 Sergio Muriel Marín. Searching for lichen gypsophiles: checklist and substrate affinities.

16.30-16.45 Mariana Rodriguez Sánchez. Aridity and gypsum type shape the gypsophyte communities of the Chihuahuan desert.

16.45-17.00 López-Pujol. Why does the world's main producer of gypsum (China) have almost no gypsophytes?

17.00-17.30 BREAK

17.30-18.15 KEY SPEAKER Dr. Helga Ochoterena (Department of Botany, Institute of Biology, National Autonomous University of México, México, México) – “Facing the challenges for the study of gypsophilous floras in México”.

TASTING ALMERIA (DE TAPAS)

Wednesday - 11/05/22 – d/m/y

Chairman: Fabián Martínez Hernández

9.00-9.45 KEY SPEAKER Prof. Wenju Li (Xinjiang Institute of Ecology and Geography, Chinese Academy of Sciences, Urumqi, China) – Mapping Asia Plants: Current status of floristic information and utilization of plant diversity and resources in Central Asia.

9.45-10.30 ORAL_SESSION III

9.45-10.00 Giovanni Spampinato. Plant communities patterns in Sicilian gypsum outcrops.

10.00-10.15 Ana I. García-Cervigón Morales. GYPWOOD: A research project to study plasticity and phenotypic variation in wood anatomy of gypsum chamaephytes in response to drought.

10.15-10.30 Alicia Montesinos. Nitrogen trade between plant species with different phenology.

10.30-11.00 BREAK

11.00-11.45 KEY SPEAKER Prof. Mingxun Ren (Center for Terrestrial Biodiversity of the South China Sea, College of Ecology and Environment, Hainan University, Haikou, China) – “Karst flora on Hainan Island, China”.

Chairman: Carlos Salazar

11.45-13.30 ORAL SESSION IV

11.45-12.00 Andreu Cera. When disturbances favour species adapted to stressful soils: grazing may benefit soil specialists in gypsum plant communities.

12.00-12.15 Sonia Chamizo. Soil CO₂ efflux dynamics from different ground covers over gypsiferous marls.

12.15-12.30 Rocio Chaves Jimenez. “The Good Neighbour”: *Erodium cicutarium* determines annual species assemblages at fine spatial scales in gypsum systems.

12.30-12.45 Laura de la Puente. An approach to the mechanisms of use of gypsum crystallization water by plants.

12.45-13.00 Alexander Rudov. Ecohydrological niche segregation among coexisting C3 and C4 desert shrubs in a gypsum-calcareous formation (NW Iran).

13.00-13.15 Ricardo Sánchez Martín. Changes in facilitative interactions in contrasting stress environments (gypsum and limestone). A model for understanding how traits and environments influence facilitative interactions.

13.15-13.30 Sarah Collins. How plant-microbial interactions affect water and nutrient dynamics in semiarid environments and its implications on plant performance and plant-plant interactions.

13.30-15.00 LUNCH

15.00-16.30 ROUNDTABLE Ecological Restoration of Gypsum Ecosystems

COMPANIES: SAINT GOBAIN / TORRALBA / E. Laguna (Technical director of CIEF, Generalitat Valenciana) / J. Lorite (Dpt. Botany, University of Granada, Spain) / J. Mota (Dpt. Biology and Geology, University of Almería, Spain)

16.30-17.00 POSTER SESSION II

17.00-17.30 BREAK

Chairman: Esteban Salmerón-Sánchez

17.30-19.00 ORAL SESSION V

17.30-17.45 Oana Cristina Dimitru. Effects of pollination and abiotic stress on plant-facilitation interactions.

17.45-18.00 Laura Ortiz Diaz. Functional diversity of experimental assemblages drives annual plant species responses to biological soil crusts in gypsum systems.

18.00-18.15 Yolanda Pueyo. Livestock grazing and aridity trade-offs on the conservation and forage quality of gypsum rangelands (NE Spain).

18.15-18.30 Sergio Cózar García. Comparative study of three methods for the determination of gypsum content in soils.

18.30-18.45 Fabián Martínez Hernández. Selection of a reserve network using the checklist of the intermountain west gypsophytes (North America).

18.45-19.00 Hossein Akhiani. Gachsaran formation: The largest area of gypsum outcrops in SW Iran with unique flora and vegetation

19.00-19.30 CLOSURE

20.30-22.00 VISIT TO THE HISTORIC CENTRE OF ALMERIA

Thursday - FIELD TRIP 12/05/22 – d/m/y Flora and vegetation of the gypsum karst of Sorbas

KEY SPEAKERS: F. Pérez-García, F. Martínez-Hernández, A. Mendoza-Fernández, E. Salmerón-Sánchez.

9.00-13.00 VISIT TO LOS_YESARES-Q

13.00-14.30 LUNCH

14.30-17.30 VISIT TO MAJADAS-Q

Friday - 13/05/22 – d/m/y

9.00-10.30 GYPWORLD Management Meeting

10.30-11.00 BREAK

11.00-13.30 GYPWORLD Management Meeting

13.30-15.00 LUNCH

SPONSORS

Ayuntamiento de Arboleas

Torralba Group

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General information and documents related to the workshop available at:

<http://nevada.ual.es/biocon/informacion-de-interes.html>

Information about GIS and niche modelling training course at:

<https://drive.google.com/drive/folders/1LdyzAx0Zdf1bWR1qjwVLz05ivfBP2Rrw?usp=sharing>