



# EWRS Working Group Meeting on "Soil Seed Bank, Germination & Early Growth" Perugia, Italy, 13-15 June 2023

## First circular

We invite you to the EWRS Working Group meeting on Soil Seed Bank, Germination & Early Growth to be held in Perugia, Italy on 13-15 June 2023. The scope of the working group includes all processes involved during the transition from seeds to seedlings, and from buds (on creeping roots, rhizomes, stolons etc.) to vegetative shoots, in the life cycle of weeds. The scope has recently been expanded to include vegetative means of reproduction. Germination (sprouting) and early growth are important processes of weeds emerging from soil seed banks and from buds on vegetative plant organs, and knowledge of these processes is important for understanding weed population dynamics and may aid in weed control timing and decisions.

The aim of the meeting is to bring together researchers with interest in this topic to exchange and discuss their experiences and findings with other colleagues. You are invited to attend this meeting by sending your registration along with the proposed title, name(s) and address(es) of author(s), and two-page abstract. Please forward this circular to any interested colleagues in your institution/country. Abstracts could be on topics such as:

- Weed seed bank dynamics
- Seed dormancy, germination, seedling emergence and early growth of weeds
- Reproduction and sprouting dynamics of vegetative structures and buds

The meeting will include a workshop on modelling seed germination and emergence. The workshop will cover important topics related to the peculiar aspects of statistical modelling of seed germination/emergence (e.g. data type, data manipulation and reformatting, between-group comparisons, censoring), the biological and theoretical underpinnings of germination models in relation to temperature (thermal time), water (hydrotime), combination of water and temperature (hydro-thermal time), and other factors. The workshop will be based on the R statistical environments and will provide both lectures and hands-on experiences in working with germination data analyses and building models. The workshop will be run by Andrea Onofri (University of Perugia, Italy) and Mohsen B. Mesgaran (University of California, Davis, USA) to a maximum of 30 people.

## Location

The workshop and working group meeting will be held at the Department of Agricultural, Food and Environmental Sciences (DSA3), University of Perugia, located at the 10<sup>th</sup> Century *San Pietro* Benedictine abbey.

The DSA3, formerly Faculty of Agriculture in Perugia, was founded in 1896 and is known as one of the oldest and most famous faculties of Agriculture throughout Italy.

Perugia is situated in the centre of Italy (Umbria region), halfway between Florence and Rome. The town is located on the top of a hill (about 500 m a.s.l.) in an area known as “the green heart of Italy” due to its beautiful, evergreen countryside. Perugia offers several Etruscan, Roman and Renaissance historical sites. Moreover, it is relatively close to the picturesque medieval towns of Assisi (20 km), Todi (30 km) and Gubbio (40 km).

In mid-June, the weather in Perugia may be very pleasant, with mild daytime temperatures, ranging from 20 to 26°C at daytime. Rainfall levels are usually low, although year-to-year variability may still be rather high.

## Preliminary Programme 2023

	13-6-2023	14-6-2023	15-6-2023
8:00 - 9:00	Travelling to Perugia	Modelling workshop Lecture 1 Hands-on exercises	Informal meeting: Discuss old common experiments (publication)
9:00-10:45			
10:45-11:00		Coffee Break	Coffee Break
11:00 - 12:30		Modelling workshop Lecture 2 Hands-on exercises	Continued meeting: new common experiments
12:30-13:30		Lunch	Lunch
13:30-15:45	Registration Meeting opening Oral pres.	Modelling workshop Lecture 3 Hands-on exercises	Oral presentations + discussion (15 minutes including discussion)
15:45-16:00		Coffee Break	Coffee Break
16:00-18:30	Modelling workshop: getting started (hands-on: uploading of R packages and introduction)	Oral presentations + discussion (15 minutes including discussion).	Field trip to the experimental station of the organising institution
19:00	Welcome cocktail		Meeting Dinner

### Abstract submission and proceedings

Those who are interested in presenting a communication should send their abstracts by the 15<sup>th</sup> of March, to Aritz Royo-Esnal (aritz.royo@udl.cat). Abstracts should not exceed two pages (all included) and will not be peer-reviewed; the authors will be fully and solely responsible for the content of their abstracts. The workshop material will be made available online. Abstracts of presentation will be collected in a booklet of proceedings and will also be made available online on the EWRS working group website.

### Cost/Fee

The registration fee will cover welcome cocktail, lunches, coffee breaks, field trip and meeting dinner, proceedings. Subscriptions should be addressed to [eleonora@magentaevents.it](mailto:eleonora@magentaevents.it) by using the attached form and students (MSc-PhD) should include a proof of their status. Instructions for payments are given in the application form.

Registration fee	EWRS member	EWRS non-member
Regular fee (delegates and accompanying persons)	210	270
Students (MSc – PhD)	180	240

The difference in fees between members and non-members is the cost of a yearly membership to the EWRS.

EWRS can give subsidies to students and early career scientists (below 35 years of age), giving a presentation, covering travel/accommodation costs up to 500 Euro per person. The interested

scientists should send an application letter with a brief CV (showing their early career status), a short motivation letter and a budget of estimated costs, together with the abstract. Please send the above documentation to Aritz Royo Esnal (aritz.royo@udl.cat) before the 15<sup>th</sup> of March 2023. The subsidy will be awarded according to the EWRS rules.

## **Deadlines**

- 1<sup>st</sup> circular/invitation – announcement in newsletter/website/via e-mails – 8 February 2023
- Abstract submission and preliminary registration – 15 March 2023
- 2<sup>nd</sup> circular with draft program and registration form – 31 March 2023
- Deadline for registration (without abstract) – 30 April 2023
- 3<sup>rd</sup> circular with final programme – 15 May 2023

## **Travel information**

### **By plane**

1. Direct Flight to Perugia - The Umbria International Airport has direct connections from/to, e.g., London Stanstead, Brussels, Barcelona, Bucarest. Further information can be obtained from: <https://airport.umbria.it/ita/>

2. Direct flight to the International Airport Roma Leonardo da Vinci – Fiumicino (FCO) and then to Perugia by train (preferably to be booked in advance; check train timetables and buy tickets at [www.trenitalia.com](http://www.trenitalia.com)). Usually, it is necessary to take a train from Fiumicino to Roma Termini and from there to Perugia (note: do not use any other stations, such as Perugia Università or Perugia Ponte San Giovanni: they are not convenient). From Roma Termini to Perugia there are daily direct trains, approx. every second hour. Other trains run from Roma Termini to Foligno and, from there, you will find connections to Perugia. Allow 30 minutes from gate to the Station in Fiumicino.

3. Direct flight to the International Airport Roma Leonardo da Vinci – Fiumicino (FCO) and then to Perugia by the SULGA bus (for information and schedule visit <https://www.sulga.it/>). Tickets can be bought onboard. At Fiumicino, the bus departs/arrives from/to Terminal T3; in Perugia, the bus departs/arrives from/to Piazza Partigiani, that is 15 minutes on foot from the Meeting venue.

4. Direct flight to the International Airports in Florence, Bologna, Milano, Ancona or Pisa and to Perugia by train (in general, less convenient; check train timetables at [www.trenitalia.com](http://www.trenitalia.com))

### **By train**

Please check timetables at [www.trenitalia.com](http://www.trenitalia.com)

### **By car**

- from Milano (460 km) or Bologna (250 km) or from Firenze (160 km)  
highway A1 (Milano - Roma) - exit Valdichiana - take the freeway to Perugia
- from Roma (170 km)  
highway A1 (Roma - Milano) - exit Orte - take freeway E45 to Perugia

## **Meals**

Coffee and lunch will be served in a room close to the meeting room.

Workshop dinner will be organised in a restaurant close to town center.

## Accommodation

Hotel reservation is left to the participants. Please, remember that Perugia is on a hill and roads are, sometimes, very steep. Thus, we suggest that you reserve a hotel or B&B in the town center. We list some possible accommodations, which are at comfortable walking distance from the workshop venue and close to the historical town centre.

Hotel	Category	Distance to workshop venue (on foot)	Link
Signa	** / ***	3 min	<a href="https://www.hotelsigna.it">https://www.hotelsigna.it</a>
Sangallo	****	10 min	<a href="http://www.sangallopalacehotel-perugia.com">http://www.sangallopalacehotel-perugia.com</a>
Rosalba	**	15 min	<a href="https://www.hotelrosalbaperugia.it">https://www.hotelrosalbaperugia.it</a>
Priori Secret Garden	***	20 min	<a href="https://priorisecretgarden.it">https://priorisecretgarden.it</a>
La Rosetta	****	20 min	<a href="https://hotelarosetta.it">https://hotelarosetta.it</a>
Fortuna	***	20 min	<a href="https://www.hotelfortunaperugia.com">https://www.hotelfortunaperugia.com</a>

## Organising committee

Aritz Royo-Esnal - Department of Agrofood and Forestry, University of Lleida, co-ordinator of EWRS WG Seed bank, Germination and Early Growth

Kirsten S. Tørresen – NIBIO, Norwegian Institute of Bioeconomy Research, Division of Biotechnology and Plant Health, Ås.

Francesco Tei - Department of Agricultural, Food and Environmental Sciences, University of Perugia

Andrea Onofri - Department of Agricultural, Food and Environmental Sciences, University of Perugia

Euro Pannacci - Department of Agricultural, Food and Environmental Sciences, University of Perugia

## Scientific Committee

Aritz Royo-Esnal - Department of Agrofood and Forestry, University of Lleida

Kirsten S. Tørresen – NIBIO, Norwegian Institute of Bioeconomy Research, Division of Biotechnology and Plant Health, Ås.

Mohsen B. Mesgaran – Department of Plant Science, University of California, Davis

Alireza Taab – Department of Agronomy and Plant Breeding, Faculty of Agriculture, Ilam University, Ilam, Iran, deputy co-ordinator of EWRS WG Germination and Early Growth

Euro Pannacci - Department of Agricultural, Food and Environmental Sciences, University of Perugia

Francesco Tei - Department of Agricultural, Food and Environmental Sciences, University of Perugia

Andrea Onofri - Department of Agricultural, Food and Environmental Sciences, University of Perugia



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13th-15th June 2023

# APPLICATION FORM

Student (please provide proof)

EWRS Member

EWRS Non-Member

## Personal Details

First Name \_\_\_\_\_

Last name \_\_\_\_\_

E-mail address \_\_\_\_\_

Phone Number (with area code) \_\_\_\_\_

## Payment Details

Payment by bank wire

Participation fee : see first circular

Recipient: MAGENTA EVENTS SRL

Bank Details: ~~IT70Y0306903110100000018507~~

Bic Code: BCITITMM      NEW: IT59G0306903110100000019446

## Food Details

Allergies or intolerances \_\_\_\_\_

Preference for Meeting Dinner

meat  
menu'

fish  
menu'

vegetarian  
menu'

- please fill out the form and send it to the e-mail address [eleonora@magentaevents.it](mailto:eleonora@magentaevents.it)