

## EDUARDO FERNANDEZ PASCUAL

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**De:** Lohengrin A. Cavieres <lcaviere@udec.cl>  
**Enviado el:** viernes, 12 de abril de 2019 19:40  
**Para:** EDUARDO FERNANDEZ PASCUAL  
**CC:** Borja Jiménez-Alfaro  
**Asunto:** Re: Launching the seed ecological spectrum of alpine plants  
**Datos adjuntos:** Alpine data\_Chile.xlsx

Hola Aeduerdo y Borja:

Listo...adjunto los datos de lo que tenemos en Chile siguiendo el formato que enviaron. Espero sean útiles...me avisan ai necesitan algo más...y quedo atento a sus noticias.

Saludos,

Lohen

Dr. Lohengrin Cavieres  
Profesor Titular  
Departamento de Botánica  
Facultad de Ciencias Naturales y Oceanográficas  
Universidad de Concepción  
Casilla 160C, Concepcion  
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El 10-04-2019 a las 5:27, EDUARDO FERNANDEZ PASCUAL escribió:

Hola Lohen,

Gracias por enviarnos esos datos, lo más útil para poder juntarlo con lo que han enviado los otros sería el siguiente formato:

- Cada réplica/placa de Petri en una fila
- Cada variable (especie, población, tratamiento, germinación...) en una columna

Te mando un ejemplo. ¿Crees que podríais enviarlo en ese formato? Con todas las especies unas debajo de otras.

En principio vamos a utilizar los porcentajes finales de germinación, así que no haría falta el dato de germinadas cada día, sólo la suma final.

Saludos,  
Eduardo

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**De:** Lohengrin A. Cavieres <[lcaviere@udec.cl](mailto:lcaviere@udec.cl)>  
**Enviado el:** miércoles, 10 de abril de 2019 5:55  
**Para:** EDUARDO FERNANDEZ PASCUAL <[eduardofp.indurot@uniovi.es](mailto:eduardofp.indurot@uniovi.es)>  
**CC:** Borja Jiménez-Alfaro <[jjimenezalfaro.borja@gmail.com](mailto:jjimenezalfaro.borja@gmail.com)>  
**Asunto:** Re: Launching the seed ecological spectrum of alpine plants

Estimados Eduardo y Borja:

Primero que todo mil disculpas por mi silencio, pero en nuestro verano estuve en enero mucho en terreno, febrero vacaciones y marzo ha sido difícil volver al semestre y coordinar clases y todo. Como les comenté antes tenemos muchos experimentos y los datos están en distintas planillas excel. Adjunto para uds. un resumen de los datos que tenemos, donde cada grupo de filas separadas por líneas corresponde a una planilla distinta. En cada planilla hay distintas hojas donde están los datos crudos de semillas germinadas cada día, luego el cálculo de porcentajes. Les envío una a modo de ejemplo. Por lo tanto, díganme uds. cuales vamos enviando. Quedo atento,

Saludos,

Lohen

Dr. Lohengrin Cavieres  
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El 09-04-2019 a las 9:53, EDUARDO FERNANDEZ PASCUAL escribió:

Dear all,

I'm writing to update you on the state of the alpine seed ecological spectrum project.

I have received data from Andrea Mondoni (Alps), Annisa Satyanti (Australia) and Honglin Li (China).

- Data from the Alps includes lab experiments on the effect of stratification, GA3 and germination temperatures.
- Data from Australia includes information also from lab experiments, on the effect of stratification and GA3. So, while we can compare those two factors with the European data, we cannot assess the effect of temperature. I'd like to make an effort to find some Australian data with different germination temperature treatments.
- Data from China comes from field sowings, so I don't think we can compare it with the rest. However, I believe we can get comparable data from some publications.

I haven't received anything from Chile, I'm including Verónica Briceño and Lohengrin A. Cavieres in this email to see if they are still interested in submitting data.

We have changed the plans we had to present a preliminary version of this at the Seed Ecology conference, because Borja won't be able to attend, and I have to present a different communication. However, I still think we should try to meet during the conference and dedicate some work to this. I can prepare a dataset combining all data we have, so we can discuss it together. Please let me know whether you will be attending the conference and if you are interested in having this meeting.

Best,

Eduardo

**De:** Borja Jiménez-Alfaro <[jimenezalfaro.borja@gmail.com](mailto:jimenezalfaro.borja@gmail.com)>

**Enviado el:** lunes, 21 de enero de 2019 12:35

**Para:** EDUARDO FERNANDEZ PASCUAL <[eduardofp.indurot@uniovi.es](mailto:eduardofp.indurot@uniovi.es)>

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**Asunto:** Re: Launching the seed ecological spectrum of alpine plants

Dear all;

Thanks again for your participation in this project, and especially Eduardo for taking the lead of data analyses!

Please reply as soon as possible to Eduardo's e-mail with the first version of your data (deadline is **one week from now**).

I also highlight the idea of having a meeting at the [Seed Ecology](#) conference this year in Germany. Please be so kind of replying (in your response to Eduardo) whether you will attend the conference and whether you are willing to participate in a group meeting about this project.

Best,

Borja

On Fri, 18 Jan 2019 at 13:47, EDUARDO FERNANDEZ PASCUAL

<[eduardofp.indurot@uniovi.es](mailto:eduardofp.indurot@uniovi.es)> wrote:

Sorry for writing again, I want to clarify two questions raised by Andrea:

1) By alpine we mean seeds collected above the treeline, including from both specialist species (which only grow above or around the treeline) and generalist species (which may also occur at lower elevations). In fact, generalists can be of special interest to compare with the specialists.

2) It does not matter if you only have data for one "replicate" (i.e. only one Petri dish) as the data will be analyzed as a proportion. By the way, it is very important that data is provided as successes, trials (i.e. with a cell for number of germinated seeds, a cell for number of potentially germinable seeds, and some indication of whether seed viability was measured somehow) NEVER as a percentage: i.e. [50 germinated, 100 germinable] and not 50% or 0.5.

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**De:** EDUARDO FERNANDEZ PASCUAL

**Enviado el:** viernes, 18 de enero de 2019 10:38

**Para:** 'Borja Jiménez-Alfaro' <[jimenezalfaro.borja@gmail.com](mailto:jimenezalfaro.borja@gmail.com)>; Adrienne Nicotra

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**Asunto:** Launching the seed ecological spectrum of alpine plants

**Importancia:** Alta

Hello everyone,

I am writing to update you on the state of our proposed collaboration network: who has replied so far, next steps, proposed co-authorship policy, and instructions to submit data. I am still including everyone in this email to encourage participation, in the future I will write only to those of you who have declared their interest.

#### **# WHO HAS DECLARED INTEREST SO FAR**

1. Andrea Mondoni: 150 published species from the European Alps and northern Apennines + c. 70 unpublished species from the same places and the Spanish Sierra Nevada.
2. Annisa Satyanti & Adrienne Nicotra: 100 Australian alpine species.
3. Honglin Li: 52 Chinese alpine species, although experiments were conducted in the field, not sure how comparable they will be with the rest.
4. Verónica Briceño: 23 species from the Chilean Andes.
5. Lohengrin A. Cavieres: 60 species from the Chilean Andes (not sure whether some of these may overlap with Verónica's).

#### **# NEXT STEPS**

I believe we can start working with this species pool, while being open to more people joining in. Our idea is to have something preliminary to present at the Seed Ecology conference in Germany (July-August), and also that those of us who attend can meet there to discuss what we have and how to move forward with it.

#### **# CO-AUTHORSHIP POLICY**

Regarding co-authorship policy, we are thinking about following the general guidelines used in multi-author vegetation papers, in which Borja has experience. Please understand that these are not some hardcoded rules, we are proposing this to start a discussion about it with you.

- The main idea is to be inclusive and invite everyone who wants to contribute with relevant data.
- Each contributing institution should make a proposal of who they think merits recognition with co-authorship for their contribution to generate the data, we think 1-3 people is reasonable. If any institution wants to propose more people, they will need to make a reasoned case for why is that necessary, and identify which was the specific contribution of each person.
- Once the dataset is assembled, we will have to evaluate what constitutes a relevant data contribution, in the form of a threshold (like 5% of the final

dataset). For example, contributing data for one species may be relevant if the final dataset is 30 species, but not if the final dataset is 300. If in the end some data is deemed non-relevant, and the contributor doesn't want it to be included without co-authorship, we will drop the data from the dataset.

- Contributing data should not be the only criterion for co-authorship, everyone listed as a co-author should provide some feedback on the manuscript before submission, at the very least by reading and accepting the last version, and agreeing to being accountable for everything that is in the manuscript.
- I understand that some of you may feel anxious about **sharing unpublished data**. I believe we can work with this kind of data for our meta-analysis, as this is going to take some time before becoming public. You can rest assured that unpublished data will be kept confidential and that I won't share it with anyone nor publish it without your express consent. If we want to include it in summary results, for example for the Seed Ecology conference, we can keep it with anonymous species names, origin, etc.

#### # INSTRUCTIONS TO SUBMIT DATA

I can assume that everyone has their data stored in different formats, so the best thing would be for every contributor to send me a sample or samples of how they have their raw data stored. I will check the format of the sample, and either ask for the whole dataset to be submitted as is, or to make some format changes to be able to merge it into a common format.

Please send me these sample datasets **no later than Jan 28**, so we can work on unifying datasets during Feb, make preliminary analyses during March, and have something for the Seed Ecology deadline which is in April.

In this email, please state also: (a) name and contact details of everyone from your group who you are proposing as a contributor (see co-authorship guidelines, I will use these contacts for future mails); (b) whether you agree with the co-authorship guidelines or want to propose changes to it.

Thanks to everyone,

Eduardo Fernández Pascual

Investigador Clarín

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**De:** Borja Jiménez-Alfaro [<mailto:jimenezalfaro.borja@gmail.com>]

**Enviado el:** miércoles, 12 de diciembre de 2018 16:26

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**Asunto:** Seed ecological spectrum of alpine plants

Dear colleagues;

I would like to invite you to collaborate on a project to address the seed ecological spectrum of alpine plants. The idea arose two years ago during the seed trait workshop held in Perth when we thought on bringing together germination data from alpine regions across the world. For different reasons, we were not able to start the project - but together with the working group on seed traits, a few of us defined a roadmap that includes exploring the seed ecological spectrum (see the pdf attached) -. The point is that I am back in Spain to develop a research project on alpine ecology, and my former Ph.D. student Eduardo Fernández-Pascual is now in the same institution for continuing his own research on comparative seed ecology. Therefore we both have decided to include this project in our research agenda.

We are mainly interested in cold-adapted species living above the climatic treeline (could be also species living in subalpine/alpine habitats). From our previous contacts, it seems that we have, at least, data from Western Europe, European Alps, Australian Alps, Andes, and the Tibetan Plateau (Julie suggested to collect data from the USA, maybe Carol can help on this). Beyond seed mass, we would like to collate data from experiments dealing with temperature and/or moisture conditions, producing information on e.g. fresh germination % (non-dormant fraction); final germination % after stratification/treatments; embryo type; seed mass viability, etc.; together with elevation and climate data. Eduardo has agreed to collect and check the data, then we can discuss their potential for specific analyses. Please note that the idea is to compare existing data rather than develop an inter-continental experiment (this could be a nice follow-up), using raw experimental data or a meta-analysis if the raw data is not comparable. It could happen that we find only one or two variables to compare, but we need to look at your data first.

If you are willing to be involved in the project, please indicate:

(ii) the approx. number of species and the regions for which you have information on seed germination of alpine plants (published or unpublished)

(ii) recent publications from your group showing results on seed ecology and related topics (please send the pdf or the weblink)

(iii) whether you know other publications or working groups in which you are not involved but you think may be relevant for getting more data.

Thank you in advance,

Borja

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