Cover letter

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Dear Editorial Board,

I submit the manuscript *The seed germination spectrum of alpine plants: a global meta-analysis* to be considered for publication as a **full paper** in New Phytologist.

## What hypotheses or questions does this work address?

This is a global meta-analysis of primary germination data contributed by 12 research groups from 8 alpine regions in 4 continents. We used 9,799 records representing 62 seed plant families and 661 species to assess whether the germination ecological patterns detected by local studies are generalized at the global level.

## How does this work advance our current understanding of plant science?

We describe a global alpine germination syndrome, information valuable for all scientists working in alpine environments. Our results indicate a convergence of the seed germination spectrum in strict alpine species. We also found interactive effects of phylogeny and seed morphology that point to trade-offs shaping the seed ecological spectrum.

## Why is this work important and timely?

This is the first global evaluation, for a coherent habitat, of the seed germination spectrum and its relationship with other aspects of the seed ecological spectrum. This was one of the objectives in the research agenda for trait-based seed ecology recently published by New Phytologist (Saatkamp *et al.*, [2019](#ref-RN4655)).

## References

Saatkamp A**,** Cochrane A**,** Commander L**,** Guja LK**,** Jimenez‐Alfaro B**,** Larson J**,** Nicotra A**,** Poschlod P**,** Silveira FA**,** Cross AT. **2019**. A research agenda for seed‐trait functional ecology. *New Phytologist* **221**: 1764–1775.