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Prof. Rowan F. Sage

Chief Editor, Annals of Botany

25th June 2024

Dear Prof. Sage,

**First submission of Original Research article**

Please find attached the manuscript ‘Functional biogeography of the thermal thresholds for post-dispersal embryo growth in *Conopodium majus*’, which we submit to your kind consideration for publication in Annals of Botany as an Original Research article.

In this manuscript, we study the functional intraspecific variation in the thermal thresholds for post-dispersal embryo growth (a.k.a. morphological seed dormancy) through a combination of lab work, field experiments and modelling. To our knowledge, this is the first time that intraspecific variation in this key ecophysiological trait is studied across the whole latitudinal distribution of a species, from the Iberian Peninsula to Scandinavia. We show that the trait shows intraspecific variation, and that this variation correlates with the bioclimatic latitudinal gradient, highlighting the functional importance of post-dispersal embryo growth for plant reproduction by seed.

In my name, and in the name of my fellow co-authors (Cristina Blandino, Brith Natlandsmyr, Sylvi M. Sandvik, Hugh W. Pritchard), thank you very much for taking the time to consider our work.

Yours sincerely,



Eduardo Fernández-Pascual

Associate Professor of Botany

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