

Cover letter

Dear Editors:

We would like to submit the enclosed manuscript entitled “Prediction of *Cossus Linnaeus* suitable growing area in China under Future Climate change based on optimized MaxEnt Model and Geographic detector”, which we wish to be considered for publication in “Ecology and Evolution”. No conflict of interest exists in the submission of this manuscript, and manuscript is approved by all authors for publication. I would like to declare on behalf of my co-authors that the work described was original research that has not been published previously, and not under consideration for publication elsewhere, in whole or in part. All the authors listed have approved the manuscript that is enclosed.

In this work, we evaluated *Cossus Linnaeus* is a globally invasive pest of a eucalyptus plantation, which spreads in China year by year. Predicting the suitable growth area of *Cossus Linnaeus* in China is beneficial to the establishment of early monitoring, forecasting and prevention of this pest. Based on the 86 valid data and 23 environmental factors of *Cossus Linnaeus* in China, based on the current distribution data of *Cossus Linnaeus* in China, combined with geographic detector model and MaxEnt model, this study screened out the main environmental variables and predicted the potential suitable growth areas of *Cossus Linnaeus* in China in 2030 and 2050. The primary significance of this study. I hope this paper is suitable for “Ecology and Evolution”.

The following is a list of possible reviewers for your consideration:

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We deeply appreciate your consideration of our manuscript, and we look forward to receiving comments from the reviewers. If you have any queries, please don't hesitate to contact me at the address below.

Thank you and best regards.

Yours sincerely,

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