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A multivariable assessment of the spatio-temporal distribution of pyrethroids performance on the sea lice *Caligus rogercresseyi* in Chile

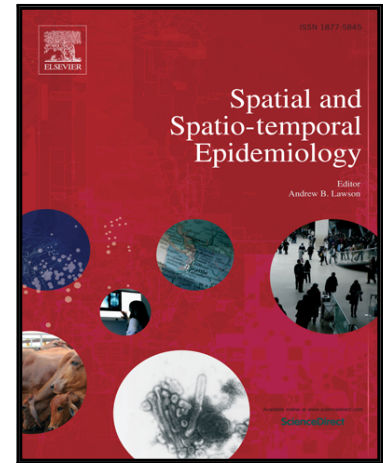
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Highlights

- The global clustering analysis suggests the response of *C. rogercresseyi* to pyrethroids is spatially structured and distance-dependent.
- The local clustering analyses indicate there were two areas, one located in northern Los Lagos region and the other in central Aysén region, where the post-treatment adult lice level attributed to the farm effect was significantly higher than in the rest of the study area.
- These spatial clusters remained even once we adjusted for environmental and management predictors, suggesting unknown factors were causing the clustering in these areas.
- One potential factor that may explain the clustering is resistance to pyrethroids of local sea lice populations. Further investigation should be carried out to confirm this finding.

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