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Submission of a manuscript to Journal of Evolutionary Biology

Dear Editor,

I am writing to express our wish to submit our manuscript "Dewlap color variation in *Anolis sagrei* is maintained among habitats within islands of the West Indies" for publication as an original research article in *Journal of Evolutionary Biology*.

Combining reflectance spectrometry and machine learning, we investigated the patterns of color variation in the dewlap of one species of *Anolis* lizard across habitats spanning multiple islands in the West Indies, testing the idea that differences in coloration may be linked to environmental conditions and habitat-types. We found that coloration indeed differed between different habitats, sometimes in close proximity. However, these differences were inconsistent across islands, suggesting that the diversity of this communication signal is maintained between habitats within islands, but that adaptation to habitat-type is unlikely to explain this pattern.

Our work builds on previous studies published in *J. Evol. Biol.*, such as Vanhooydonck et al. (2009, DOI 10.1111/j.1420-9101.2008.01643.x) and Driessens et al. (2017, DOI 10.1111/jeb.13144) who investigated similar questions in the same study species, albeit by comparing populations from different islands and not habitats within islands. By doing so, we hope that our study will constitute a logical and complementary follow-up to theirs for the readership of *J. Evol. Biol.*.

This manuscript has not been published before and is not currently under consideration by another journal. All authors have agreed to submit this manuscript to J. $Evol.\ Biol.$, and declare no conflicts of interest.

Yours sincerely,

Raphaël Scherrer