

Microtopographical Selection of the Common Periwinkle *Littorina littorea*

Sympatric speciation is an important aspect of evolutionary biology and ecology. Understanding this complex process requires finding examples to study to enhance our understanding of the mechanisms at work. The common periwinkle *Littorina littorea* has been used as a model organism to study habitat selection preferences and perhaps could be used to evaluate how these preferences result in sympatric speciation. This study focused on the microtopographical preferences of *L. littorea* and determined that there are two subpopulations present, one which prefers to inhabit the tops of rocks while the other group prefers to inhabit the base level substrate. Numerous possible mechanisms exist which could account for this selection preference, but at the present time there is no knowledge of what the dominant factor is. This study lays the groundwork for future research into sympatric speciation using *L. littorea* as a model organism.

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