Life history evolution across climate clines (Application deadline April 15)

Funded by grants from the Bolin Centre for Climate Research at Stockholm University and the Swedish Research Council (VR).

This PhD project will focus on the evolution of life cycle timing in situations where insect species show shifts in the number of annual generations, i.e. when there are shifts in voltinism. Selection is likely to change significantly across voltinism shifts as they signify a dramatic change in optimal life history strategy. In particular the new project aims at exploring life cycle adaptations and potential voltinism shifts in the expanding range margins of butterfly species that are presently expanding their distributions northwards. At the northern range limits these expanding species are expected to experience strong selection for changes in how photoperiod regulates life cycle timing and voltinism. The project aims at testing the general prediction from life history theory that there are footprints of selection for a change in life cycle regulation resulting in a shift from the ancestral state of having two generations per year to having only one annual generation. In this way the project will provide novel insights into ecological consequences of the interaction between the two most prominent effects of climate change on natural populations: northward range expansions and selection for changes in seasonal life cycle regulation.

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See more info and instructions of how to apply at: https://www.su.se/english/about/working-at-su/phd