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Evolution of polymorphism on a heterogeneous landscape

The effect of spatial heterogeneity and habitat boundaries on the coexistence of multiple competing strains has been of recent interest as a novel mechanism for maintaining diversity above the level predicted by the competitive exclusion principle. Given that limited dispersal in heterogeneous landscapes can indeed enable the stable coexistence of more competitors than there are resources, a natural next step is to investigate the emergence and stability of such diversity under evolution. I present some results from individual-based simulations of evolving populations on a heterogeneous lattice landscape, and contrast these with some semi-analytical approximations, showing that evolution in such systems can indeed lead to the emergence of polymorphism and stabilize it against local extinction due to demographic stochasticity.