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Metapopulation model of rock-scissors-paper game with subpopulation-specific victory rates stabilized by heterogeneity

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Highlights

- We presented a metapopulation model with different victory rates in the rock-scissors-paper game.
- We numerically obtained the solutions of reaction-diffusion equations on the graphs with two and three nodes.
- We also analytically derived the approximate solutions of the equations.
- When victory rates between subpopulations are heterogeneous, the solution approaches stable focuses.
- The heterogeneity of victory rates promoted the coexistence of species.

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