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# Global Attracting Behavior of Non-autonomous Stagestructured Population Dynamical System with Diffusion

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摘要 A non-autonomous single species dispersal model is considered, in which individual member of the population has a life history that goes through two stages, immature and mature. By applying the theory of monotone and concave operators to functional differential equations, we establish conditions under which the system admits a positive periodic solution which attracts all other positive solutions.

关键词 <u>nonautonomous</u> <u>stage structure</u> <u>dispersal</u> 分类号

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**Abstract** A non-autonomous single species dispersal model is considered, in which individual member of the population has a life history that goes through two stages, immature and mature. By applying the theory of monotone and concave operators to functional differential equations, we establish conditions under which the system admits a positive periodic solution which attracts all other positive solutions.

Key words <u>nonautonomous</u> <u>stage structure</u> <u>dispersal</u>

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