Speed determinacy of the traveling waves for a three species time-periodic Lotka-Volterra competition system

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August 24, 2021

Abstract

In this paper, speed selection of the time periodic traveling waves for a three species time-periodic Lotka-Volterra competition system is studied via the upper-lower solution method as well as the comparison principle. Through constructing specific types of upper and lower solutions to the system, the speed selection of the minimal wave speed can be determined under some sets of sufficient conditions composed of the parameters in the system.

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