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*Dynamics of Diffusive Lotka-Volterra competition systems in a shifting environment*

We studied the existence, uniqueness and stability of forced traveling waves for the Lotka-Volterra competition system in a shifting habitat. Based on the asymptotic behaviors of the wave profiles and by means of upper-lower solution method coupled with sliding technique, we showed that the forced wave for the system exists and is unique, when the forced speed lies in a specific interval. Explicit expressions of the two end points of this interval were derived and our finding indicated that they are related to the Fisher-KPP-type invasion speed. Furthermore, we established a squeezing theorem to show the local stability of the forced waves. With the aid of comparison principle and Xinfu Chen's idea (1997), we established the global stability of the forced waves when the initial data were properly assigned. Finally, a gap formation between two species were studied when forced traveling wave doesn't exist.