

1092-35-215

Yuxiang Zhang* (yzha42@uottawa.ca), 585 King Edward Avenue, Department of Mathematics and Statistics, University of Ottawa, Ottawa, ON K1N 6N6, Canada. *Bistable Traveling Waves for A Reaction and Diffusion Model with Seasonal Succession.*

This work is devoted to the study of a periodic reaction-diffusion competition model, which describes the propagation of two competitive species in bad and good seasons. The existence and global stability of time-periodic bistable traveling waves are established for such a system under appropriate conditions. The methods involve the upper and lower solutions, spreading speeds of monostable systems, and the monotone semiflow approach. This is a joint work with Dr. Xiaoqiang Zhao. (Received August 09, 2013)