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Shu Dai, Dong Li and Kun Zhao* (kzhao@tulane.edu). *Non-existence result for a class of Shigesada-Kawasaki-Teramoto type reaction-cross diffusion models.*

We consider a class of Shigesada-Kawasaki-Teramoto type reaction-cross diffusion models with vanishing random diffusion coefficients. For homogeneous Dirichlet boundary conditions we prove non-existence of global-in-time non-trivial non-negative smooth solutions. Some numerical results are also presented, suggesting the possibility of finite time extinction. (Received August 27, 2012)