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Michael A Freeze, II* (freezem@uncw.edu), Dept. of Mathematics and Statistics, 601 South College Road, Wilmington, NC 28403, and **Yaw Chang, Wei Feng** and **Xin Lu**. *On Ratio-Dependent Food Chain Model, Part II: Reaction-Diffusion System.*

We study the dynamical structure of an extension of a simple food chain model to a reaction-diffusion system that includes a super-predator consuming both prey and predator. Straightforward criteria for the existence of a positive global attractor and the presence of a positive steady-state solution as well as conditions for uniqueness and stability of the coexistence state are provided. Numerical simulations demonstrate the feasibility of the identified conditions. (Received September 23, 2014)