Joon Hyuk Kang\* (kang@andrews.edu). Uniqueness pattern of survival of two species of animals in a domain.

We concentrate on the uniqueness of the positive solution for the general elliptic system with homogeneous boundary conditions. This system is the general model for the steady state of a competitive interacting system. The techniques used in this paper are upper-lower solutions, maximum principles and spectrum estimates. The arguments also rely on some detailed properties for the solution of logistic equations. (Received September 15, 2019)