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Janpou Nee* (jpnee@ctu.edu.tw), General Education Center, ChienKuo Technology University, Cheng-Hua, Taiwan , Taiwan, and **Hsi-Chuan Huang** (schwag@cc.ctu.edu.tw), Department of Automation Engineer, and Institute of Mechatronoptic Systems, ChienKuo Technology University, Changhua, Taiwan. *On the behavior of the solutions of certain Turing system.*

The species of fungal are manifold including some precious Chinese herb. In this article we study the model discussed by F. A. Davidson et al and it is a system of parabolic equations that describe the activation and depletion. The behavior of the solutions of this biological system is complicated due to the positive cubic nonlinear reaction term which, in general, cause the solutions blow-up in finite time. However, with a suitable restriction to the diffusion coefficients there will exists a global absorbing set for any initial value. To demonstrate the results, we extend generalized maximum principle of W. M. Ni et al of elliptic equations to parabolic equation. (Received December 10, 2011)