1056-92-740   **Sophia R-J Jang*** (`sophia.jang@ttu.edu`), Department of Mathematics and Statistics, Texas Tech University, Lubbock, TX 79409. *Discrete host-parasitoid models with Allee effects and age structure in the host.*

We study a stage-structured single species population model with Allee effects. The asymptotic dynamics of the model depend on the maximal growth rate of the population as well as on its initial population size. We also investigate two models of host-parasitoid interaction with stage-structure and Allee effects in the host. The parasitoid population may drive the host population to extinction in both models even if the initial host population is beyond the Allee threshold. (Received September 16, 2009)