Meeting: 1006, Lubbock, Texas, SS 14A, Special Session on Undergraduate and Graduate Student Research (and Related Poster Session organized by Ali Khoujmane and Mara D. Neusal, Texas Tech)

1006-60-102 **Kiyomi Kaskela***, Department of Mathematics and Statistics, Texas Tech University, Lubbock, TX 79409. Stochastic LPA Models Compared.

Three stochastic models developed by Cushing et al. (Chaos in Ecology) for the flour beetle are compared. The models are referred to as LPA models because of the three developmental stages of the beetle: larvae, pupae, and adult. We compare some of the probability distributions associated with three different stochastic LPA models: demographic model, environmental model, and Poisson-binomial model. (Received February 09, 2005)