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Lihong Zhao* (lzhao@louisiana.edu), lzhao@louisiana.edu, and **Karyn L. Sutton** and **Jacoby Carter**. *Growth Dynamics for Pomacea maculata*.

Pomacea maculata is a relatively new invasive species to the Gulf Coast region and potentially threatens local agriculture (rice) and ecosystems (aquatic vegetation). The population dynamics of *Pomacea maculata* have largely been unquantified. We directly measured the growth rates of individually marked snails grown in a common tank to quantify their growth patterns. But due to large intra- and inter- individual variability and sample size, we were not able to get statistically supported estimates (i.e., tight confidence intervals) on overall growth dynamics. However, we were able to use a model comparison statistic to determine that there are distinct growth stages. Further, these data strongly suggest that male and female growth dynamics, size distributions, and overall weights, are notably different with females being generally larger. We performed simulation studies based on observed variability, and designed additional lab experiments and field studies. We were able to get a large sample size data set, which allows us to better characterize the variability in the population, but only over one time interval. Analysis of this data set suggests that variability in growth rates is significant, which is important for an accurate model of the population dynamics. (Received November 10, 2015)