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Azmy S. Ackleh, Xinyu Li and Baoling Ma* (baoling.ma@louisiana.edu). *Parameter estimation in a size-structured population model with distributed states in the recruitment.*

A least-squares method is developed for estimating parameters in a size-structured population model with distributed states in the recruitment. Convergence results for the computed parameters are established. In the numerical simulations, we perform parameter estimation computations with statistical analysis to compare the single state-at-birth versus the distributed states-at-birth model dynamics. (Received September 15, 2014)