1014-39-148 **M R.S. Kulenovic*** (kulenm@math.uri.edu), Department of Mathematics, University of Rhode Island, Kingston, RI 02881, and **Orlando Merino** (merino@math.uri.edu), Department of Mathematics, University of Rhode Island, Kingston, RI 02881. *A Global Attractivity Result for Maps with Invariant Boxes.*

We present a global attractivity result for maps generated by systems of autonomous difference equations. It is assumed that the map of the system leaves invariant a box, is monotone in a coordinate-wise sense (but not necessarily monotone with respect to a standard cone), and satisfies certain algebraic condition. It is shown that there exists a unique equilibrium, and that it is a global attractor. As an application, it is shown that a discretized version of the Lotka-Volterra system of differential equations of order k has a global attractor in the positive orthant for certain range of parameters. (Received August 03, 2005)