Mihaela Predescu* (mpredescu@bentley.edu), Bentley College, 175 Forest St., Department of Mathematical Sciences, Waltham, MA 02452. Some Nonlinear Systems of Difference Equations with Applications. Preliminary report.

We will present some nonlinear systems of difference equations involving rational terms that have appeared in applications and natural sciences. Initial conditions are nonnegative and all parameters are positive. We will focus on the boundedness and the global character of solutions. In some cases, sufficient conditions for global attractivity will be given in terms of the parameters of the system. (Received August 19, 2008)