

1165-39-97

arzu bilgin* (arzu.bilgin@erdogan.edu.tr), Recep Tayyip Erdogan University, Department of Mathematics, Rize, Turkey. *Coexistence of Period-Two Solutions of a Cooperative System.*

I investigate the global character of a cooperative system in a number of cases. First, I discuss the existence of the equilibrium solutions and the results for different dynamics scenarios of equilibrium solutions and period-two solutions. Then, I consider the cases which depends on the existence or non-existence of period-two solutions as well as the Allee effect.

Keywords: difference equations, discrete dynamical system, global, linear fractional, rational, stability. (Received January 14, 2021)