M. Jaberi and J. Mashreghi, On the population model of the non-autonomous logistical equation of second order with period two parameters, submitted.

Abstract

In this paper we study the non-autonomous logistic difference equation

$$x_{n+1} = \frac{p_n x_n}{1 + x_{n-1}}, \ n \ge 0,$$

with the nonnegative initial conditions x_{-1}, x_0 . In particular, the periodic behavior, the attractivity of solutions and the stability of solutions are discussed in detail.