

962-39-46

Michael A. Radin* (mradin@math.uri.edu), University of Rhode Island, Department of Mathematics, Kingston, RI 02881, **Hamdi El-Metwally** (hamdi@math.uri.edu), University of Rhode Island, Department of Mathematics, Kingston, RI 02881, **Edward A Grove** (grove@math.uri.edu), University of Rhode Island, Department of Mathematics, Kingston, RI 02881, **Gerry Ladas** (gladas@math.uri.edu), University of Rhode Island, Department of Mathematics, Kingston, RI 02881, and **Richard Levins** (humaneco@biostat.harvard.edu), Harvard School of Public Health, Department of Population Science, 665 Huntington Avenue, Boston, MA 02115. *On the Difference Equation $x_{[n+1]} = a + bx_{[n-1]}e^{-x_{[n]}}$, $n = 0, 1, 2, \dots$*

We study the global stability, the boundedness nature, and the periodic character of the positive solutions of the difference equation $x_{[n+1]} = a + bx_{[n-1]}e^{-x_{[n]}}$, $n = 0, 1, 2, \dots$ which may be interesting in its own right, but which may be viewed as describing a population model. (Received July 05, 2000)