1135-39-506 **Vlajko L. Kocic*** (vkocic@xula.edu), Xavier University of Louisiana, Mathematics Department, New Orleans, LA 70125. *Global asymptotic behavior of certain class of nonlinear nonautonomous difference equations.*

In this paper we study the global asymptotic behavior of positive solutions of the nonlinear nonautonomous difference equation of the form

$$x_{n+1} = a_n x_n f(x_{n-k}), n = 0, 1, ...$$

with positive initial conditions where the sequence a_n is positive and periodic with period p, and the function f satisfies some additional conditions. Results are applied to some periodically forced classical population models. (Received September 06, 2017)