1163-39-716 **Mustafa Kulenovic***, 165 little rest road, Unversity of Rhode Island, Kingston, RI 02881. *Global Behavior of Certain Nonautonomous Linearizable Three Term Difference Equations.*

We investigate the nonautonomous difference equation

$$x_{n+1} = g_0 x_n + g_1 x_{n-1}, \quad n = 0, 1, \dots \ .$$

with real initial conditions and coefficients $g_i, i = 0, 1$ which are in general functions of n and/or the state variables $x_n, x_{n-1}, \dots$ and satisfy $g_0 + g_1 = 1$. We also obtain some global results about the behavior of solutions of the nonautonomous non-homogeneous difference equation

$$x_{n+1} = g_0 x_n + g_1 x_{n-1} + g_2, \quad n = 0, 1, \dots \ .$$

where $g_i, i = 0, 1, 2$ are functions of n and/or the state variables $x_n, x_{n-1}, \dots$ with $g_0 + g_1 = 1$. Our results are based on the explicit formulas for solutions. Our applications will include some discontinuous and piecewise difference equations. (Received September 11, 2020)