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**Yevgeniy Kostrov** and **Zachary Kudlak\*** (zachary.a.kudlak@uscga.edu), 31 Mohegan Ave Pkway, New London, CT 06320, and **Patrick Vernon**. *On a System of Rational Difference Equations with Non-constant Coefficients.*

We investigate the boundedness character of nonnegative solutions of the nonautonomous rational system

$$\begin{cases} x_{n+1} = \frac{\alpha_n + \gamma_n x_n}{\beta_n x_n + y_n} \\ y_{n+1} = g(x_n, \dots, x_{n-k+1}, y_n, \dots, y_{n-k+1}, n) \end{cases} \quad \text{for } n = 0, 1, \dots$$

where the coefficients of the system are sequences of nonnegative numbers bounded both above and below by positive constants, the initial conditions  $(x_0, y_0), (x_{-1}, y_{-1}), \dots, (x_{-k+1}, y_{-k+1})$  are positive, and  $g$  takes on only positive values for positive values of  $x_n, \dots, x_{n-k+1}, y_n, y_{n-k+1}, n$ . Special cases of this system, such as with periodic coefficients, are also investigated. (Received September 13, 2018)