

1056-39-1290

E. A. Grove and **Y. Kostrov*** (ykostrov@xula.edu), 4859 West Napoleon ave, Apt # 204, metairie, LA 70001, and **M. Radin** and **S. Schultz**. *On The Global Behavior Of A System Of Rational Difference Equations.* Preliminary report.

We show that the system of rational difference equations

$$x_{n+1} = \frac{\alpha_1}{x_n + y_n} \quad , \quad y_{n+1} = \frac{\alpha_2 + y_n}{B_2 x_n + y_n}$$

is permanent, where the initial conditions $x_0, y_0 \in (0, \infty)$ and the parameters $\alpha_1, \alpha_2, B_2 \in (0, \infty)$ of the system are positive real numbers. We also find sufficient conditions for every positive solution of the system to converge. (Received September 21, 2009)