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**Sukanya Basu\*** ([sukanya.basu@mwsu.edu](mailto:sukanya.basu@mwsu.edu)), Mathematics Department, Midwestern State University, 3410 Taft Blvd., Wichita Falls, TX 76308. *Global Behavior of Solutions to a Planar System of First-Order Rational Difference Equations.*

For positive parameters  $\alpha_1, \beta_1, \gamma_1, A_1, B_1, C_1, \alpha_2, \beta_2, \gamma_2, A_2, B_2$  and  $C_2$ , consider the system of first-order rational difference equations

$$\left. \begin{aligned} x_{n+1} &= \frac{\alpha_1 + \beta_1 x_n + \gamma_1 y_n}{A_1 + B_1 x_n + C_1 y_n} \\ y_{n+1} &= \frac{\alpha_2 + \beta_2 x_n + \gamma_2 y_n}{A_2 + B_2 x_n + C_2 y_n} \end{aligned} \right\}, \quad n = 0, 1, 2, \dots \quad (\text{E})$$

I will discuss the global behavior of all solutions to system (E) whose initial conditions are non-negative. (Received September 16, 2009)