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Orlando Merino (merino@math.uri.edu), Lippitt Hall, Kingston, RI 02881. *Global Bifurcation
for Competitive Systems in the Plane.*

A global bifurcation result is obtained for families of competitive systems of difference equations

$$\begin{cases} x_{n+1} = f_\alpha(x_n, y_n) \\ y_{n+1} = g_\alpha(x_n, y_n) \end{cases}$$

where α is a parameter, f_α and g_α are continuous real valued functions on a rectangular domain $\mathcal{R}_\alpha \subset \mathbb{R}^2$ such that $f_\alpha(x, y)$ is non-decreasing in x and non-increasing in y , and $g_\alpha(x, y)$ is non-increasing in x and non-decreasing in y . A unique interior fixed point is assumed for all values of the parameter α . (Received February 10, 2009)