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Senada Kalabusic* (senadak@yahoo.com), Department of Mathematics, University of Rhode Island, Kingston, RI 02881. *Nonhyperbolic Dynamics for Competitive Systems in the Plane and Global Period-doubling Bifurcations.*

We investigate the global period-doubling bifurcations of solutions of the equation

$$x_{n+1} = f(x_n, x_{n-1}), \quad n = 0, 1, \dots$$

where the function f satisfies certain monotonicity conditions. We also obtain a global asymptotic result for competitive systems of difference equations in the plane in the nonhyperbolic case when the considered system has an infinite number of equilibrium points located along the graph of a nonincreasing function. (Received September 16, 2008)