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M. R. S. Kulenovic* (mkulenovic@mail.uri.edu), Department of Mathematics, University of Rhode Island, Kingston, RI 02881. *Stability of the Gumowski-Mira Equation with Period-Two Coefficient.*

We investigate the stability of solutions of the Gumowski-Mira equation with a period-two coefficient:

$$y_{n+1} = \frac{y_n}{b_n + y_n^2} - y_{n-1}, \quad n = 0, 1, \dots$$

where

$$b_n = \begin{cases} \alpha \geq 0 & \text{for } n = 2k, \\ \beta \geq 0 & \text{for } n = 2k + 1, \quad k = 0, 1, \dots \end{cases}$$

and the initial conditions y_{-1}, y_0 are real numbers. We prove that under some conditions the periodic coefficients will cause unboundedness of most of solutions. (Received September 16, 2008)