

عنوان مقاله:

On the Dynamics of the Logistic Delay Differential Equation with Two Different Delays

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نویسندگان:

Ahmed El-Sayed - Faculty of Science, Alexandria University, Alexandria, Egypt

Sanaa Salman - Faculty of Education, Alexandria University, Alexandria, Egypt

Ali Abo-Bakr - Faculty of Science, Alexandria University, Alexandria, Egypt

خلاصه مقاله:

Here, we study the logistic delay differential equation with two different delays. First of all, we discuss the local stability and Hopf bifurcation conditions. The method of steps is used to get a discretized analogue of the original system. Local stability and bifurcation analysis of the discretized system is investigated. Finally, we carry out some numerical simulations such as bifurcation diagram, Lyapunov exponent and phase portraits to verify the theoretical results and to illustrate complex dynamics of the considered system.

کلمات کلیدی:

Logistic equation, Time delay, Local stability, Bifurcation, Chaos

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