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Unique stationary distribution and ergodicity of a stochastic Logistic model with distributed delay

Xinguo Sun, Wenjie Zuo, Daqing Jiang, Tasawar Hayat

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Highlights

(1) Dynamics of a stochastic Logistic model with distributed delay are investigated.

(2) The existence of a unique and ergodic stationary distribution is proved by the Markov semigroups theory.

(3) Our main innovations are to transfer a stochastic Logistic model with strong kernel into a degenerated stochastic system and to construct a specific control function.

(4) Persistence and extinction are obtained.