SOME RESULTS ON CERTAIN STOCHASTIC PREDATOR-PREY MODELS

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Abstract: We study stochastic predator-prey systems with emphases on asymptotic properties. We obtain sufficient and almost necessary conditions for permanence and ergodicity of the stochastic predator-prey models with Beddington-DeAngelis functional response. Both non-degenerate and degenerate diffusions are considered. One of the distinctive aspects of this work is that it characterizes the support of the corresponding invariant probability measures. [This is a joint work with N.H. Du (Hanoi National University) and N.H. Dang (Wayne State University)].