

**ANALYSIS OF A PERIODICALLY FORCED PREDATOR-PREY
MODEL WITH BEDDINGTON-DEANGELIS FUNCTIONAL
RESPONSE AND IMPULSIVE PERTURBATIONS**

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ABSTRACT. In this paper, we study a periodically forced predator-prey model with Beddington-DeAngelis functional response and impulsive perturbations and we prove that there exists a stable prey-free solution when the magnitude of periodic forcing is less than some critical value. Also, we find a sufficient condition that the model is permanent. We have numerical results on periodic forcing and impulsive perturbations that show that the model we consider can give birth to various kinds of dynamical behaviors and several types of attractor coexistence.

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