

Accepted Manuscript

Study of cross-diffusion induced Turing patterns in a ratio-dependent prey-predator model via amplitude equations

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PII: S0307-904X(17)30696-0
DOI: [10.1016/j.apm.2017.11.005](https://doi.org/10.1016/j.apm.2017.11.005)
Reference: APM 12047



To appear in: *Applied Mathematical Modelling*

Received date: 23 May 2017
Revised date: 14 October 2017
Accepted date: 13 November 2017

Please cite this article as: Malay Banerjee, S Ghorai, Nayana Mukherjee, Study of cross-diffusion induced Turing patterns in a ratio-dependent prey-predator model via amplitude equations, *Applied Mathematical Modelling* (2017), doi: [10.1016/j.apm.2017.11.005](https://doi.org/10.1016/j.apm.2017.11.005)

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Highlights

- Spatio-temporal prey-predator model with cross-diffusion is studied.
- Effects of cross-diffusion terms are studied - analytically and numerically.
- Weakly nonlinear analysis is used to find the amplitude equations.
- Numerical simulations are used to see how cross-diffusion influence Turing patterns.
- Complete scenario of pattern formation in model with cross-diffusion is provided.

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