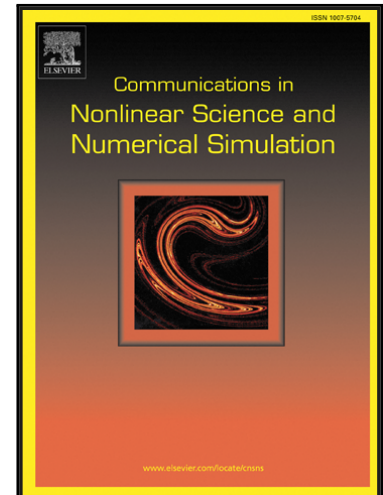


## Accepted Manuscript

Predator interference effects on biological control: The “paradox” of the generalist predator revisited

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## HIGHLIGHTS

- We introduce a new concept to measure the success of a biological control.
- We show the three species model proposed in "The role of top predator interference on the dynamics of a food chain model" by Upadhyay et al., Communications in Nonlinear Science and Numerical Simulation, 18, 757-768, 2013, and its spatially explicit version, can blow-up in finite time, for sufficiently large initial data.
- We show predator interference is the sole factor in inducing this blow-up.
- Based on our results we propose that generalist predator interference might be a cause of their success, in controlling target pests. However, predator interference may also be a cause of the population explosion of certain species, introduced originally for biological control purposes, such as the cane toad in Australia.

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