Review of: "Exploring the Impact of Reaction-Diffusion on an Ecological Diversity Mathematical Paradigm for Understanding Hantavirus Infection Dynamics"

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Potential competing interests: No potential competing interests to declare.

This paper proposes a modelling approach to describe the dynamics of Hantavirus infection by combining generalized Lotka-Volterra type equations with diffusion terms. The local stability of the proposed model is discussed, and case studies are reported.

Remarks:

- The introduced model needs more motivation. E.g., ``Additionally, we modify the alien population by including the diffusion term, D, and replacing it with the predator population represented by the variable$z$.'' What motivates the replacement?

- The applicability of Jacobian-based stability analysis of nonlinear dynamic systems relies on some well-known theorems, such as the Hartman-Grobman theorem. The applicability of Jacobian-based stability analysis for the considered system class is not discussed in the paper.

- The literature study in the Introduction is poorly organized.

- The quality of the presentation needs improvement. For example, in the section ``Local stability analysis,'' the second-order system and the third-order system should be treated in separate subsections. There are many formulation and grammar errors in the paper.