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Models to assess the effects of non-identical sex ratio augmentations of Wolbachia-carrying mosquitoes on the control of dengue disease

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Highlights

- *Wolbachia*-infected mosquitoes are released to break the cycle of dengue transmission.
- Modelling mosquitoes with stage structure and non-identical sex ratio augmentation is proposed.
- Bifurcation diagrams and the basin of attractions of equilibria are obtained.
- Three possible results for mosquito augmentation in parameter space are summarized.
- The study will be helpful to design proper mosquito augmentation plans.

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