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Stability of multi-group models with cross-dispersal based on graph theory

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Highlights

- The new multi-group models with cross-dispersal are proposed.
- Two kinds of sufficient criteria are presented for the stability of our models.
- Graph theory, together with Lyapunov method, are used to solve the stability of multi-group models with cross-dispersal.
- The stability criteria are shown in terms of the topology structure of digraphs.

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