

Enrichment Thresholds for Growth and Predation

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ABSTRACT

We consider a resource-based model of single-species growth on two non-reproducing, growth limiting, non-inhibitory resources. The environment is enriched by increasing the input concentration of one of the resources. The effects of enrichment depend in part, on how the resources are combined to promote growth. We consider two such cases. The model is then extended to include a predator species and the effects on the predator population of enrichment at the lowest trophic level are investigated.

Key Words: enrichment, predation, chemostat

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