Meeting: 1006, Lubbock, Texas, SS 10A, Special Session on Extinction, Periodicity, and Chaos in Population and Epidemic Models

1006-92-164 **Mary M Ballyk*** (mballyk@nmsu.edu), New Mexico State University, Department of Mathematical Sciences, POBox 30001, Department 3MB, Las Cruces, NM 88011, and **Gail S.K. Wolkowicz**. *Enrichment Thresholds for Growth and Predation.*

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. (Received February 14, 2005)