

1056-92-43

Jemal S Mohammed-Awel* (jmohammedawel@valdosta.edu), P.O.Box 5743, Valdosta, GA 31603, and **Kbenesh W Blayneh** and **Abdul-Aziz Yakubu**. *Discrete hierarchical competition with reward and cost of dispersion.*

The dynamics of asymmetric dispersion between two patches, where the local populations are structured into m-age classes, are considered. The population in one of the patches is assumed to have age-hierarchical organization and the local population practices contest competition while the population in the other habitat is not organized and practices scramble competition. Using analytical and numerical methods, comparison of the two populations (prior to dispersion), the effects of dispersion on the persistence and extinction of the local and the metapopulation are studied as key parameters change. (Received July 08, 2009)