1023-92-1516 **Youssef M Dib*** (`youssef@louisiana.edu`), 217 Maxim D. Doucet Hall, P.O.Box 41010, Lafayette, LA 70504-1010. *Competitive Exclusion and Coexistence in a Nonlinear Refuge-Mediated Selection Model.*

A selection model with n traits is considered. It is assumed that the mortality function is density dependent and that individuals with "weak" traits are able to disperse to a safe refuge patch and avoid competition with individuals carrying the strongest trait. It is shown that if any subpopulation with a "weak" trait does not have a safe refuge then it will become extinct. Therefore, for survival of n traits $n-1$ safe refuge patches are needed. When $n-1$ refuge patches are available global stability results of the interior equilibrium is proved under some conditions on the model parameters. Finally, two special cases with logistic and Beverton-Holt type of dynamics are studied in details. (Received September 26, 2006)