1035-92-445   **Sze-Bi Hsu**, Hsinchu, Taiwan, and **Lih-Ing W. Roeger*** (`lih-ing.roeger@ttu.edu`), Department of Mathematics and Statistics, Box 41042, Texas Tech University, Lubbock, TX 79409. *Competition of Two Species for Two Limited Resources with One Species Mediated by Parasites.* Preliminary report.

A mathematical model of two host species competing for two limited resources with one of the species mediated by parasites is considered. The first host species is divided into the susceptible and the infective population. The second species is assumed to be free of infection and is not able to get infected. We analyze the model by finding the conditions for the existence of the various equilibria and their local stability criteria. (Received September 07, 2007)