

AGE EFFECTS ON REPRODUCTIVE BEHAVIOR IN THE TREEHOPPER  
*UMBONIA CRASSICORNIS* (HEMIPTERA: MEMBRACIDAE)

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ABSTRACT

In many animal species females select mates based on male age. This choice is often linked to the reproductive benefits females derive. Age-based choice is also influenced by variation in the ability of males to find and solicit matings from females. My dissertation investigated the effect of male age in influencing patterns of female choice, and in affecting variation in male reproductive behavior, in the treehopper *Umbonia crassicornis* (Hemiptera: Membracidae).

The experiments conducted in this dissertation yield three main results. First, mating with older males has the beneficial consequence of promoting inbreeding avoidance. Second, age-based variation in vibrational mate-advertisement signals does not influence female choice. Nonetheless, it provides some insight into the potential factors affecting age-dependent signal expression in this species. Third, significant age-related changes in the behaviors used to find and solicit matings from females suggests that different mating tactics are used by older and younger males.