

# **Population growth characteristics of incipient colonies of the eastern subterranean termite, *Reticulitermes flavipes* (Isoptera: Rhinotermitidae)**

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In May 2011, ~800 colonies of *Reticulitermes flavipes* were initiated with paired alates originating from a single swarm. Only established colonies headed by a single queen and king were censused, and 15 different colonies were examined monthly for a 1-yr period. At each observation, data were recorded for all castes in the colony including the number of individuals and their collective mass. The mass of both the king and queen greatly decreased during the first two months, coinciding with egg production and colony foundation, and their mass remained relatively constant through the eighth month reading. Egg production was intermittent, with the greatest number of eggs (mean = 14.5) produced during the first month. The initial clutch of eggs developed into workers prior to additional eggs being laid at 5 mo. At the 6-mo census, a soldier was first observed in each of two colonies with total populations of 12 and 13 individuals. Total mass of each colony gradually increased over time. This study is ongoing, but I will present data regarding the growth of the colonies for the first year after establishment in terms of caste and biomass as well as the major events including occurrences of castes and the major growth periods of the colonies.