Life Cycle and Fecundity of Peanut Burrower Bug, *Pangaeus bilineatus* Say (Hemiptera: Cydnidae), Under Laboratory Conditions

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Peanut burrower bug (PBB), *Pangaeus bilineatus* Say (Hemiptera: Cydnidae), is a serious pest of peanut, *Arachis hypogaea* L., in the Southeast US. Adults and nymphs feed directly on peanut seed with piercing sucking mouthparts reducing seed quality and value. There is limited information on the insect's biology including its life cycle; therefore, a study was conducted to determine PBB fecundity and development time from oviposition to adult eclosion. This information is critical for development of an integrated pest management strategy, as control tactics often exploit vulnerable life stages of the target pest. Observations of PBB in laboratory colonies at UGA indicate that development from egg to adult requires approximately 30 days under constant conditions of 29°C, 40%RH, and 14:10 L:D cycle, but empirical data were lacking. Fourth and fifth instar nymphs were allowed to mature to adulthood in isolation. Adult virgin males and females were paired (n=20 pairs) and placed in 266 mL resealable plastic containers (11×8×5cm) with screened lids and 1 cm of sandy loam soil wetted to approximately 15% VWC. Ten peanut seed were placed on the soil surface as a food source and were replaced each day. Containers were placed in a growth chamber on a 14:10 L:D cycle and a constant temperature of 29°C. Containers were checked daily for eggs, nymphs, and exuviae as evidence of development to successive life stages. Date, time, no. of eggs, no. of nymphs and life stage were recorded.