

Effects of Landscape Context and Environmental Factors on Injury to Peanut Caused by the Subterranean Pest *Pangaeus bilineatus* in South Georgia.

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The peanut burrower bug (PBB), *Pangaeus bilineatus* Say (Hemiptera: Cydnidae), is a serious economic pest of peanut, *Arachis hypogaea* L., in the Southeast U.S., especially in Georgia. Factors driving the distribution of this historically sporadic native pest are unknown and annual losses have been reported throughout the region since 2010. Records of all PBB injury occurring in the 2016-2018 GA crop years were acquired from the Georgia Federal-State Inspection Service. Preliminary analyses were conducted using data from 2016 to test for significance of land use land cover (LULC) proportions in peanut, cotton, other agriculture, wetland, forest, and non-agricultural land with PBB injury. Other factors of irrigation, soil texture, field size, average roughness, and cumulative days of rain were inspected as potential predictors for PBB injury using a stepwise regression model in R. Preliminary results suggest significant factors of PBB injury to peanuts include irrigation, cumulative days of rain, average roughness, field size, and proportion of peanut in the surrounding landscape (1km).