Influence of Different Groundnut - Cowpea Intercropping Ratios on Sucking Pests and their Natural Enemies

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ABSTRACT

Among different ratios of groundnut + cowpea intercropping systems, the highest mean population of thrips and leaf hoppers were recorded in groundnut and cowpea sole crops (4.29 and 4.08 thrips/ plant & 5.58 and 10.64 jassids/ plant, respectively) followed by groundnut and cowpea crops in 3:1 ratio of groundnut + cowpea intercropping systems (3.50 and 3.69 thrips/ plant & 4.98 and 8.18 jassids/ plant, respectively) and comparatively lowest population was recorded in both groundnut cowpea crops at 7:1 ratio of groundnut + cowpea intercropping system (2.90 and 3.10 thrips/ plant; 4.09 & 7.83 leaf hoppers/ plant, respectively). A similar trend was followed in case of aphid population where highest population recorded in cowpea sole crop (23.20 aphids/ plant on leaves and 34.01 aphids/ plant on shoots, respectively) followed by groundnut and cowpea crops at 3:1 ratio of intercropping systems (5.94, 18.61 aphids/ plant on leaves and 10.91, 25.29 aphids/ plant on shoots, respectively) and lowest population was recorded in groundnut and cowpea crops at 7:1 (3.66, 14.22 aphids/ plant on leaves and 10.25, 18.71 aphids/ plant on shoots, respectively) ratio. The highest mean population of Coccinellids and spiders in groundnut and cowpea crops were observed in 3:1 (1.64, 1.65 coccinellids/ plant and 1.48, 1.83 spiders/ plant, respectively) and 7:1 ratios (1.20, 1.62 coccinellids/ plant and 1.34 and 1.38 spiders/ plant, respectively) of groundnut + cowpea intercropping systems among all intercropping ratios. The highest net returns and maximum B: C ratios were obtained in 7:1 ratio of groundnut + cowpea intercropping system.

Key words: Cowpea, Groundnut, Intercropping.