Abstract

Detritally-based resource subsidies can contribute to the regulation of insect herbivores by providing supplemental food for generalist predators. The prey from the detrital food web may act to increase predator densities when herbivorous prey is absent. What is not known is how variation in the quality or composition of detrital subsidies can influence predator populations. Previous research demonstrates that compost can help to recruit and retain generalist predators from the surrounding environment, which may prey upon pest species. We examined how five different compost treatments affected the abundance and diversity of epigeal generalist predators. The experiment followed a randomized complete block design and sampling occurred two times from July to August 2011 using pitfall traps. We sorted, enumerated, and identified all predatory arthropods in order to evaluate the effects of the treatments on the abundance of generalist predators. We found that both the manure and hardwood treatments were significantly different from the rest of the treatments, and had the highest abundance of generalist predators.