Biodegradation of Polystyrene by Superworms

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The purpose of this project was to see if superworms would consume more polystyrene than mealworms over a time span of 168 hours. Comparing the lifestyles of superworms and mealworms,it is logical to believe that superworms can also consume polystyrene similar to mealworms.It was hypothesized that superworms would consume more polystyrene than mealworms .A total of 5 grams of each species' larvae were placed in a half of a ½ gallon Aqua Culture Betta View Betta Fish Aquarium. One gram of polystyrene (cut into 3×3 cm squares) was placed in each section of larvae. The container was placed in a room with temperatures ranging from 65-70? F. Every 24 hours the mass of the polystyrene squares was recorded. At the end of the experiment, mealworms had consumed more polystyrene per day than superworms in 168 hours.

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