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*Is It Worth It: The Study of Repellents on Darkling Beetles*

The purpose of this research project is to determine what repellents repel Pine Beetles. The repellents being used are soapy water, Rosemary, and Pine Beetle Repellent. Six Darkling Beetles were placed in four different cages. Cage one, the control doesn't receive repellent. Cage two receives dish soap solution. Cage three receives Rosemary and cage four receives Pine Beetle Repellent. A large tub is used for each repellent. The dish soap solution and the rosemary will be placed in the middle of the tubs making a line from across the tub. The Pine Beetle Repellent packets will be laid across the center of the tub. Observations will show if the beetles cross the repellents. The hypothesis states the Rosemary will work better than the dish soap solution or the Pine Beetle Repellent.

The data did not support the hypothesis. All beetles crossed the Rosemary and the dish soap solution. After trial one of the dish soap solution beetle 6 died. The Pine Beetle Repellent during the first trial kept all beetles but one from crossing. In Trials 2 and 3 all beetles crossed the repellents of the dish soap solution and rosemary. Before Trials 2 and 3 of the Pine Beetle Repellent two beetles died, in Trial 2 beetle 1 and 5 crossed repellent, Beetle 3 and 4 did not cross. During Trial 3 of the Pine Beetle Repellent beetle 1 and 4 crossed and Beetle 3 did not cross the repellent.