Lint! A New Way to Conserve Water

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Seventy percent of world's water is used for agricultural purposes which makes up most of our surface water and is needed to feed the world. We live in a desert which makes water even scarcer. Lint contributes to the 2.9 billion cubic feet of trash collected in the United States. Lint absorbs water. If we combine lint with soil for our plants would this be an effective way to recycle the lint and conserve the water? Our project tested the various combinations of lint, soil, and sand for water absorbency when grown in germinated bean plants. The data showed that when lint alone was tested for water absorbency, the average amount of water absorbed was 7.24ml of water per every gram of lint. This was a significant amount of water absorbed. However, data showed that when the amount of water absorbed by the potted bean plants in the various combinations of soil and lint were tested the amounts of water absorbed were not significant. Statistical analysis of the data supported our null hypothesis which stated that the lint would have no effect on the amount of water absorbed. Our standard deviation values showed there was no major difference between any of the lint-soil combinations vs the soil alone. The possibility for conserving water in our desert using lint makes it worthwhile to conduct more test trials with different types of soil combinations and lint.

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