



**CALIFORNIA STATE SCIENCE FAIR  
2015 PROJECT SUMMARY**

<b>Name(s)</b> <b>Megan R. Kohanarieh</b>	<b>Project Number</b> <b>J1820</b>										
<b>Project Title</b> <b>Germinating a Mixture of Lolium perenne and Poa pratensis L.: Grey Water vs. Tap Water</b>											
<table border="1"><thead><tr><th>Objectives/Goals</th><th>Abstract</th></tr></thead><tbody><tr><td><b>Objectives/Goals</b> I tried to germinate a mixture of two different types of grass seeds in a container with tap water and germinate a mixture of two different types of grass seeds in a container with grey water.</td><td></td></tr><tr><td><b>Methods/Materials</b> I had two trials; the first I germinated the seeds using soil with grey water and tap water, and the second I germinated without soil using grey water and tap water.</td><td></td></tr><tr><td><b>Results</b> After four weeks of testing, the first trial did not have one seed that germinated for tap water seeds or grey water seeds. Trial 2, however, did have seeds that germinated; twenty three germinated in tap water, and three germinated in grey water. As the seeds germinated, they began to sink below the surface in the cup for both grey water and tap water in Trial 2.</td><td></td></tr><tr><td><b>Conclusions/Discussion</b> The first trial did not have one seed that germinated for both tap water and grey water because of rain, low temperature conditions, and chemicals that got in the way of the seed getting its proper nutrients to germinate. Trial 2, however, did have seeds that germinated; 23 germinated in tap water, 3 germinated in grey water. As the seeds germinated and grew, the density increased, making the seeds sink. In the future, I can do this at a different time during the year, preferably summer, so the temperature is correct to water the grass and so there is no rain to affect my results.</td><td></td></tr></tbody></table>		Objectives/Goals	Abstract	<b>Objectives/Goals</b> I tried to germinate a mixture of two different types of grass seeds in a container with tap water and germinate a mixture of two different types of grass seeds in a container with grey water.		<b>Methods/Materials</b> I had two trials; the first I germinated the seeds using soil with grey water and tap water, and the second I germinated without soil using grey water and tap water.		<b>Results</b> After four weeks of testing, the first trial did not have one seed that germinated for tap water seeds or grey water seeds. Trial 2, however, did have seeds that germinated; twenty three germinated in tap water, and three germinated in grey water. As the seeds germinated, they began to sink below the surface in the cup for both grey water and tap water in Trial 2.		<b>Conclusions/Discussion</b> The first trial did not have one seed that germinated for both tap water and grey water because of rain, low temperature conditions, and chemicals that got in the way of the seed getting its proper nutrients to germinate. Trial 2, however, did have seeds that germinated; 23 germinated in tap water, 3 germinated in grey water. As the seeds germinated and grew, the density increased, making the seeds sink. In the future, I can do this at a different time during the year, preferably summer, so the temperature is correct to water the grass and so there is no rain to affect my results.	
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<b>Summary Statement</b> My project is about seeing if grey water can be used as an alternative for tap water when watering grass.											
<b>Help Received</b> I did not receive any help in doing this project.											