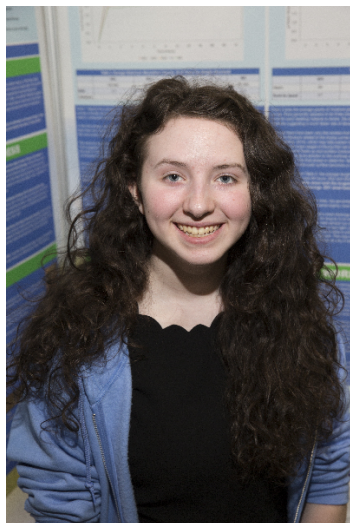


CWSF 2019 - Fredericton, New Brunswick



Abby Mattina

Time to Switch to Switchgrass Bedding?

Challenge: Resources

Category: Intermediate

Region: Toronto

City: Toronto, ON

School: Bloor C.I.

Abstract: The purpose of this project is to measure the absorptive capacity and moisture loss rate of switchgrass bedding relative to wheat straw and wood shavings. Three different switchgrass chop lengths are tested. The switchgrass results fall within a similar range to wheat straw and wood shavings, supporting the existing literature that switchgrass is a viable, sustainable bedding option for farmers.

Biography

My name is Abby Mattina. I am a grade 9 student in the TOPS program at Bloor Collegiate Institute in Toronto, Ontario. My grandfather grows switchgrass in southwestern Ontario. He would tell me stories about how local farmers were starting to use switchgrass for their bedding needs, and finding that it absorbed and desorbed moisture really well. This is what inspired me to try to actually measure the absorptive capacity and moisture loss rate of switchgrass for my project. I hope to take this research further by testing the switchgrass bedding in a laboratory setting, examining different chop sizes, organic materials, and varieties. My advice to other students who are thinking about doing a science fair project is to always be mindful of how your project contributes to the existing literature and/or addresses a real-world problem.

Awards

Value

Excellence Award - Intermediate - Silver Medal Sponsor: Youth Science Canada	
Western University Scholarship Silver Medallist - \$2000 Entrance Scholarship Sponsor: Western University	\$2 000
Total	\$2 000