Reid Pidsadowski

Diesel From the Field

Challenge: Energy
Category: Junior
Region: Edmonton
City: St Albert, AB
School: Sir George Simpson Junior High

Abstract: My inspiration came from a Biodiesel sticker. I wondered: Does Biodiesel contained as much energy as gas station Diesel? I turned Vegetable Oils into Biodiesel, burned them and measured how much energy each produced. Canola Biodiesel put out the most energy, but produced a bit less energy than gas station Diesel. Could we burn Canola Biodiesel, create less greenhouse gases and help save the Earth?

Biography

Greetings! I am Reid Pidsadowski, and I attend Sir George Simpson Junior High in St. Albert, Alberta. With my love of numbers and solving problems, my future career will likely be in Engineering. In my spare time, I enjoy online gaming, training Tae Kwon Do and traveling across Canada with my parents and sister. The inspiration for my Science Fair project happened when my Dad and I were fueling up our Diesel pick up truck. On the fuel pump there was a sticker that read: "May Contain Up to 5% Biodiesel" I had no idea what Biodiesel was. Since I have a farming background, I investigated which oils, like canola, are suitable for making Biodiesel. I also tested to see if there is a similar amount of energy in Biodiesel. I determined that Biodiesel, made from Canola oil, contains the highest amount of energy. For future research, I would like to determine the levels of greenhouse gas emissions in Petroleum Diesel versus Biodiesel. I would encourage everyone to participate in Science Fair and follow your curiosity about why the world around you is the way it is.

Awards	Value
Renewable Energy Award - Junior Sponsor: Ontario Power Generation	$500
Excellence Award - Junior - Silver Medal Sponsor: Youth Science Canada	
Challenge Award - Energy - Junior Sponsor: Youth Science Canada	
Western University Scholarship Silver Medallist - $2000 Entrance Scholarship Sponsor: Western University	$2 000
Total	$2 500