

Dear Professional Engineers in California Government,

My name is Kawthar Hemdan. I am a 7th grader at New Horizon School Pasadena. I am extremely grateful and happy to be receiving the Marilyn Jorgensen-Reece Award for Excellence from you at the 70th annual Los Angeles County Science Fair. I am especially honored to receive this award at such a tough time for everyone but am very grateful that LA County Science Fair was able to provide judges who interviewed us in such a well-organized environment. It is also my first time winning in the LA County Fair and receiving third place. I appreciate all the effort and lengths all the judges went to, to make this possible and I thank you. I hope with this award I can make a difference in the world that just might benefit people everywhere. By giving me this award, you have shown me that I am able to continue my passion and achieve anything in life with hard work.

I have always wanted to be a pediatrician since I was a little girl and to help children and those in need. I knew that if I wanted to become a pediatrician I would have to work hard and strive to do more. This award has given me that motivation to work harder and to strive to be better. It has also shown me that children my age all around the world are able to do anything, but they just need to be willing to try. I have always loved doctors and believe that they are the best people and heroes in the world because they save so many lives everyday showing children that anything is possible in life. My passion for becoming a pediatrician has increased over the years and now I believe that this can truly come true because of this award showing me that I could accomplish more than I expected. This is only my second time doing LA County Science Fair, but I hope to continue to do more in the future and achieve great things in life that I couldn't have possibly imagined. This has been an ultimate success and I thank you.

My project was comparing the effectiveness of coconut fiber + recycled plastic, shrubs + recycled plastic, and jute cloth + recycled plastic in preventing soil erosion. The materials used were shrubs, plastic pieces, coconut fiber, jute cloth, water, soil, a mesh bag, and a container. The three different barriers were tested separately by placing soil and the barrier in a container and propping it at an angle. Water was then poured slowly. The amount of soil left at the top was weighed, and this was repeated 15 times for each barrier. This experiment is important because it helps farmers and gardeners choose materials like jute cloth, coconut fiber, and shrubs that prevent soil erosion during storms and floods. Soil erosion has a big impact on farmers and gardeners across the world whose crops and seeds are getting swept away and pulled out of the ground due to soil degradation. I did this project because soil erosion damages nutrient-rich soil, affects crop yields, and costs farmers millions of dollars in resources and income. My goal is to provide a solution to this problem by testing different materials that could prevent soil erosion. Also, the addition of plastic pieces to the different types of barriers can help reduce plastic waste in landfills which is causing air pollution and global warming.

Once again, I would like to thank the Professional Engineers in California Government for awarding me the 2020 Marilyn Jorgensen-Reece Award for Excellence. I am truly thankful and honored to be receiving this award and I thank you for making this opportunity possible for me and for hundreds of other kids to participate in the 70th annual Los Angeles County Science Fair. This has been such an unbelievable opportunity and I will continue to work to achieve more and to excel.

Sincerely,

Kawthar Hemdan