Jagroop Gill Kahlon

Semi-finalist

Story teller tendrils

Doctor of Philosophy

Department of Agricultural Food and Nutritional Science, Faculty of Agricultural, Life & Environmental Sciences

Image created in Edmonton, Alberta

My current PhD research focuses on environmental biosafety of transgenic pea (Pisum sativum L.). We are testing the efficacy of transgenic disease pea against fungal pathogens in comparison to the non-transgenic pea in confined field trials. When we have to compare transgenic lines, we not only have to focus on the trait under question but also have to take into account various agronomic characteristics including morphological differences that may not seem relevant right away but will tell you a story later or help you, as a connecting link of the story, you want to tell. This particular image depicts the arrangement of tendrils of pea on a transgenic line, which had little more curling in the whorls at the end than the other lines. Is this indication of some off type? Or is this a new mutation that has randomly occurred during the transformation process? Or is this a trait that perhaps was recessive, sitting unexpressed in the parents or grandparents of this line? A careful observation and spending some time with the plants in the field while they are growing- will have a story to tell... like these tendrils.