

This month's graduate student profile is of Mr. Brent P. Murphy.



Growing up near Winnipeg, MB, Brent's interest in Agriculture developed as he spent his childhood helping his parents on the family's research farm. During this time, he learnt a lot about how to take care and manage small plot field experiments, which is the farm's specialization. While pursuing his Bachelors of

Science at the University of Manitoba, Brent was introduced to the field of weed science through Dr. Rob Gulden, who gave him the opportunity to learn more about herbicide resistance as he completed his undergrad thesis which focused on the molecular basis for ACCase-inhibitor resistance in *Setaria viridis* (L.) Beauv. After graduating in 2016, he was accepted into a Master of Science program with Dr. Patrick Tranel of the University of Illinois at Urbana-Champaign to study herbicide resistance and molecular differences among *Amaranthus* species. Since successfully defending his M.Sc. in 2018, Brent continues his academic career path by pursuing a Ph.D. in Dr. Tranel's laboratory working on a project titled "Fine mapping and functional analysis of HPPD-inhibitor resistance in *Amaranthus tuberculatus* (Moq.) Sauer". Eventually, Brent would like to contribute his knowledge and expertise to designing novel control strategies for problem weeds across diverse systems and find ways to utilize diversity within weeds for crop improvement. Outside of his research interests, Brent enjoys baking pastries and pies, finding innovating ways to use his barbeque smoker, and ruling the day in weekly Dungeon & Dragon sessions.