Groton Jr.Sr. High | Agricultural Sciences STEAM Program | Fall 2020 Naked Barley Report

The Agricultural Science STEAM Program at Groton Jr/Sr High (grotonffa.org) in Groton, NY began our collaboration with the OSU OREI funded Naked Barley Project this year. The Groton program, led by Dr. Jason Oliver, has two main goals. First is for students to learn about genetics, crop breeding, and production agriculture through the lens of Barley. Second is to carry on the breeding efforts started by the neighboring Dewitt Middle School in Ithaca, NY following the retirement of Science Teacher, Wayne Gottlieb. We look forward to working closely with Dr. Mark Sorrells and his student, Karl Kunze, at Cornell, and to collaborating more broadly with the OSU team and other project membership.

On October 21st, 2020 our students threshed and sorted barley harvested by the Dewitt students and made selections from the Oregon Naked Barley Blend based on kernel color and shape to initiate our own breeding effort. We then headed out to our school garden and planted the selections in a 3' x 16' headrow mimicking the single spike selection planting used at Cornell. In the spring semester our students will take Plant Science where we will dive into the genetics of crop breeding and production in greater detail. For now our seed is safely in the ground as snow starts to fall in our region.



Figure 1: Groton students hand threshing barley selected by Dewitt students.



Figure 2: Groton students planting a headrow of their various barley selections.