

CURRICULUM VITAE

Karl Kunze

Present Position:

PhD Candidate in Plant Breeding and Genetics, advisor Dr. Mark Sorrells, Cornell University- 2017 present

Education:

B.S. Plant Science concentration in Plant Breeding and Genetics, minor in Business for Life Sciences- Cornell University, 2017

Experience:

Graduate Research Assistant, Graduate School Field of Plant Breeding minor in Plant Pathology and Food Science, Cornell University-2017 present

Research Projects:

Weed Competitive Ability in Organic Spring Naked Barley-Utilizing collected field trait phenotypes and UAV imaging to measure barley vigor and growth in organic environments

Genome wide association of disease resistance in organic naked barley- Genetic characterization of barley disease resistance across 18 location by year field trials of a naked barley diversity panel

Germination traits of winter double haploid barley breeding population- Genetic characterization of germination traits of double haploid winter barley breeding lines

Grants and Fellowships:

Developing Multi-use Naked Barley for Organic Farming Systems I & II: USDA-NIFA-OREI Grant 2017-51300-26809

American Malting Barley Association Grant 2020-2021- Genetic Characterization of Germination Traits and Their Relationship to Preharvest Sprouting in Winter and Spring Barley

American Malting Barley Association Grant 2021-2022- Germination Traits & Relationships to Pre-Harvest Sprouting

NYS Department of Agriculture and Markets Funding

Professional Societies:

New York State Agriculture Society member

Tri societies ASA(American Society of Agronomy) and CSSA(Crop Science Society of America) student member

National Association of Plant Breeders (NAPB) student member

Student Organic Seed Society member

Alumni of Alpha Gamma Rho, Zeta Chapter-Cornell University

Leadership Activities and Conferences attended:

Local Graduate Student Liaison representative and member for the National Association of Plant Breeders (NAPB) Graduate Student Working Group, Fall 2020-present

Presenter at the Philly Malt and Grains Conference, March 2020

Future Student representative of the CSSA(Crop Science Society of America) executive board 2022-2024

Presented eOrganic Webinar Titled “Progress on Organic Naked Barley Breeding, Exploration of Organic Breeding Traits” April 2021

Graduate student representative on the Cornell University, College of Agriculture and Life Sciences alumni committee, 2018-present

Cornell Plant Breeding and Genetics Graduate Student Association, Synapsis-Professional Development Committee Member, Fall 2020-present

Cornell Plant Breeding and Genetics Graduate Student Association, Synapsis-President, 2018-2019

Plant Breeding Field representative for the Cornell Graduate and Professional Student Association, 2017-2019

Attended Student Organic Seed Society (SOSS) conference- Madison, WI, August 2019

Graduate Student Representative on the 2019 Cornell Plant Breeding Faculty Search Committee-Spring 2019

Corteva Symposium organizing committee member at Cornell University, April 2019

Recipient of the 2019 ASA, CSSA, SSSA Future Leaders in Science Award, March 2019

Participant in the Tri-societies poster competition Baltimore, MD, November 2018

Attend NOFA-NY Organic Conference January 2018