

INTRODUCTION TO KERNZA

A NEW PERENNIAL INTERMEDIATE WHEATGRASS



WHY KERNZA

- All the grain crops now are annual plants, which require tillage and replanting every year.
- Kernza is a perennial intermediate wheatgrass related to wheat, created by Land Institute in Kansas.
- Kernza can be planted once and harvested multiple years, producing both grain and feed

KERNZA DUAL USE CROP



Kernza Grain



Biomass for Animal Feed



Spring harvest



Fall harvest

ENVIRONMENTAL BENEFIT



- Save on fuel use and reduce pollution
- Reduce tillage-released carbon
- Deep roots fix carbon
- reduced soil and water erosion
- reduced soil nitrate leaching

OUR FARM

**We have 20 plus acres of farmland which grow winter oats.
We have a pilot project of growing Kernza to test the climate
and other factors with the support from SARE.**



OUR FINDINGS SO FAR

1. Kernza has successfully grown in our local climate in Alpine CA as a perennial for 2 years.
2. The grains form despite mild winter and can germinate without problems the next year.
3. Animals love to eat the biomass. Critters create problems for the young plants.
4. This is the first report of growing Kernza in the most southern part of the country so far.
5. Further large field test with mechanically planted seeds is still needed.



LOCAL AND REGIONAL IMPLICATIONS

- There are 500 plus acres of farmland currently managed by students from Grossmont Union High School District to grow winter oats.
- Other East San Diego towns such as Campo has hundreds of acres idle farmland.
- Farmers in Imperial County grow thousands of acres of wheat and hay.
- Switching to perennial Kerza corps will potentially bring economic and environmental benefits to the farmers and reduce the overall carbon footprint of the regions.

THANK YOU

Charlie Chen

charlie@meristemllc.com

