

## **Reactive Oxygen Species (ROS)**

- 1. ROS is produced when a plant is under stress.
- 2 ROS negatively affects mitochondria and chloroplasts.
- 3. ROS causes damage to plant cells.



## Frenzy (Power Through Crop Stress)

**Frenzy** is proven in helping plants withstand and recover from stress, while increasing nutrient efficiency. Frenzy is very effective under heat, drought, pest, and disease stress in row crops and specialty crop production. Note: Frenzy needs to be in the plant before stress occurs so plan your application earlier than later.

- Increased yields Corn: 97%-win rate. +8.7 bu/A average increase.
- Increased yields Soybeans: 95%-win rate. +2.23 bu/A average increase.
  - (Corn and Soy results are from 11 states over 3 years)
- Season-long Crop Health affects plants at the mitochondrial level. Gives the plant the ability to withstand and recover from stress and increase nutrient efficiency. 100X more efficient at combating stress than isoflavinoids.
- Ease of timing use Can be foliar applied to a crop at any growth stage. Needs to be in the plant before stress occurs.
- Ease of compatibility Tank mix compatible with herbicides, fungicides, liquid fertilizer, and insecticides. (always conduct a jar test)
- **Easy storage** not a living biological. Has a shelf life of 2 years after production.
- Best Practice Frenzy is compatible in tank mixes with herbicides, fungicides, and starter fertilizers.

Available to use as a Liquid In-Furrow (LiF) and Foliar (F) application (both 16 oz/acre).



As farmers shift to greater plant populations, root systems will decrease in size and require better management to reach maximum yield. "On average, we lose 2.5% of our root mass per plant for every 1,000-plant increase in population," Sible says. "We are planting 400 more plants per acre a year, which means we are losing 1% of our per plant root biomass every single year. These smaller roots are more susceptible to stress, and we're going to have to better manage that stress through things like biologicals."

Connor Sible, a postdoctoral researcher at the University of Illinois, Urbana-Champaign