

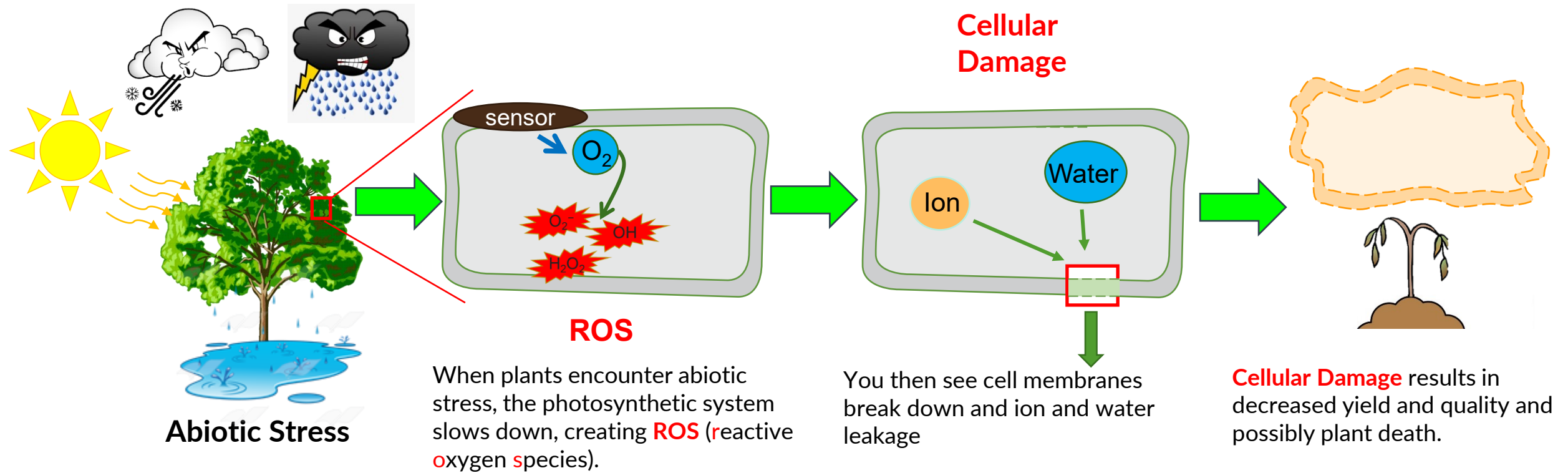


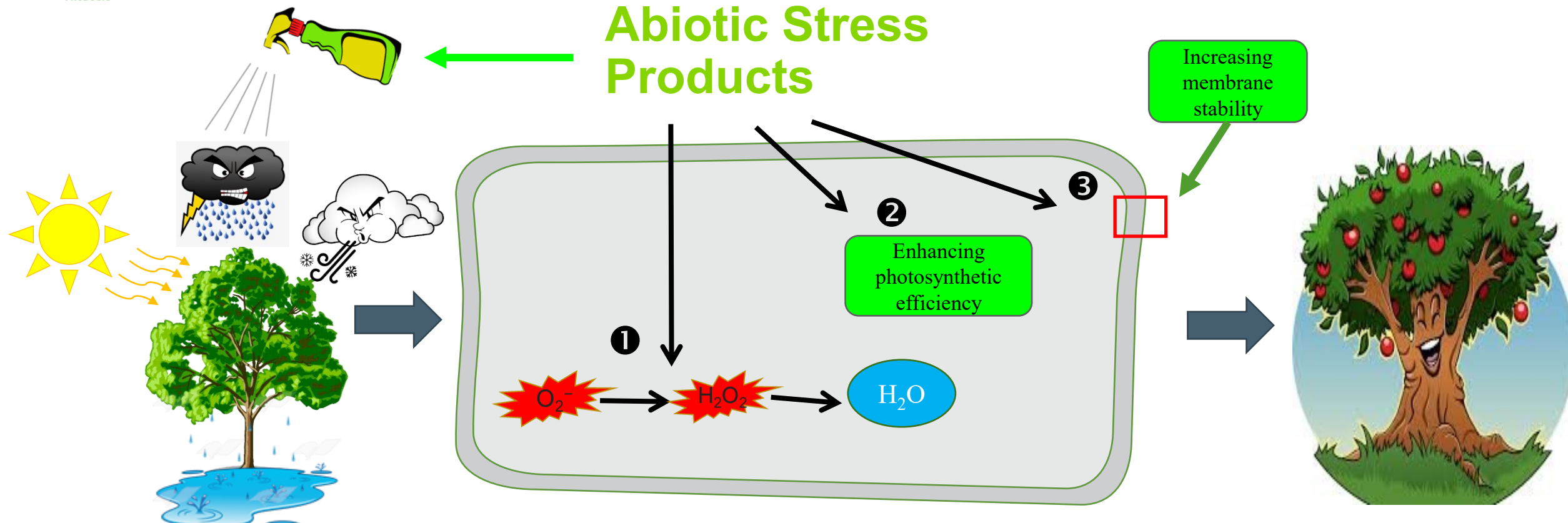
Abiotic Stress Reduction Technology

Nutrien[®]
Feeding the Future[™]

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Crop Damage Under Abiotic Stress





Abiotic Stress Products

Abiotic Stress

Abiotic Stress mitigators is unique in the following ways:

1. Enhances the plant detoxification system
2. Promotes photosynthesis
3. Increases membrane stability

Abiotic Stress Products





TERRAMAR™, intended for foliar use in row crops, delivers increased nutrient uptake and enhanced stress mitigation, optimizing plant health and contributing to enhanced yield. It combines two technology platforms unique to Loveland Products:

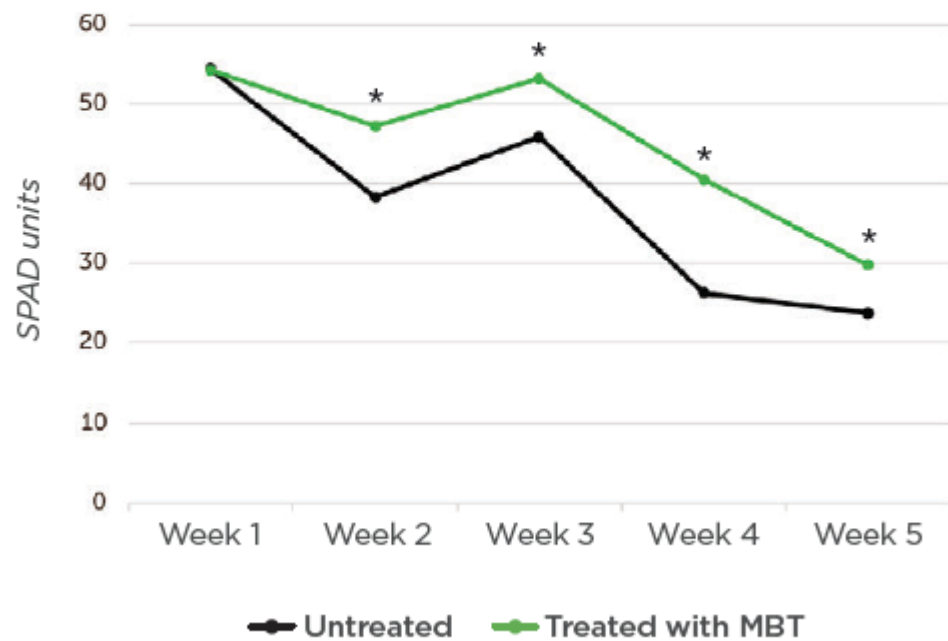
- **Carbon-Based Technology (CBT)** –
Biologically extracted leonardite
- **Marine-Based Technology (MBT)** –
Biologically extracted kelp

Why Is Kelp Important for Crop Production?

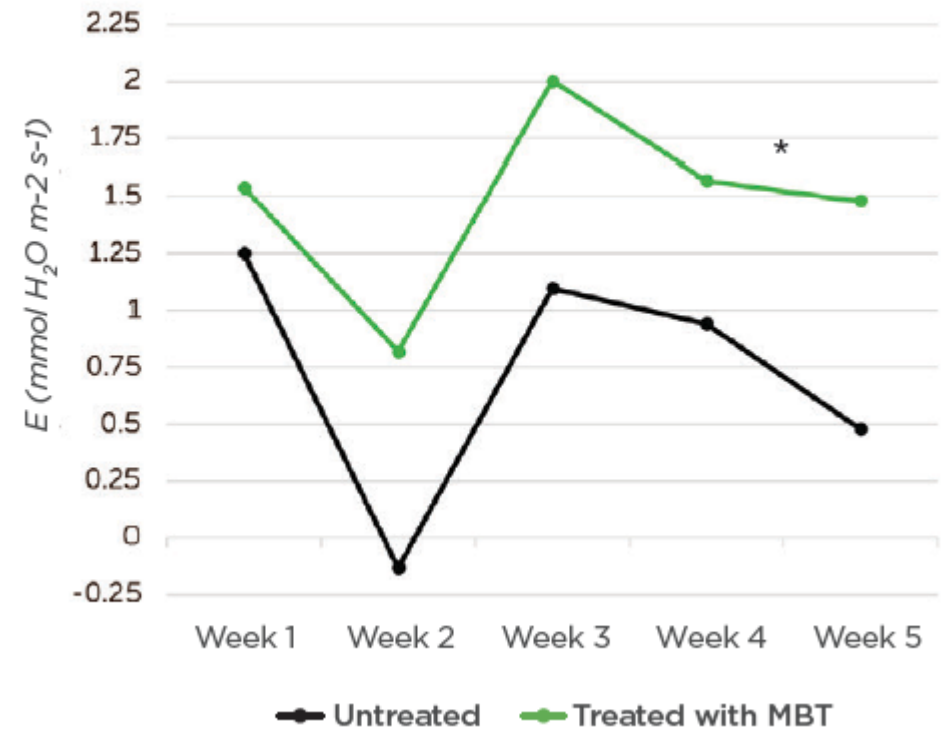
- Seaweeds are **rich in diverse compounds** like lipids, proteins, carbohydrates, phytohormones, amino acids, osmoprotectants, antimicrobial compounds and minerals
- Numerous and diverse benefits of seaweed application in agriculture:
 - **Stimulation of seed germination**
 - **Enhancement of health and growth of plants** (namely shoot and root elongation)
 - **Improved water and nutrient uptake**
 - **Frost and saline resistance**
 - **Biocontrol and resistance toward phyto pathogenic organisms**
 - **Remediation of pollutants of contaminated soil and fertilization**



Higher Leaf Chlorophyll Content with MBT



Higher Transpiration Rate with MBT



TERRAMAR™

Dry-land soybeans, Terramar applied R3 with fungicide. 33bu/a with Terramar and 22bu/a w/o

No Terramar



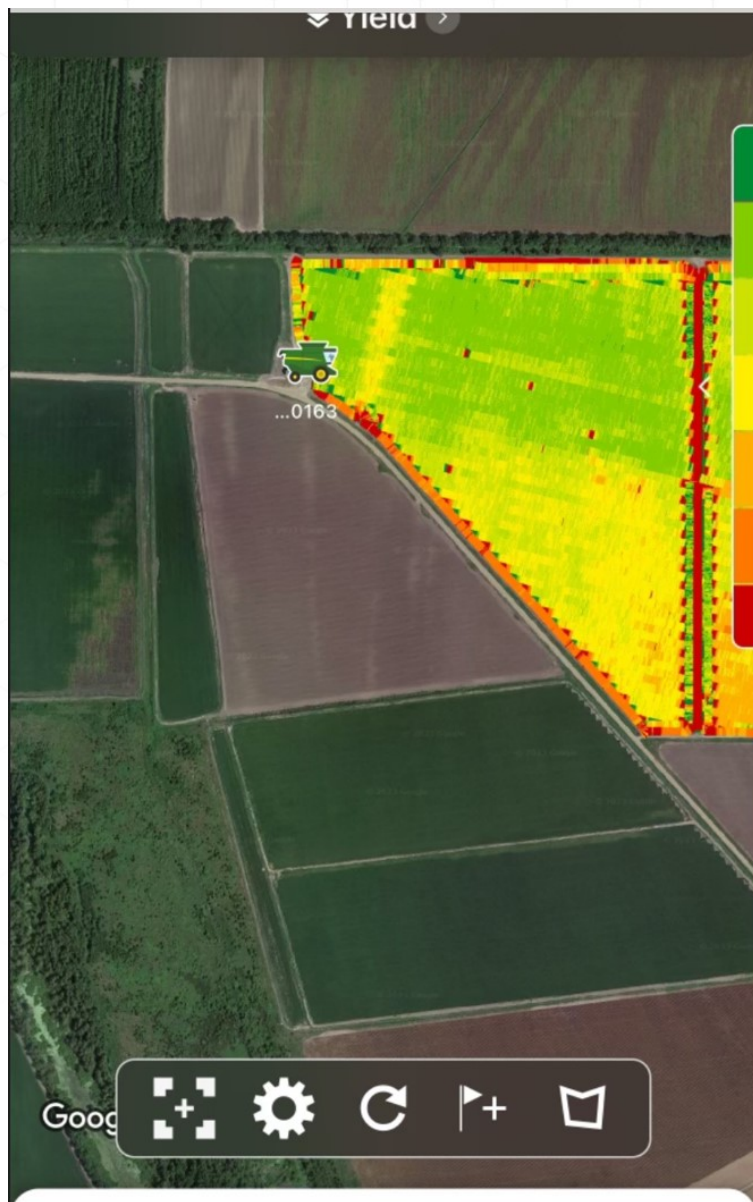
Terramar

No Terramar



Terramar





7 bu/a increase

Sprayed north half of field at V5 with herbicide

Irrigated





Terramar Summary

- Carbon- and Marine-based technologies in Terramar offer unique but complimentary functionalities for improved plant performance
- Terramar can be used in combination with early and late-season foliar applications to mitigate stress and improve nutrient uptake
- Multiple field trials validate the effectiveness of Terramar as an early or late-season addition to pesticide applications



Nutrien
Ag Solutions[®]

Thank You

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