



## Pacific Kelp Co.: Transforming Alaskan Kelp Into High-Value Agricultural Inputs

December 2025 Interim Update

### Kelp Biostimulant Efficacy Study



*Changes to average root mass (top / left) from a 1:200 application of our *Macrocystis Pyrifera*-based biostimulant and changes to average soil respiration rate (bottom / right) from a 1:50 application*

Above is some of the initial data from our 2-year research partnership with Cornell University studying the effects of our Alaskan kelp-based biostimulants on root development and soil health in commercial turfgrass plots. Thanks to [Dr. Kyle Wickings of the Department of Entomology](#) and his team for sharing this data. Dr. Wickings and his team are studying how our Alaskan kelp biostimulant products can positively impact plant health, root development, and soil health in turf grasses.

After applying various different dilutions of our Alaskan-kelp based biostimulants to



turfgrass plots over several months, the team took samples this fall and calculated impacts to key metrics like root biomass and soil respiration rate.

Initial data is showing a **34% increase** to average root biomass as a result of using our macrocystis pyrifera (MP) extract, and a **11.1% increase to average soil respiration rate**.

Root biomass is looked at "as a sign of overall turf health and resilience" says Dr. Wickings, and that "It is also generally understood that better root biomass means greater resistance to root pests and drought."

Soil respiration is a "snapshot in time" of the release of carbon dioxide in the soil and is a key indicator of microbial and biological activity. Generally speaking, greater soil respiration means greater microbial activity, which can have many positive effects on the overall health of the soil.

While these are only initial results and there is more testing, data collection, analysis, and science to be done, we're excited that the initial results are telling us that our Alaskan Kelp biostimulants are hugely positive for plant and soil health, especially in critical areas like root development.