

# Ground Report

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**PACIFIC GRO**  
Seafood for the Soil®

## Regenerative Farming is Gaining Momentum

Adopting biological inputs in conventional systems is a powerful trend that's improving crops and profits, and improving the soil – often with lower total input costs. Last year, we helped a lot of growers add biological inoculants together with Pacific Gro – with great results.

Strawberries produced on California's central coast had increased yield, higher quality fruit (sweeter and firmer), better growth after both cold weather and prolonged heat, less pressure from insects and disease, and a longer harvest period. This produced higher profits and ROI.

In conventional corn, nitrogen was cut back to pay for the biologicals, which increased nitrogen efficiency (240 bu corn on 120#N) and reduced the cost per bushel. Sap analysis showed more balanced nutrient uptake. The benefits included increased root hair growth, less leaf disease (rust, blight, grey leaf spot), faster and more even germination, more earthworms, and increasing soil carbon. And yields were generally better as well.

Results in wheat were similar: more balanced nutrient uptake in the sap, less fungal disease (often none at all), less hot weather stress, excellent stalk strength, fully developed spikelet (no blanks), great test weights and higher profit per bushel. Earthworm counts and soil health also increased.

And we saw this again in Soybeans and in Lentils: Great yields, more pods per plant, increased nodulation, less or no fungal disease. The greatest improvement was on late-planted beans.

Alfalfa also showed improved growth and great yields: farmers gained an extra cutting. There was less stress during hot and dry weather, and a more winter hardy field.

We also did some work in potatoes and onions.

The onions had higher population/germination, less pink root disease, less crusting of the soil, higher quality and excellent yields. More balanced nutrients in the sap showed we were on the right track.

In a potato trial we replaced the starter fertilizer with a microbial and Pacific Gro Sea Phos – and increased the yield 25%. The half of the pivot treated with Tainio and Pacific Gro stayed green longer, which bulked the potatoes.

How did the year of the virus impact your life and business? It seems that agriculture suffered less than most sectors. But still . . . what a nuisance it's been. At the plant, while expanding our production capacity and inventory, we've had a hard time hiring and keeping enough staff. Some projects had to be cut, so we could focus on priorities.

Trade shows and conferences were all cancelled, so we missed having the usual contact with people. But we compensated by doing a lot of small meetings with growers, usually outdoors. Mark has been fearlessly traversing the country, meeting consultants and farmers. It's rewarding to meet like-minded people and collaborate on adopting more biological, regenerative practices.

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## Seed Treatment in Furrow

Treating seed before planting can be a very economical way to connect plants to soil microbes. We've been demonstrating a strategy of adding biologicals during planting.

We believe this makes more sense than doing a separate seed treatment, especially since most seed already comes with a treatment, which typically includes fungicide. So to counteract the microbial toxins, we recommend dribbling liquid Pacific Gro and inoculants in-row during planting. The biologicals get established in the soil near the seed.

Pacific Gro is a carbon-based microbial food, which kick-starts the program. It especially helps establish beneficial fungi and a more diverse soil food web. We're seeing faster emergence and better establishment.

