Structure®

SUPERIOR PHOSPHATE MOBILITY AND AVAILABILITY

Encourage Root Growth

Improve Phosphorus Availability

Increase Yield

Safe on Seedling Crops

Structure® (7-21-0 with 0.2% Zinc) was specially engineered for more mobile, and significantly more available phosphate in the soil. Structure is also one of the few concentrated formulations that can effectively supply phosphorus to the root zone. This proprietary product is non-phytotoxic and will not cause root damage to tender seedlings or young plants, unlike many commodity fertilizers. Replicated trials over many years have consistently shown that Structure creates a positive growth response in plants, resulting in increasing yields with less phosphate being applied.

Structure vs. 10-34-0

Orthophosphates vs. Polyphosphates

For a healthy response, plants rely on orthophosphates to be readily available. Structure is comprised mainly of orthophosphates in addition to Actagro Organic Acids® to make phosphates readily available at application. 10-34-0 is made of 70% polyphosphates which take time to break down into orthophosphates. Even then, the phosphates in 10-34-0 will tie up within the soil to calcium, iron, and aluminum. Structure does not tie up to these elements and is available right at application.

VISIBLE CROP IMPROVEMENTS

actagro®

Structure®

PROVEN SUPERIOR BY THIRD PARTY EVALUATION

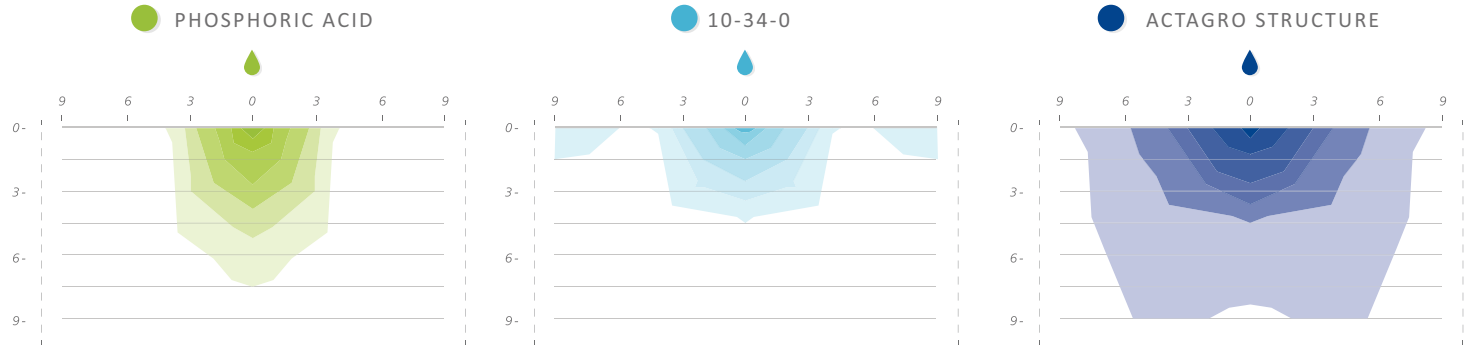
Dr. Husein Ajwa et. al, in cooperation with Actagro®, LLC, evaluated the availability and movement of available soil phosphate in four fertilizer treatments over three months in Mendota, California[2]. Soil type was clay loam with pH of 7.8. Each treatment was replicated four times.

Experiment design was a randomized complete block with a final plot size of one, 60" wide, 200 ft. long bed (a total plot size of 0.5 acres). Fertilizers were applied through a single low flow drip irrigation tape (0.25 gpm/100 feet) with four inches emitter spacing, placed in the center of the bed surface. Fertilizers were applied over a span of six hours. Beds were pre-irrigated and additional irrigation water was applied to ensure high fertigation uniformity. Irrigation occurred twice weekly to replace water lost to evaporation. No crop or weeds were allowed to grow.

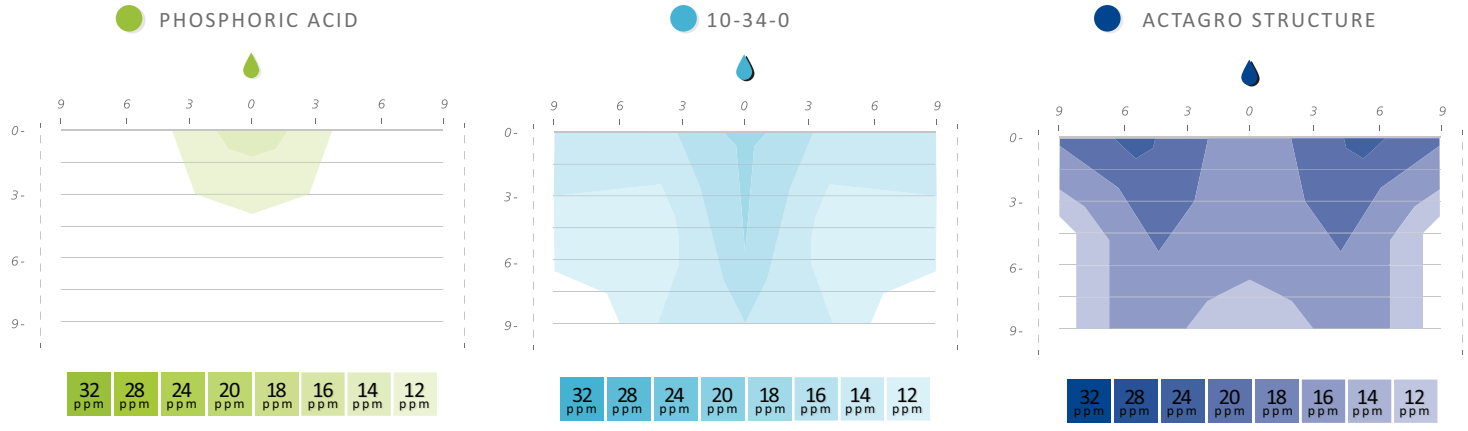
TRIAL HIGHLIGHTS

- Phosphoric acid initially moved, but was mostly tied up before 42 days.
- 10-34-0 initially moved, but was largely tied up before 42 days.
- **Structure® moved throughout the soil and remained available for uptake for all 42 days.**

DISTRIBUTION OF AVAILABLE PHOSPHORUS
2 DAYS AFTER APPLICATION OF 1/2 INCH OF UNTREATED WATER



DISTRIBUTION OF AVAILABLE PHOSPHORUS
42 DAYS AFTER APPLICATION OF 1/2 INCH OF UNTREATED WATER



[2]Gereke, T., Ajwa, H., Krauter, C., Pier, J. (2011). *Greater Phosphorus Efficiency Results from Improved Mobility and Prolonged Availability*. The Fluid Journal

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