

Trial Data Summary

OneUP™ is a new fertilizer product designed to produce stronger root systems, increased yield and improved soil health. Field trials evaluating the effects of OneUP™ were conducted on crops grown in the Intermountain and Pacific Northwest, including onions, sugar beets, corn, and potatoes.

The treatments were delivered to the fields through a combination of foliar and soil applications at varying rates to test the effectiveness of OneUP™. The results demonstrated improved yields and quality when incorporating OneUP™ into the fertility program.



Onions OneUP™

Location: Sand Hollow, ID

Cooperator: Frisby Farms

Study Design: Replicated paired plot demonstration

Replications: 4

Soil: Sandy loam

OneUP™ Treatments:

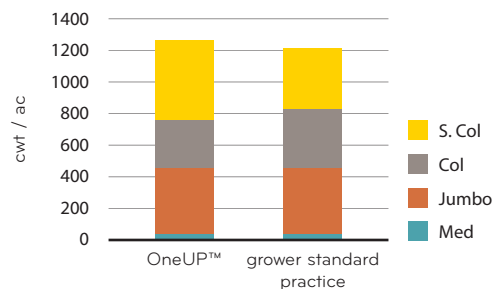
- 4 gallons per acre of grower standard practice was replaced with 4 gallons per acre of OneUP™, in furrow at planting.

Summary:

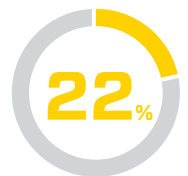
OneUP™ increased total yields by 5%, but more importantly, yield of super colossals by 22% which resulted in a significant economic advantage.



Onion Yields with OneUP™



Yield Increase of Super Colossals



5% total increase across the field trials



Corn OneUP™

Location: Nampa, Idaho

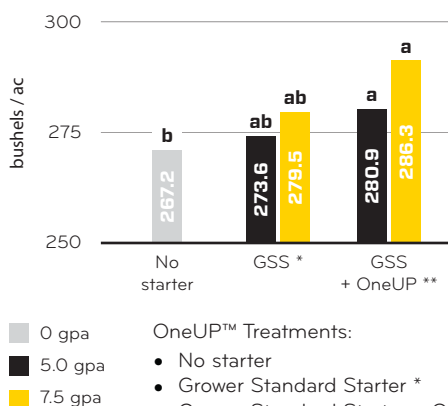
Investigator: Dr. Terry Tindall and Dr. Galen Mooso

Study Design: Plots were approximately 0.5 acres (replication=3)

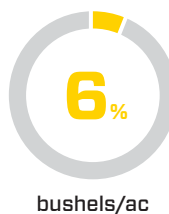


Starter	Starter Rate gpa	Yield bu/ac	Return @ \$4.09/bu
No Starter	0	267.2	\$1092.85
Grower Standard Starter	5.0	273.6	\$1119.02 (+\$26.20)
Grower Standard Starter	7.5	279.5	\$1128.43 (+\$35.61)
Grower Standard Starter + 1 g of OneUP™	5.0	280.9	\$1148.88 (+\$56.06)
Grower Standard Starter + 1.5 g of OneUP™	7.5	286.3	\$1170.97 (+\$78.15)

Evaluation of OneUP™ with 6-24-6 with AVAIL® as a In-Furrow Starter for Corn Production



Yield Increase



OneUP™ Treatments:

- No starter
- Grower Standard Starter *
- Grower Standard Starter + OneUP™ **

Treatments with the same letter are not significantly different P=0.1

Potatoes OneUP™

Location: Eltopia and Basin City, Washington

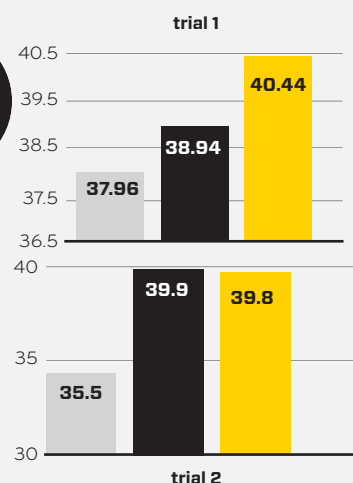
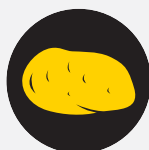
Cooperators: Simplot Grower Solutions

Study Design: All potatoes were recovered from five randomly selected strips measuring 7.5' throughout the treated area via hand digging. These samples were then graded by AgWorld Labs in Pasco, WA. Plot Size: 17 acres (trial 1) 20 acres (trial 2)

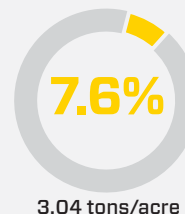
Soil: Sandy loam

OneUP™ Treatments: In addition to grower standard practice

- 3 gallons per acre in furrow at planting
- 5 gallons per acre in furrow at planting
- 2 quarts through center pivot at row closure (trial 1 only)



Avg. Yield Increase



Sugar Beet OneUP™

Location: Billings, Montana

Investigator: Neal E. Fehringer, Certified Professional Agronomist, C.C.A.

Study Design: Plot size: 4 rows (22" spacing) x 30 ft. 4 replications per treatment.

OneUP™ Treatments tested (versus 2.5 gpa of 6-24-6 in furrow):

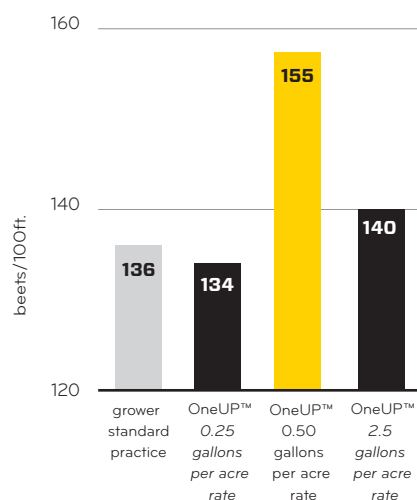
- 0.25 gallons per acre in furrow + 2 quarts/ac foliar applied at 3-4 leaf stage.
- 0.50 gallons per acre in furrow + 2 quarts/ac foliar applied at 3-4 leaf stage.
- 2.5 gallons per acre in furrow + 2 quarts/ac foliar applied at 3-4 leaf stage.

Summary:

- Products were applied in furrow at 6 gallons per acre total volume. No issue with plugging orifices or build-up on 100 mesh screens.
- OneUP™ applied foliar via backpack sprayer in 10 gpa total volume.
- Soil test Olsen P was 13 ppm, organic matter was 3.7% and zinc was 1.0 ppm.
- Beets were planted by standard 4 row planter at 250 seeds per 100 feet.
- 0.50 gallons per acre OneUP™ rate performed best of all treatments



Harvestable Beets (>3 inches)



Yield Increase



OneUP™ increased sugar/ac vs standard starter at a decreased application rate (.50 gpa vs 2.5 gpa)