



NOVA FLOW™

NOVA HIPEAK™

POLYSULPHATE®

Trial



Cotton

(Gossypium hirsutum)
on Olton clay loam

Nova FLOW™ is a highly soluble alternative to magnesium nitrate with N-P-K, plus magnesium, sulfur, and boron.

N	5%
P ₂ O ₅	10%
K ₂ O	20%
+	Mg, S, B

Nova HiPeaK™ is a highly concentrated, high purity, water-soluble phosphorus and potassium fertilizer free from chloride and sodium.

N	0%
P ₂ O ₅	44%
K ₂ O	44%

Polysulphate® fertilizer is a natural, granular source of easily-absorbed sulfur, potassium, magnesium, and calcium.

S	19.2%
K ₂ O	14%
Mg	3.6%
Ca	12.2%



When

Planting Dates:
May 18, 2023



Where

Lubbock, TX, USA
(Dr. Katie Lewis,
Texas A&M AgriLife
Research)



Crop

Cotton
(*Gossypium hirsutum*)



Soil type

Olton clay loam



Measurements

Lint yield (lb/A)



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Objective

To evaluate the response of cotton yield to Polysulphate® in combination with foliar potassium (K) application using Nova FLOW™ (5-10-20, 11.7 S, 9 Mg, 0.5 B) and Nova HiPeaK™ (0-44-44).

Treatments

This randomized complete block trial consisted of four replicates with four treatments. Polysulphate was applied preplant alone and in combination with foliar applications of Nova FLOW and Nova HiPeaK. Foliar applications were applied at first bloom.

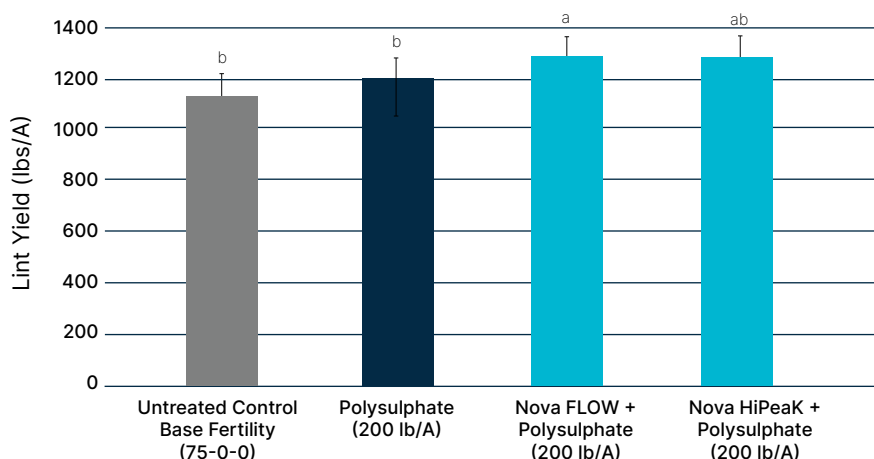
- UTC, base fertility (75-0-0)
- Polysulphate (PS) 200 lb/A PP**
- Polysulphate (200 lb/A PP) + Nova FLOW (10 lb/A FOL^)
- Polysulphate (200 lb/A PP) + Nova HiPeaK (10 lb/A FOL)

**PP – pre-plant application, ^ FOL – foliar application.

Results

- Polysulphate in combination with foliar applications of both Nova FLOW and Nova HiPeaK increased cotton lint yield by ~ 10 % over the control.

Means follow by same letter is not significantly different at the 0.10 significance level.



Conclusion

- Foliar potassium (K) application can increase cotton yields and should be included in cotton management strategies.
- Nova FLOW and Nova HiPeaK are excellent choices for foliar K, as they have been proven to boost cotton yield.
- Foliar K should be applied during the reproductive stages of cotton, particularly from first bloom to peak bloom. This is when the plant has a high demand for nutrients like potassium, magnesium, sulfur, and boron to support flower development and boll formation.