

A close-up photograph of a green wheat spike, showing the developing grains. The background is a soft-focus green field of wheat.

Wheat yield as influenced by urea applied with nitrification inhibitor and gibberellic acid

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Randomized Complete Block Design

Block 1	T_3	T_1	T_2
Block 2	T_1	T_2	T_3
Block 3	T_2	T_1	T_3
Block 4	T_2	T_3	T_1
Block 5	T_3	T_2	T_1



Treatments:

T ₁	Control Treatment (without Urea)
T ₂	Farmers method (300 kg Urea/ha)
T ₃	Best Practice (300 Kg Urea/ha+Nitrapyrin+GA3)



Treatments:

Splits	T ₂
First split	100 Kg Urea/ha
Second split	100 Kg Urea/ha
Third split	100 Kg Urea/ha

Splits	T ₃
First split	100 Kg Urea/ha+Nitrapyrin (700 gr/ha)
Second split	100 Kg Urea/ha+Nitrapyrin (700 gr/ha)+GA3
Third split	100 Kg Urea/ha+Nitrapyrin (700 gr/ha)



Applying GA3





Results:

- ✓ The crop yield data showed that, urea applied with NP and GA3 had a significant ($p \leq 0.01$) effect on grain yield, biological yield, number of grains, 1000-grain weight and % Harvest Index (%HI) compared to other treatments.
- ✓ Urea applied with NP and GA3 increased grain yield (10.30 t/ha) by 13.9% and 46.1% compared to farmer practices (9.04 t/ha) and control treatment (7.05 t /ha).
- ✓ These results suggest that co-application of urea with NP and GA3 has the potential to enhance wheat yield in semi-arid area of Iran.

Thank you for your attention

