



EFFICACY EVALUATION OF **N-GUARD** ON CORN

TRIAL CONDUCTED BY **SGS**

A trial was conducted with SGS at one location (3 replications), to test the efficacy of N-Guard on Maize in Dahegam, Gujarat, India. N-Guard was tested as per the protocol printed on the reverse of this page. The crop was applied with the treatments as per the best practices laid down by the Govt. of India.

N-Guard yield has comprehensively outperformed the control plot and also a popular international urease inhibitor. Further, it has shown excellent abilities to improve the nitrogen status of the soil and also has been able to show some control on the common pests, diseases and nematodes affecting Maize. Results below.

N-Guard coating at 8 litres per tonne of Urea recorded the highest increase in yield over control @ 27.5%

Fertiliser Use Efficiency:

- The best fertilizer (nitrogen) use efficiency was shown by N-Guard coating @ 7.59 ml/Kg with a Harvest Index of 37.1%

Economics:

- We discovered that N-Guard coating @ 7.59 ml/Kg also resulted the highest B:C ratio of 0.73:1

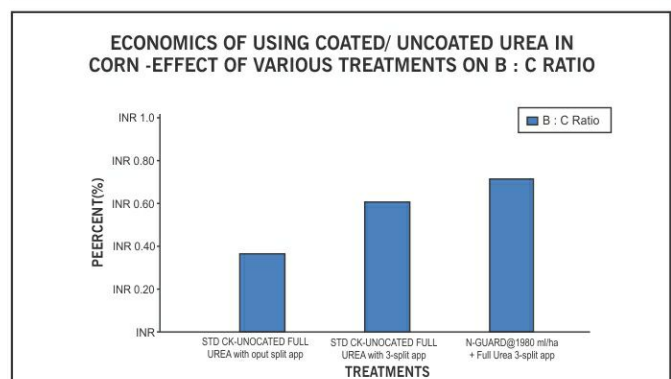
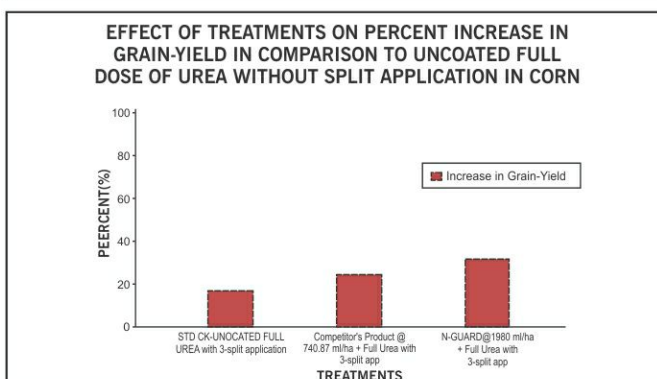
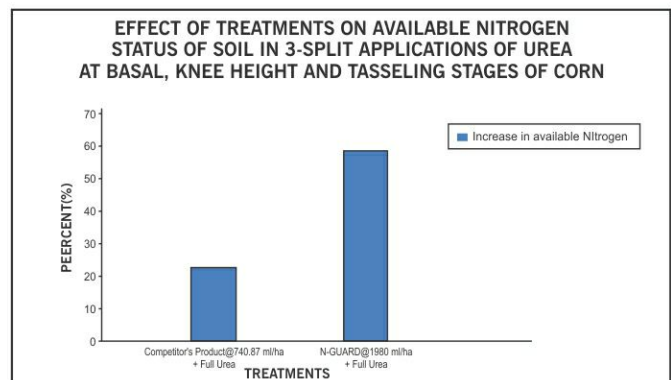
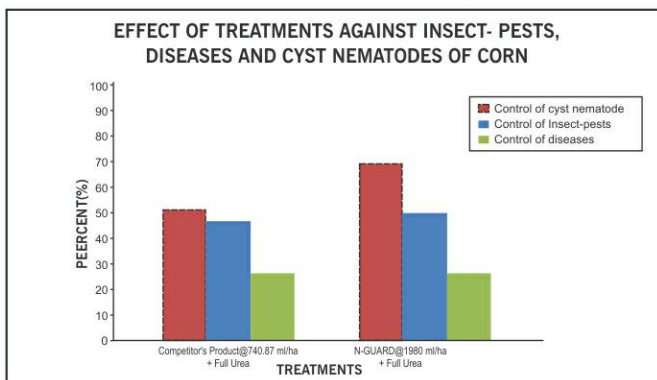
Nitrogen Status:

- The soil samples collected from various plots and analysed in the laboratory revealed that N-Guard coating @ 7.59 ml/Kg treated plots had the maximum available nitrogen status in soil (58.7% increase)
- N-Guard coating @ 7.59 ml/Kg resulted 37 % stabilization of the Nitrogen in soil through inhibition of nitrification

Pest and Nematode Control:

The trial revealed that N-Guard coating @ 7.59 ml/Kg controlled

- 49.2% pests (stem borer-Chilo partellus)
- 25.9% diseases (Maydis Leaf Blight- Helminthosporium maydis, Turicum leaf blight- Exserohilum triticum and Stripe Downy Mildew-Sclerophthora rayssiae var. Zeae)
- 68.4% control of the plant parasitic cyst nematodes in corn



Please contact kartik@orgoneem.com for the complete trial.



SGS

Efficacy evaluation of N-Guard (a nitrification-inhibitor) coated urea in corn

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EFFECT OF VARIOUS TREATMENTS ON GROWTH, DEVELOPMENT AND YIELD PARAMETERS OF MAIZE (CV. PIONEER HI-BRED-30R77) AT VILL-GALUDHAN, TALUQ-DAHEGAM, AHMEDABAD DURING RABI, 2011-12

TR (T)	DOSE		GROWTH, DEVELOPMENT AND YIELD PARAMETERS OF MAIZE							B : C RATIO
	NITRIFICATION- INHIBITOR/N-STABILIZER FOR COATING SPLIT UREA	N : P : K (SPLIT N- UREA) (KG/HA)	HEIGHT (CM)	CROP VIGOUR (1-10 SCALE)	NUMBER OF GRAINS PER EAR/COB (NO.)	GRAIN- YIELD (Q/HA)	STOVER- YIELD (T/HA)	HARVES T INDEX (%)	IOC GRAIN- YIELD-(T1) (%)	
T1	UNCOATED (0.00)	120:60:40 (120)	145.7	6.7	463.8	27.3	7.88	34.6	0.0	0.38
T2	UNCOATED (0.00)	120:60:40 (60+60)	153.3	7.2	473.5	31.6	9.00	35.1	15.8	0.59
T3	UNCOATED (0.00)	120:60:40 (40+40+40)	154.3	7.5	480.4	32.2	9.12	35.3	17.9	0.62
T4	Competitor's Product@ 740.87 (246.96+246.96+246.96)	120:60:40 (40+40+40)	155.8	9.2	505.1	33.7	9.16	36.8	23.4	0.66
T5	N-GUARD @ 1980 (660+660+660)	120:60:40 (40+40+40)	162.1	9.3	514.6	34.8	9.38	37.1	27.5	0.73
T6	N-GUARD @ 1721.74 (573.91+573.91+573.91)	120:60:40 (40+40+40)	155.1	8.6	496.0	32.6	8.96	36.4	19.4	0.62
T7	N-GUARD @ 1463.48 (487.83+487.83+487.83)	120:60:40 (40+40+40)	155.0	8.0	486.1	31.3	8.71	35.9	14.7	0.56
T8	N-GUARD @ 1463.48 (487.83+487.83+487.83)	102: :60:40 (34+34+34)	151.3	6.9	481.9	29.5	8.39	35.2	8.1	0.49
T9	N-GUARD @ 1291.3 (430.43+430.43+430.43)	90:60:40 (30+30+30)	146.5	6.4	463.6	27.7	8.01	34.6	1.5	0.41
SEM (±)			2.19	0.1	9.9	0.4	0.24		-	
CD (P=0.05)			6.64	0.2	30.0	1.1	0.72		-	
CV (%)			2.48	1.2	3.5	2.1	4.71		-	

VALUES ARE MEANS OF THREE REPLICATIONS

ONCE AT BASAL STAGE (T1)

IOC = PERCENT INCREASE IN GRAIN-YIELD OVER UNCOATED UREA APPLICATION

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