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Dear CO Tan:

Please find the data in the attached file. The MPC has resulted a significant increase of paddy yield. If you need any clarification, please let me know.

With best regards.

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Effect of MPC (Natural Biodegradable) application with NPK on the growth and yield of transplanted rice in Pakistan

A field trial was conducted at Rice research area, NARC during kharif season, 2012. The aim of the research was to study the effect of MPC with NPK application in comparison to soil incorporated NPK alone on the growth and yield of rice variety “Basmati -385”. The experiment was laid out in RCBD with three replications. The net plot size was 60 x 60 (3600 m²). The seed for raising seedlings was sown in 1st week of June and the seedlings were transplanted by trained manual laborers in the 2nd week of July. Row to Row and Plant to Plant distances were maintained at 20cm. All the agronomic operations except those under study were kept normal and uniform for all the treatments. The treatments included in the experiment were, T₁ = control (without MPC and NPK), T₂ = soil application (recommended NPK) and T₃ = MPC + recommended NPK. MPC was sprayed to rice crop as advised by the Company. Data were recorded on plant height (cm), productive tillers m⁻², panicle length (cm), number of grains panicle⁻¹, 1000-grain weight (gm), biomass (t ha⁻¹) and paddy yield (t ha⁻¹).

The data revealed that **MPC along with NPK application performed the best** and gave the maximum paddy yield of 5.33 t ha⁻¹ followed by soil incorporated NPK alone (4.17 t ha⁻¹). The treatment of MPC with NPK yielded **45% higher yield** over control and 27% more yield over recommended NPK alone.

Table: 1. Effect of MPC and NPK on the growth and yield of Basmati Rice.

Treatment	Plant height (cm)	Tillers m⁻²	Panicle length (cm)	Grains panicle⁻¹	1000-grain weight (g)	Biomass (t ha⁻¹)	Paddy yield (t ha⁻¹)
T₁	104.67 b	209.33 c	20.90 b	73.40 b	18.23 b	20.00 b	3.67 b
T₂	117.00 a	350.67 b	27.60 a	107.07 a	22.40 a	20.17 b	4.17 ab
T₃	112.67 a	375.00 a	24.77 a	123.67 a	23.03 a	28.33 a	5.33 a
LSD	6.3222	16.136	3.2440	21.076	2.4948	7.2873	1.5113

LSD = Least Significant Difference Test