

Effect of Yogic and Organic fertilization on growth and productivity of wheat (*Triticum aestivum* L.) at Gagsina village, Karnal (Haryana) during Rabi 2011-12

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Wheat is the second most important staple food crop of India and contributes major share to food basket of the country. A major share of chemical fertilizers especially nitrogen is consumed in producing this crop. The use of chemical fertilizers is not only costly but causing health and environmental concern. Hence the use of organic cultivation of wheat is gaining its ground especially where the premium price of organically produced wheat is being offered. Combining the use of organic cultivation of wheat and yogic vibration is opening new era in this direction and hence needs to be investigated through scientifically experimentation. In order to achieve this objective a field experiment comprising four yogic and organic treatments [Yogic + Organic (Farm Yard Manure)- T₁, Only Organic (FYM)- T₂, Recommended chemical fertilizers (100 kg N/ha and 60 P₂ O₅ kg/ha)-T₃ and Control (no FYM or chemical fertilizers)-T₄] was conducted at Farmer's field of Gagsina village, Karnal, Haryana in Randomized Block Design with four replications on sandy clay loam soil having low to medium soil fertility during *rabi* season of 2011-12, with the objective to find out effect of Yogic and Organic production of bread wheat (*Triticum aestivum* L.). Wheat variety C 306 (*deshi* tall wheat variety) was grown. The sowing of the crop was done on November 9, 2011 and harvested on April 12, 2012.

The perusal of the results data presented in Table 1 revealed that the Yogic + Organic (FYM) treatment gave significantly higher growth and yield than organic (FYM) and control treatments and at par with chemical fertilizers treatment. This (Yogic + Organic) treatment also produced significantly bolder grains of wheat than all other treatments. The grain protein content of Yogic + Organic and Organic treatments was also significantly higher than chemical fertilizers and control treatment.

Table 1. Effect of Yogic and Organics on growth, productivity and quality of bread wheat

Treatment	Plant height, cm	Earhead length, cm	Earhead/ m ²	Biomass, q/ha	Grain yield, q/ha	1000 grains weight, g	Grains protein, %
Organic + Yogic	111.98	8.8	207.0	81.31	31.46	44.28	9.13
Organic (Farm Yard Manure)	111.93	9.1	166.8	63.28	22.78	41.70	9.78
Inorganic (NPK)	123.73	9.0	219.0	94.59	31.81	41.74	8.03
Control (No FYM or NPK)	118.45	9.1	144.3	61.89	19.76	40.92	7.75
C. D. (0.05)	4.69	N. S.	14.18	3.69	2.48	1.49	0.51