## GROWTH INDICES, HARVEST AND ATTRACTION INDEX OF WHEAT CROP AS INFLUENCED BY DIFFERENT VARIETIES AND NITROGEN SOURCES

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Received-06.08.2019, Revised-25.09.2019

**Abstract:** A field experiment was conducted at Agronomy Research Area, CCS HAU Hisar to study the influence of nitrogen source and varieties on growth indices and harvest index of wheat crop during *rabi* season of 2017-18 in split plot design with three replication. In the main plots there were five wheat varieties (WH 1105, WH 1142, HD 3086, HD 2967 and DBW 88) and in sub plots three nitrogen sources *viz.* 100 RDN through inorganic source (urea), 100 per cent RDN through organic source (vermicompost) and 50 per cent RDN through inorganic + 50 per cent RDN through organic source. Higher leaf area index and leaf area duration was recorded under variety HD 3086 and 100 % RDN through inorganic source (urea). Among varieties non significant differences were observed in respect of crop growth rate except at 31-60 days after sowing. Neither the varieties nor the nitrogen sources had any significant effect on relative growth rate, attraction index and harvest index.

Keywords: Wheat, Varieties, Growth indices, Nitrogen sources, Harvest index

## REFERENCES

**Ali, A., Khaliq, T., Ahmad, A., Ahmad, S., Malik, A.U. and Rasul, F.** (2012). How wheat responses to nitrogen in the field? A review. *Crop Environment* 3: 71-76.

**Donald, C.M. and Hamblin, J.** (1976). The biological yield and harvest index of cereal as agronomic and plant breeding criteria, *Advances in Agronomy* 28:361-405.

Ma, B.L., Wu, T. Y., Tremblay, N., Deen, W., McLaughlin, N. B., Morrison, M. J. and Stewart, G. (2010). On-farm assessment of the amount and timing of nitrogen fertilizer on ammonia volatilization. *Agronomy Journal* 102 (1):134-144.

Mondal, H., Mazumder, S., Roy, S. K., Mujahidi, T. A and Paul, S. K. (2015). Growth, yield and

quality of wheat varieties as affected by different levels of nitrogen. *Bangladesh Agronomy Journal* 18 (1):89-98.

**Riley, W. J., Ortiz-Monasterio, I. and Matson, P. A.** (2001). Nitrogen leaching and soil nitrate, nitrite, and ammonium levels under irrigated wheat in Northern Mexico. *Nutrient Cycling in Agroecosystem*.61(3):223-236.

**Sestak, Z., Catsky, J. and Jarvis, P. G.** (1971). Plant photosynthetic production, Manual of Methods, Ed. by Junk, W. N. V, publications, The Hughus, pp. 343-381.

Singh, A., Darvhankar, M.S., Singh, G. and Sonam (2018). Impact of organic and inorganic amendments on yield and growth of wheat(*Triticum aestivum L.*). International Journal of Current Microbiology and Applied Science. **7**(8):789-794.

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