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## RESEARCH PAPER

## Effect of humic acid on the growth and yield attributes of wheat crop (*Triticum aestivum* L.)

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Abstract: The present investigation entitled "Effect of humic acid on the growth and yield attributes of wheat crop" the experiment was carried out at the research farm Sitholi campus ITM University, Gwalior (M.P.) during 2019-20 under the agroclimatic and soil conditions of Northern Madhya Pradesh. Humic acid, the main fraction of soil organic matter, is a vital factor for maintenance of soil fertility and plant. The experimental material for the present investigation was comprised of eight treatments viz of the wheat. These treatment were laid out in Randomized Block Design with three replications. The various observations were recorded on the basis of five random on competitive plants selected from each treatment separately for growth, yield and yield attributes and quality parameters and we're evaluated as per standard procedure The result will help to a great extent in treatment of different levels of humic acid with RDF doses treatment T<sub>8</sub> (RDF<sub>100</sub>+1250ppmHumic acid foliar spray) was found significantly superior as compared to other treatments. Highest growth parameters (viz. plant population, plant height, number of tillers/m<sup>2</sup>, number of leaves culm<sup>-1</sup>, number of ear head m<sup>-2</sup>, crop area index, root length, dry weight of plant and fresh weight of plant at all growth stages of the crop including at harvest.) and yield and yield attributes (viz., length of ear head, number of grain per ear had, weight of ear head, test weight, grain yield per plant, grain yield per plot and grain yield per hectare ) were recorded in T<sub>s</sub> (RDF<sub>100</sub>+1250ppmHumic acid foliar spray) and minimum were recorded in T<sub>1</sub> (Absolute control). Whereas the highest quality parameters (viz., protein content) and economics of treatment revealed that that highest gross return was recorded in T<sub>e</sub>. The lowest gross return was recorded in T<sub>1</sub>. However, read-through of data revealed that highest net return was recorded in T<sub>2</sub>. The lowest net return was recorded in T<sub>1</sub>. However, perusal of data revealed that higher benefit: cost was recorded in T<sub>2</sub> and T<sub>8</sub>. The lowest benefit: cost was recorded in T<sub>1</sub>.

Key Words: Humic acid, Wheat, Foliar spray, Growth parameters, Yield attributes

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