



Effect of Putrescine Foliar Application on Wheat Genotypes (*Triticum aestivum* L.) under Water Stress Conditions

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Abstract : Polyamines are essential compounds and are important in cell survival. It has key roles in abiotic stress protection. The present study has been carried out to give better understanding about the effect of exogenous application of putrescine on two drought stressed wheat (*Triticum aestivum* L.) genotypes at the fruiting stage. The experiment consisted of four water stress conditions (90%, 70%, 50% and 30%) FC. One group of each concentration was sprayed with 0.2 mM putrescine. The wheat genotypes varied greatly in their drought tolerance and also towards putrescine treatment. Data indicated that Sakha61 tolerated drought stress up to 30% FC while Sakha69 was a drought sensitive genotype because it gave no productivity at the severe drought stress conditions. Foliar application of 0.2 mM putrescine resulted in some contradictory conclusions of a biphasic effect (stimulatory and inhibitory) under the different drought stress levels. The best stimulation in all the studied growth, yield and physiological parameters was recorded at 50% FC among both wheat genotypes studied.

Key words : Drought, Putrescine, Polyamines, Wheat.

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