

## **Effect of temperature on nitrogen use efficiency in crop production**

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**Abstract** Nitrogen (N) is a crucial and limiting nutrient for crop production and its efficient use is important for the economic sustainability of cropping systems. Loss of nitrogen through different mechanism from the soil/plant system not only reduces soil fertility and plant yield, but also causes adverse impacts on the environment. NUE is a function of multiple interactions of genetic and environmental factors. Today, Nitrogen Use Efficiency (NUE) is the major issue in agriculture as it delivers enough nitrogen to the crop to optimize yield, save fertilizer costs and minimizes nitrogen pollution. In present scenario, due to global warming, the temperature rises day by day which affects the nitrogen use efficiency and ultimately crop production. At higher temperatures, the intensity of light is very high and it affects mineral nutrients uptake in plants and also affect plant growth negatively. So, in this study the objective is to see the impact of elevated temperature on nitrogen use efficiency in crop production.

**Keywords:** Nitrogen, temperature, nitrogen use efficiency, crop production