
Responses of common bean to water stress and ozone during seed filling: focus on some physiological and agronomical parameters

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Résumé

While drought and tropospheric ozone (O₃) are major factors limiting crop yield, their combined effects on plant physiology and yield are not fully understood. Our objective is to characterize the impact of combined O₃ and drought on seed yield and nitrogen use efficiency in two common bean genotypes known for their contrasting response to O₃ in order to identify marker of tolerance to these stresses. As a preliminary experiment, drought was applied at the stage of seed filling. Nitrogen use efficiency indicators were determined using the ¹⁵N isotope labelling technique.

Mots-Clés: Phaseolus vulgaris, water stress, Ozone, nitrogen use efficiency, ¹⁵N, seed quality

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