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In vitro study of the efficiency loss of two fungicides under the effect of water salinity and the period of stay by the use of bio-indicators.

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PURPOSE OF THE ABSTRACT

Large amounts of pesticides are used in Algeria due to different climatic pressures, pathological and physiological crop. To overcome the shortcomings of the treatments, including saline hydrolysis which remains the most important problems given the high salte concentration of water in the region, farmers increase the dose of quarantine treatment or increase the frequency of these treatments which complicates the situation more and more. To study this phenomenon of saline hydrolysis and the effect of the period of stay of the active phytosanitary molecules in an aqueous formulation of two fungicides in wide use in our region The bioindication methods used include that of the effect on the mycelial growth of fungi. A range of salts was chosen to meet the salinity change of reality in our study area with a different range of periods of residence retained after the preparation of fungicide solutions maintained in laboratory ambient temperature 25 ° C and the dark to avoid any photochemical reaction. From youth cultures of seven days, spores and mycelia were confronted with parameters respectively studied in a sterilized nutrient broth and agar PDA. On the other hand, a measure of mycelial growth in daily time. ANOVA revealed very highly significant effects of the factors studied on the saline hydrolysis. The results we were allowed to check that the fungicides are rapidly degraded under saline aqueous conditions and long residence times, and less affected in weak saline environments and periods short stays (24 hours 48h).

FIGURES

FIGURE 1

FIGURE 2

KEYWORDS

efficiency loss | fungicide | water salinity | period of stay

BIBLIOGRAPHY