

## **ACTION OF THE COMBINATION OF ALTERNARIA ALTERNATA AND NEOCHETINA EICHHORNIAE ON GROWTH PARAMETERS OF THE WATER HYACINTH IN A CONTROLLED ENVIRONMENT**

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### **ABSTRACT**

*Alternaria alternata* and *Neochetina eichhornia* are pathogens of water hyacinth which is a major invasive weed on our water ways in the south of Benin. We tested these two agents in a controlled environment on association water hyacinth. The device is made of four treatments with seven replicates. The association is made of two pairs of *Neochetina eichhornia* and *Alternaria alternate* with different sporulations  $10^6$ sp/ml,  $10^7$ sp/ml,  $10^8$ sp/ml,  $10^9$ sp/ml,  $10^{10}$ sp/ml,  $10^{11}$ sp/ml et  $10^{12}$ sp/ml on water hyacinth for twelve weeks and a few days. The average values of the significant parameters of growth at the of the experiment as the weight with sporulation of  $10^{12}$ sp/ml and of two pairs of *Neochetina eichhoenia*  $18.80 \pm 0.35$ ; those of leaves are  $1.12 \pm 0.21$  and those of buds are  $0.80 \pm 0.13$ . Thus *A. alternata* is a potential as an agent of bio control of water hyacinth with block<sub>7</sub> T4 treatment.

**KEYWORDS:** *Alternaria Alternata*, *Neochetina Eichhorniae*, Biocontrol, Water Hyacinth, Sporulation