Abstract:

The focus of this study is to examine if hazardous substances found in cigarette stumps extracted by different solvents, including deionized water solution with neutral, alkaline and acid pH, and pure ethanol (99%) have growth inhibitory effects on sandwich cress *(Lepidium sativum)*. Survey materials include extracts from cigarette stumps from the brand Winston (*Winston Red Talls)* and seeds from sandwich cress *(Lepidium sativum)*. The laboratory method consists of germinating seeds from *Lepidium sativum* with burnt tobacco and cigarette stump residue extracted by different solvents. The laboratory results show no statistically significant difference between the control group (reference group) and the tobacco extract group for three out of four solvents. A statistically significant difference was noted for deionized water solution with acid pH. There are some indications that toxins extracted with cigarette stumps in deionized water solution with acid pH have growth inhibitory effects on seeds from *Lepidium sativum*, but not for the other solvents. The results of the study contradict earlier research conducted on other varieties of seed plants.