

Organic Waste Recycling by Using High Heat in Green Houses

Eleyyat, Baraah

This project solves an ongoing issue of the organic wastes, it became a worldwide problem. After a long time research we finally came up with a solution to have a great benefit by making this organic into a soil fertilizer (in which can be used in agriculture) using the green houses because a lot of people use green houses here in Palestine. In autumn and winter, temperatures start to fall so decomposing the organic waste outside the green houses (using the traditional way of digging a hole underground and putting the waste in it and then cover it with soil) becomes difficult because it takes a long time (4-6) months. The idea of this project depends on burring the waste inside the green house which provides high temperatures that decompose in short time (not more than a month) by compared with the traditional method outside the green house, that take from (4-6) months. The aim of this project is to prove the following theory" the heat of the green houses decomposes the waste quickly in autumn and winter as the temperatures are low in these two seasons the temperature inside the green house is more than outside. To prove that this theory is true i carried out an experiment. it was done as followed 1- I took two samples of wastes for the two seasons and burring one sample (5kilograms of waste) inside the green house and the other (5kilograms) outside. 2- I irrigated it every three days. 3- I measured the temperature four times daily. 4- After a month the organic waste turned into fertilizer. This fertilizer was used in agriculture , i planted some types of vegetables , i also measurd hight, and number of leaves , and this table show the results for the two seasons: Winter experiment Autumn experiment Outside green house Inside