

## THE INFLUENCE OF ORGANIC MATERIALS USED AS MULCH ON THE CUCUMBER CULTURE

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### SUMMARY

The cucumber culture was founded in the didactic fields of Horticulture Faculty from Bucharest using many organic materials as mulches. The biological material used was the hybrid Royal F1. As organic materials for mulching were used the compost of mushrooms rooted in the white mushroom, *Agaricus bisporus*, the compost of mushrooms rooted in *Pleurotus* mushrooms and cereal straws. The scheme of the experience was the following: V 1 mt- non mulched; V2-mulching with compost from *Agaricus*; V3-mulching with compost from *Pleurotus*; V4 -mulching with straws.

During the experimental period there were executed observations and measurements regarding the growth of seedlings, the growth of plants (height, the appearance of each side off shoots and pinching at the appropriate time), the fruits estimation, their ranging on size categories. The plants mulched with *Agaricus* compost formed the highest number of fruits (28.8). The straws represent a very good material for mulching the cucumbers, the number of fruits having an average of 25 per plant. The compost from *Pleurotus* has a similar effect as straws. The non mulched witness formed the lower number of fruits (21.3). The biggest production of fruits was registered at the white mushroom mulched variant, around 4.97 kg/pl, while the smallest production was obtained at the non mulched witness. In between productions was obtained at variants 3 and 4 were the mulching materials is very similar, excepting the straws which maintained coldness less than other materials which was not benefic for cucumbers especially in the first period of vegetation.

The researches regarding the mulching of cucumber cultures with different organic materials brought in evidence the following conclusions: Mulching with white mushroom compost, gives an optimal combination of mushrooms and other vegetables; The reuse of the compost from *Pleurotus* leads to important productions at cucumber and positive effects on plants and soil; The environment is protected, the soil and product pollution is reduced;

### REFERENCES

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