

## USE OF DIFFERENT AGRO-FOOD WASTES TO FERTILIZE THE LETTUCE CULTURE

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**Introduction.** The use of organic wastes in agriculture represents a valuable option for managing the large quantities of waste generated by the agro-industrial processing of vegetables. In this context, the purpose of this paper is to evaluate the effect of applying different types of compost, obtained from organic vegetable waste resulting from the industrial processing of different vegetable species, on lettuce crop.

**Material and methods.** The experiment was carried out between the years 2020-2021, at the University for Life Sciences "Ion Ionescu de la Brad" in Iasi, V. Adamachi Research farm. To obtain the composts, vegetable wastes resulted from the industrial processing of onion, cabbage, carrot, beetroot, eggplant and pepper, kindly provided by Contec Foods SRL, Tecuci, were used. A number of 6 composts, each consisting of a single different vegetable waste, were added in various proportions to the substrate used to produce the lettuce seedling (15% compost + 85% peat and 30% compost + 70% peat).

**Results.** The yield of the lettuce grown in the compost-peat substrate was compared with that of the plants grown only in peat. The use of compost in the preparation of the substrate determined yield increases, the best results, with significant differences compared to the control, being recorded for the beetroot and eggplant wastes.

**Conclusions.** The use of compost from agro-food industrial waste (from fruits and vegetables) may be an ecological method to replace other non-ecological fertilizers.

**Keywords:** *compost, fruits waste, industrial processing waste, valorization, vegetables waste, yield*

**Acknowledgments:** Joint Operational Programme Romania – Republic of Moldova 2014 – 2020, grant 2SOFT/1.2/83, 02.09.2020, project "Intelligent valorisation of agro-food industrial wastes" (INTELWASTES).