

**THE EFFECT OF PHYTONCIDAL SUBSTANCES OF ONION *ALLIUM CEPA* VARIETIES ON THE GROWTH AND DEVELOPMENT OF FUNGI CULTURES *PENICILLIUM SP***

**T.M. GORGAN**

*Institute of Agroecology and Environmental NAAS of Ukraine*

The purpose of work was a study of influence of volatile fractions of phytoncids of juice of onion bulbs on the cultures of mushrooms of sort of *Penicillium*, that prevailed on sorts during a vegetation period and storage.

In experience the bulbs of sharp and light-green sorts were utilized with the scales of the white, yellow and violet colouring. Essence of method consists in the action of volatile fractions of phytoncids of juice of sorts of onion bulbs of, which are in cylinders, on the cultures of select mushrooms. After the area of absence of growth, drew a conclusion discoloration micromycetes about phytoncidal activity of sorts of onion bulbs.

Research results testify that the testable sorts of bow Reptilia are characterized the different degree of pressure on the cultures of mushrooms of *Penicillium of verrucosum* and *Penicillium of canescens*.

All of sorts found out different activity of volatile fractions of phytoncids of to every mushroom, but clear dependence between colouring of scales and phytoncidal activity was not observed. All of sharp sorts anymore influenced on development of *micromycetes*, to what the delay of growth testifies that discoloration colonies round cylinders.

The area of absence of growth was expressly traced in research of mushroom of *Penicillium of canescens* during the first three days of cultivation at **пяти** sorts within the limits of 5,0 – 12,5 ì. *Verrucosum* phytoncids of the probed sorts restrained growth and development of micromycetes of *Penicillium* only two first days.

As a result of experience phytoncids of sort Zolotista repressed the colonies of mushroom of *Penicillium of canescens*, as speed of growth of micromycetes with approaching to the cylinder with juice of sort diminished gradually. And the sort of Grandina vice versa stimulated more active development of colonies and with approaching to the cylinder with juice there was more stormy growth pathogenic. Other sorts repressed the colonies of micromycetes poorly. In research of mushroom of *Penicillium* the *verrucosum* sort of Grandina vice versa found out most phytoncids, and sort Nymph considerably stimulated growth of colonies. The got results open the prospect of research of co-operation of plants of onion bulbs and phytopathogenic microorganisms in agrophytocenoses.