MEDICINAL PROPERTIES OF VEGETABLE CROPS AND THE POSSIBILITY OF THEIR CULTIVATION IN THE IN VITRO

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Medicinal properties of food plants are determined by the presence of active substances, which, unlikesynthetic analogues "conflict-free" are included in the processes of human life, and therefore less dangerous in pathological processes. Therefore, edible plants, not just products on our table, but also an invaluable storehouse of useful and medicinal substances, which are key to beauty and health. Edible plants, along with the drug, may be used for the treatment and prevention of various diseases, and can serve as raw material not only edible parts of plants, or otherwise, and the whole vegetable entirety. Intensification of vegetable production to increase production of valuable products sets high requirements to grades hybrids. To consolidate the relevant signs and rapid multiplication of valuable material in the last 10 years been widely and effectively used technology of cultivation of plant cells, tissues and organs in vitro, which was transformed into a complex and large-scale industry of experimental biology. In addition, recent advances in cell mutagenesis and genetic engineering are largely determined by the development of culture methods. Reproduction of vegetable crops in vitro method for conducting a major breeding and seed works. From traditional methods of plant propagation micro cloning has some peculiarities: a) providing a large number of copies with minimal raw material, b) give, depending on the purpose of the study, genetically homogeneous material and somaclonal variants, c) the possibility to choose in vitro plant material with features that interest researchers, and, d) the possibility of obtaining disease-free seed, and e) the opportunity to lead the reproduction of plants throughout the year, as their growth and reproduction in vitro virtually independent of seasonal changes. That such and other techniques and technologies are successfully used in biotechnology laboratories of the Institute of Vegetables and Melons NAASU. The aim of our study was to introduce the detailed basic vegetable medicinal plants in vitro at the base of the institution. Established that crops such as onions, shallots, garlic, peppers, cabbage successfully cloned from meristematic fabric of different zones. Provide good results for the formation of homemade explants of regenerated plants of tomato, carrot roots are obtained by regeneration of somatic embryos ginogennyh callus carrots, etc. However, a range of vegetable crops is huge - more than 1,200 species - and biotechnologists task is not only to develop technologies to produce them under in vitro, but the widespread adoption of these technologies in practice.