Innovation in biotechnology

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Introduction. At present, forestry is on the threshold of a promising change as biotechnology has already penetrated into its activities. Modern methods of tissue culture seedlings for cloning and genetically modified organisms portend big enough benefit, because the principal amount of industrial wood produced in the world on the plantations. In most cases, biotechnology in forestry is an extension of agricultural innovations, such as the stability of woody plant species to herbicides. However, biotechnology also has applications of forestry, such as fiber modification, reduction, as well as sterility, which is an important factor to prevent the "hit" of modified genes into the environment

So, Italian breeders of the leading national association of agricultural producers presented a new variety of tomatoes, the use of which will help to slow aging and improve the human body. According to the scientists content of super tomato having effective natural antioxidant - lycopene is three times higher than normal, available in conventional tomatoes. The researchers also emphasize that the veg was created without the participation of geneticists and is not genetically modified products. "Our experience shows that it is possible to achieve high quality and innovative results without resorting to genetic engineering and responding to consumer demands expected from the manufacturer guarantees of food safety," - said the president of Coldiretti Sergio Marini. As stated during the presentation of the famous Italian nutritionist Jojo Calabrese: "This totally natural product will greatly assist the human body". Scientists have proven that tomatoes with high contents of lycopene prevents the development of certain cancers.

Very interesting innovation in the field of biotechnology is that plants can talk to each other and British researchers removed the camera on this phenomenon. Scientists conducted an experiment on cabbage. Biologists have notched growing on a bed of vegetable leaf, whereby he released gas, warning neighboring intact shoots of danger. Those, in turn, launched the internal mechanisms of protection: immediately increased in its biochemical balance toxic substances that antagonize pests, primarily caterpillars. As the head of the experiment, the gas and is the language of communication between plants. With his help, vegetables inform the world about the need to increase the level of protection.

Also the British proved that plants can be grown without fertilizers. British scientists have developed a technology for N-Fix, which allows plants to obtain nitrogen from the air instead of fertilizers. Experts at Nottingham University have developed a method of placing the bacteria capture nitrogen directly into plant cells. This became possible after the discovery of the specific form of nitrogen assimilating bacteria in sugar cane. According to scientists, these same bacteria can live in the cells of most plants.

Conclusions. As a result it may be concluded that biotechnology is always and therefore develop and innovate in this area. Today, the pharmaceutical biotechnology products are presented by classic products: antibiotics for different purposes, vitamins, vaccines and enzymes, as well as products of "new biotechnology", which are genetically engineered drugs and vaccines and diagnostic tools of the new generation.

References:

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