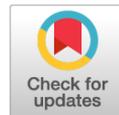


## Prospects for the study of natural GMOs



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Naturally transgenic plants are plants that have been subjected to “Agrobacterium” mediated transformation in natural conditions without any human impact. They contain T-DNA-like sequences, called cellular T-DNA (cT-DNA) in their genomes and transfer them from generation to generation [1].

At the moment, several dozen species of natural GMOs are known, and this list is constantly updated. Based on the available data on the diversity of natural GMOs, it can be concluded that in each case, plants have their own set of functionally active transgenes. Accordingly, each cT-DNA performs its own functions. This set of active transgenes will define promising areas for nGMO research, such as:

- description of the structures and functions of opine synthesis genes and the biological activity of their products in the regulation of plant-microbial interactions [2];
- description of the effect of oncogenes on plant morphogenesis, their primary and secondary metabolism [1].

In addition, sequences, newly acquired by plants, can be successfully used in phylogenetic studies [3].

These topics will be the subject of a report at the conference.

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**Keywords:** natural GMO; cellular T-DNA; phylogenetic studies; opines; T-DNA oncogenes.

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