



“In late August, we were invited to visit Nanjing Normal University on occasion during which we talked with Prof. Chuanchao Dai in School of Life Science. We have also shown to him our iGEM project as well as the iGEM competition. Prof. Dai showed great interest in it and told us that he intended to organize their students to participate in the competition in 2016. We promised him we would spare no efforts to help them organize a team. Nanjing Normal University has been a normal school and values tremendously about nurturing teachers. Therefore, it will benefit a large community if we help them participate in the iGEM competition.” Comments from the government official.

Interview Record

Q: Could you briefly introduce the latest development of transgenic technology to us?

A: Transgenic technology is now mainly used in the planting of genetically modified (GM) crops. The total planting area of GM crops around the world in 2014 is 181.5 million hectares. In 2014, a total of 28 countries are growing GM crops, including the United States, Canada, Australia, Spain, Portugal, China, Brazil, Argentina, India, South Africa, etc.

Q: How are the applications of transgenic technology in fields like agriculture, industry or environmental protection?

A: In agriculture, transgenic technology has made significant progress in cultivating GM crops, such as antivirus crops, crops with insect resistance, herbicide resistance, stress resistance, or with high quality; in industry, it is mainly used in fields like food industry and biofuels; and in environmental protection, it shows distinct potential for the treatment of the soil heavy metal pollution, etc.

Q: Why do we develop the transgenic technology?

A: Transgenic technology is able to cultivate high-yield, high-quality, and efficient varieties, so as to reduce pesticide and fertilizer inputs. Hence, it has a leading edge in alleviating resource constraints, protecting the ecological environment, improving product quality, and expanding agricultural function. At present, the transgenic

technology has become a commanding height of science and technology among countries, and the focus of agricultural international competitiveness. It assists in the formulation of the country's future developing strategies, supporting the country's development.

Q: Is the transgenic technology safe?

A: There must be some safety risks during the development of any technology, the transgenic technology is no exception. At present, the controversy on it is reasonable, and also very necessary. The controversy, on the one hand, can push scientists to examine the safety of the transgenic technology under a more rigorous assessment; on the other hand, can also help to popularize the knowledge of the transgenic technology effectively, making the public to have a better understanding of the transgenic technology and deal with it rationally.

Q: Are there any policies related to GMOs in China?

A: Yes, such as the "Regulations on Administration of Agricultural Genetically Modified Organisms Safety", "Measures for the Administration of the Safe Import of Agricultural Transgenic Living Things", and "Administration Measures for Genetically Modified Food Hygiene".

[_http://www.gov.cn/ziliao/flfg/2005-08/06/content_21003.htm](http://www.gov.cn/ziliao/flfg/2005-08/06/content_21003.htm)

[_http://www.gov.cn/gongbao/content/2002/content_61848.htm](http://www.gov.cn/gongbao/content/2002/content_61848.htm)

[_http://www.china.com.cn/chinese/PI-c/138299.htm](http://www.china.com.cn/chinese/PI-c/138299.htm)

Q: What are Chinese commercial cultivated GM crops?

A: China has not approved the application of transgenic technology on the commercial production of major grain. The GM varieties that can be used for commercial cultivation are only GM cotton with insect resistance and GM papaya.

Q: What are the GM food on Chinese market?

A: On Chinese market, currently, the imported GM food are mainly soybeans, rapeseeds, corns, and related products; the domestic GM food are cottonseed oil and papayas. It is worthwhile to note that the cherry tomatoes, peppers, small pumpkins and small cucumbers on the market are not GM food.

Q: How to distinguish the GM food on the market?

A: In order to protect consumers' rights to know and option, China implements GM recognition system. That is to say, the GM food incorporated in the catalog and sold in the market needs labeling.

Brief Introduction of NIES

Nanjing Institute of Environmental Sciences of the Ministry of Environmental Protection (NIES), founded in 1978, is a national scientific research institution directly affiliated to the Ministry of Environmental Protection. It is also one of the pioneers that carried out scientific researches on environmental protection in China. Since its establishment, the institute maintained its main research direction in ecological protection and rural environment protection, and dedicated to prospective, strategic, fundamental and applied environmental studies. The research fields of NIES cover ecological protection and restoration, nature and biodiversity conservation, rural environment management, ecological effects of toxic and hazardous chemicals and pollution control, soil pollution prevention, ecological protection of watersheds and water pollution prevention, which includes twenty-one research divisions. Based on the relevant research experiences, NIES has carried out a wide range of technical consultation works on ecological environmental protection planning, organic product certification, agricultural chemicals environmental safety assessment, contaminated site remediation, environmental engineering and environmental impact assessment, etc.