A Ten-year research and practice of functional agriculture in China

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Abstract

Functional agriculture was firstly put forward by Qiguo Zhao, academician of Chinese Academy of Sciences, in "Agricultural Science and Technology in China: A road map to 2050" in 2008, and development of selenium-enriched agriculture is an important part of functional agriculture. Dr. Xuebin Yin's team from University of Science and Technology of China (USTC) conducted systematic studies and industrialization practices of functional agriculture firstly, leading China's agricultural transformation in the recent 10 years.

An engineering center and an advanced laboratory of functional agricultural were established in Institute of Advanced Technology, USTC, and Suzhou Institute for Advanced Study, USTC. The first functional agricultural academician workstation, and provincial engineering and technology center of selenium were established later. The Chinese branch of International Society for Selenium Research was established to attract more Chinese scholars and promote the exchange of selenium research results. These institutes developed technologies to cultivate 30 of varieties selenium-enriched agricultural products, and accumulated more than 300 patents, providing comprehensive agricultural services for many national leading agricultural enterprises, such as COFCO, China National Salt Industry Corporation, Beidahuang Group, Jiangsu Nongken Group, and so on.

As the functional agriculture increased the health connotation of agricultural products, the agricultural benefits improved greatly. Several members of the National People's Congress proposed to develop the functional agricultural industry energetically for it is a new way to reform China's agricultural supply side. Proposals for developing functional agricultural were written in "2017 Central Document, China", which highly encouraged functional agricultural industries.

Keywords: functional agriculture; research; practice; industrialization