

EDITORIAL

Editorial for *Advances in Modern Agriculture* (Volume 4, Issue 1)

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As a technology-intensive sector, modern agriculture is becoming more and more dependent on the ongoing development of new technological inputs, which serve as both its foundation and its engine. These new technologies include biotechnology, information technology, cultivation technology, water-saving irrigation technology, etc. The application of agricultural technologies has many advantages: firstly, it can increase the yield of agricultural products per unit; secondly, it can improve the quality of agricultural products; thirdly, it can reduce labor intensity; and fourthly, it can save energy and improve the ecological environment. Agriculture has developed quickly as a result of those new technology, which is quite advantageous to the general public and practitioners that are involved. This issue offers readers a discussion of the implications of numerous new technologies being applied to various connections in agriculture, along with interesting facts about these applications. Those findings suggest that appropriate use of modern technologies in agriculture could provide economic benefits without endangering the natural environment. More specifically, the use of irrigation technology, the promotion of crop growth, and the impact of technology on agriculture are the three key topics of this issue.

In addition to efficiently using scarce water resources, easing the severe situation of excessive groundwater exploitation and crustal subsidence, modern scientific irrigation technology can also improve the growth conditions of crops, fruit trees, etc., and increase yield and fruit quality through organic combination with precise fertilization. Many academics are interested in studying this area and dedicated to the advancement of irrigation technology because of the many benefits provided by modern scientific irrigation technology. Three different nozzle shapes were designed by Liu et al.^[1], who also investigated the distribution law of the kinetic energy, velocity, and diameter of the water droplets in irregular nozzles. Selecting the right irrigation equipment is just as important as studying particular irrigation technologies. In order to determine the ideal design for center pivot irrigation equipment, Maldonado et al.^[2] used software that considers data on the kind of crop, soil properties, and agroclimatic conditions of the area. Their research enlightens us on the fact that selecting the right irrigation equipment is just as crucial as applying irrigation technology correctly.

Furthermore, several academics investigate how technologies affect various aspects of agriculture. Yi and Cheng's^[3] study looked into how the popularization of internet technology affected the Yangtze River Economic Belt's environmentally friendly agricultural development. Their research demonstrates the positive impact of internet technology on the environmentally friendly growth of agriculture in the Yangtze River Economic Belt. A research project on the bioethical ramifications of implementing transgenic technology for

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agriculture in Colombia gave rise to a study by Cuéllar Saavedra^[4]. This study evaluates the impacts of the usage of transgenic technology in agriculture in an equitable and neutral way.

Additionally, articles in this issue explore the best growth stimulants for crops and how to promote crop growth. Their research contributes to increasing crop yield and might be instructive and beneficial to people engaging in related fields of research.

Finally, we deeply appreciate the authors' permission to authorize us to share their insightful ideas.

Conflict of interest

The author declares no conflict of interest.

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