

技术及应用

中国核农学的发展历程与成就

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摘要 文章概述了我国核农学的创建与发展历程以及核技术农业应用研究所取得的主要成果。我国核农学始于1956年, 经过50多年的发展, 现已形成科研协作网络、学术交流网络、国际交流网络。这三大网络全面推动了中国农业核技术应用的核农学的形成与发展, 在辐射育种、航天育种、同位素示踪技术在农业中的应用、农产品辐照贮藏和保鲜加工、辐射害虫防治、低剂量辐射刺激增产等方面取得了显著成绩。此外, 文章还就中国核农学今后的发展构想以及核农学优先发展的主要领域提出了构思和建议。

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分类号

Development Process and Achievements of China Nuclear Agricultural Sciences

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Abstract This paper outlines the creation of our nuclear agricultural sciences and the development process as well as the main results for agricultural applications of nuclear technology. Nuclear agricultural sciences in China began in 1956, after 50 years of development, the collaborative research network, the academic-exchange network, and the international exchange network have been formed. These three networks comprehensively have promoted the formation and development of China nuclear agricultural sciences. Remarkable results have been achieved in the fields of radiation mutation breeding, space mutation breeding, isotope tracer technique application in agriculture, agricultural products storage and preservation of irradiation processing, irradiation sterile insect technique, low-doses of radiation to stimulate output. In addition, the concept of suggestions on the future development of China nuclear agricultural sciences, as well as the priorities of research fields are put forward.

Key words [nuclear](#) [agricultural](#) [sciences](#) [_](#) [isotope](#) [tracer](#) [_](#) [radiation](#) [mutation](#) [breeding](#) [irradiation](#) [food](#) [preservation](#) [_](#) [radiation](#) [sterile](#) [insect](#) [technique](#)

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