

农学—研究进展

两系杂交稻现代安全繁殖制种技术研究进展

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摘要:

此文论述了两系杂交稻现代安全繁殖制种的重要意义,提出两系不育系育性转换起点温度偏高及其“遗传漂变”、制种基地选择和季节安排不合理、不育系繁殖产量不稳定等是目前两系安全繁殖制种中存在的主要问题,指明选育实用光温敏核不育系、加强“核心种子”生产、利用“低温繁殖有效积温原理”进行安全高产繁殖、基于种子生产基地气象决策支持系统有效地选择制种基地和时段等是解决问题的主要技术措施。

关键词: 两系杂交稻; 安全; 繁殖制种; 技术

Advances in Induced Technology of Modern Safe Seed Breeding and Hybrid Seed Production of Two-line Hybrid Rice

Abstract:

The significance of modern safe seed breeding and hybrid seed production of two-line hybrid rice were discussed, the high fertility conversion temperature, “genetic drift”, the selection of seed production bases, the unreasonable arrangements of seed production seasons and the unstable output of TGMS line reproduction were the major problems existed in the safe seed breeding and production of two-line hybrid rice which were proposed in this paper. The selection of practical TGMS line, the strengthen of “core seed” production and using the principle of “low temperature breeding and effective temperature accumulation” were specified, which were used to security high-yield breeding of two-line hybrid rice. The weather decision support system of hybrid seed production base was based for effective chosen the hybrid seed production base and the production time which was the main technical measurements for solving the problems above.

Keywords: two-line hybrid rice security seed breeding technology

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