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Improved yield and Zn accumulation for rice grain by Zn fertilization and optimized water management

通过锌肥和适宜的水分管理提高水稻籽
粒产量及锌积累量

Key words: Rice, Alternate wetting and drying, Soil fertilization, Zinc

关键词：水稻；干湿交替；施肥；锌

- Zinc (Zn) deficiency occurs not only in traditional lowland rice, but also in some newly developed water-saving management, resulted in not only yield reduction but also Zn malnutrition in humans.
- Zn deficiency in rice can be alleviated through Zn fertilization with high solubility and Zn availability for the plant.
- Alternate wetting and drying is considered to be a promising water-saving strategy under an intensive rice production system, it remains debatable to achieve the dual goal of increasing grain yield and saving water.
- According to the current results, AWD represents not only a promising rice production system but also a strategy for Zn biofortification. AWD regime combined with ZnSO_4 fertilization was recommended in rice production systems to obtain higher yield, Zn concentration and bioavailability in grain.

