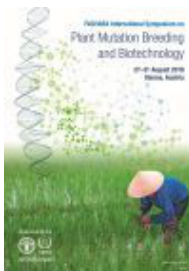


# FAO/IAEA International Symposium on Plant Mutation Breeding and Biotechnology



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## THE BREEDING OF GLUTINOUS HYBRID RICE

The glutinous rice is the traditional staple food most people in Asia. The glutinous rice is used in many countries for the preparation of the rice cake, and is an important cultural component. Along with living standards' enhancement and market economy's development and the demands for nutritious and healthy foods drive constant increase of the market for glutinous rice demand. The rice breeding programme has adopted the super rice breeding and good progress was made. It is important for us to develop glutinous hybrid rice for improving the yield of glutinous rice. Induced mutants of *wx* were directly obtained after irradiation on maintainer (B), restorer (R) and photoperiod (temperature) sensitive genic male sterile lines (S) of hybrid rice. CMS(A) lines with *wx* (referred to as *wxA*), T(P)GMS lines with *wx* (referred to as *wxS*), restorer lines with *wx* gene (referred to as *wxR*) as well as hybrid rice with *wx* gene (referred to as *wx*-hybrids) were developed. By using the *wx*-hybrid rice breeding method, most of CMS(T(P)GMS) lines and R lines used in China were transferred to *wx*-CMS (*wx*- T(P)GMS) lines and *wx* R lines. Till now, 8 *wx*-CMS (T(P)GMS) lines and 5 elite *wx*-hybrid rice were released for commercial production. Compared with the traditional glutinous rice, the yield of the *wx*-hybrid rice was improved about 1,500 kg ha<sup>2</sup>.

### Country or International Organization

Hybrid rice; Glutinous rice; *wx*-hybrid rice; Mutation

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