

The Mycelium Growth of *Ustilago esculenta* Influenced the Gall Formation of *Zizania latifolia*

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The smut fungus, *Ustilago esculenta*, played an important role on the gall formation of *Zizania latifolia*. The enlarged gall was called *Jiaobai*, which was the second important aquatic vegetable in China. Strains isolated from edible *Jiaobai* and grey *Jiaobai* were called MT and T strain respectively. During the gall formation of edible *Jiaobai*, gradually increased hypha clusters were observed at the earlier stage. At the later stage, number of hypha clusters decreased significantly, and teliospores were formed. *In-vitro* study showed that hormone could effect the mycelium growth of *U. esculenta*. IAA could promote the mycelium growth of both T and MT strains. TIBA could inhibit the mycelium growth of T and MT stains, and significantly reduced dry weight of haploid strain. The gall maturation and yield of *Jiaobai* could be effectively regulated by hormone in the field. IAA could delay approximately nine days of gall maturation, but with no effects on the yield. While TIBA could shorten gall maturation time, and increase yield of early harvest stage.

Biography:

Dr. Haifeng Cui obtained his B.S. Degree at Shandong University in China in 2003, and completed his Ph. D with Prof Guangmin Xia at Shandong University in China in 2008. He joined Prof. Zihong Ye's group in the Zhejiang Provincial Key Lab of Biometrology and Inspection & Quarantine at China Jiliang University as an associate professor in 2012. His current research is focused on the interaction between *Zizania latifolia* and *Ustilago esculenta* during the gall formation of *Jiaobai*.