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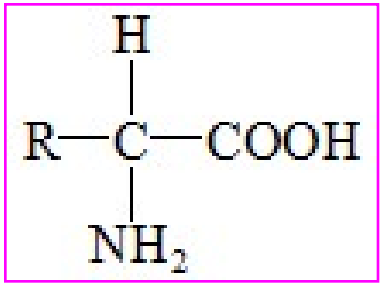
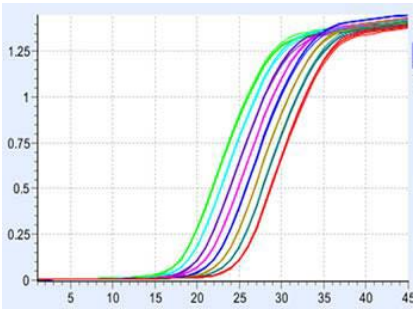
Molecular identification and interaction assay of the gene (*OsUbc13*) encoding a ubiquitin-conjugating enzyme in rice

Key words: Ubc13; *Oryza sativa*; Real-time quantitative PCR; Yeast two-hybrid.

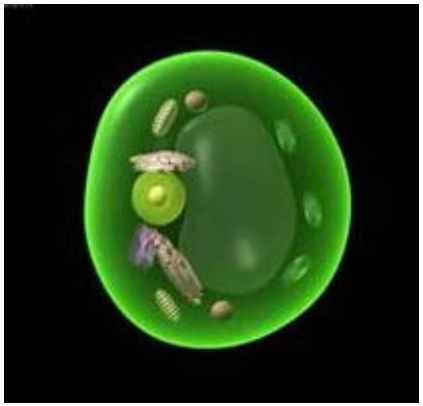
Research contents

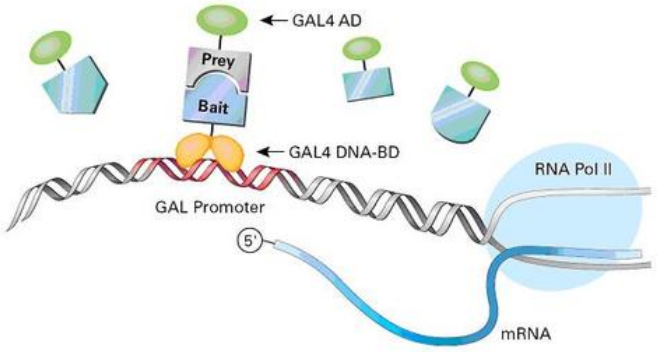
This research paper mainly focused on the study of *OsUbc13* gene in the following aspects:





- **The sequence analysis**
- **The expression pattern**
- **The subcellular localization**
- **The protein-protein interactions**



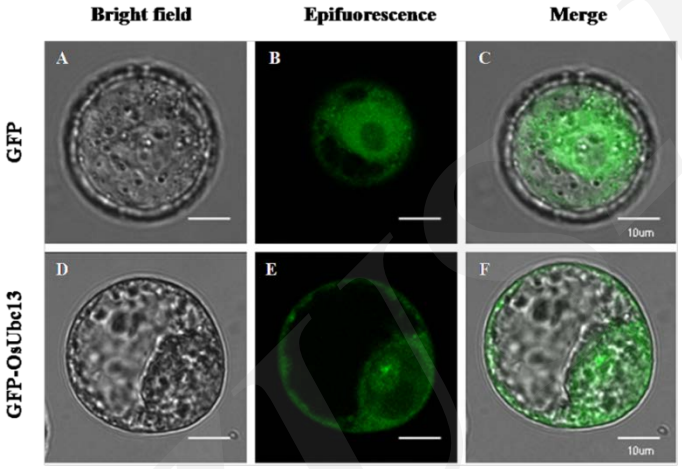


Main conclusions

- ***OsUbc13*** **encodes a UBC homolog of 153 amino acids (Fig. 1).**
- ***OsUbc13*** **gene is primarily constitutive in various tissues (Fig. 2).**
- ***OsUbc13*** **gene is generally modulated by hormone and abiotic stresses (Fig. 3).**
- **OsUbc13 was probably localized in the plasma and nuclear membranes (Fig. 4).**
- **Twenty proteins were identified as the potential OsUbc13-interacting partners (Fig. 5 and Table 1).**

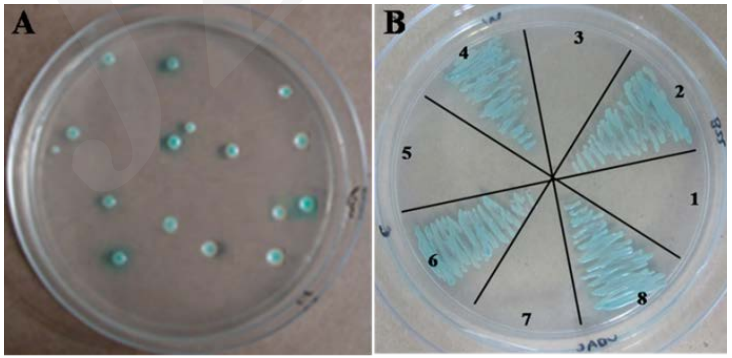
Innovation points

➢ **Study on the subcellular localization of plant Ubc13 protein**



(Fig. 4)

➢**Exploration the interacting proteins of** *OsUbc13*



(Fig. 5)