

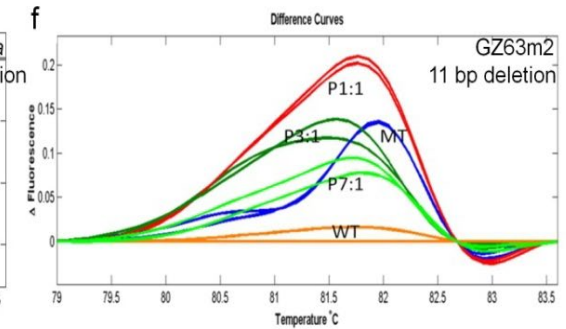
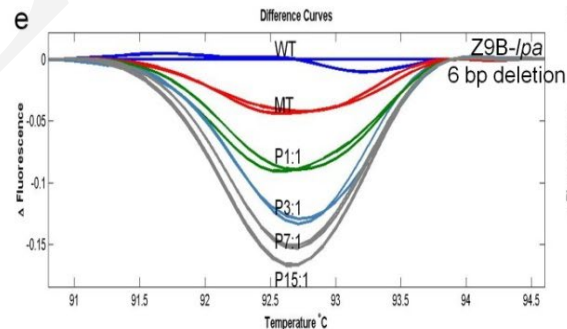
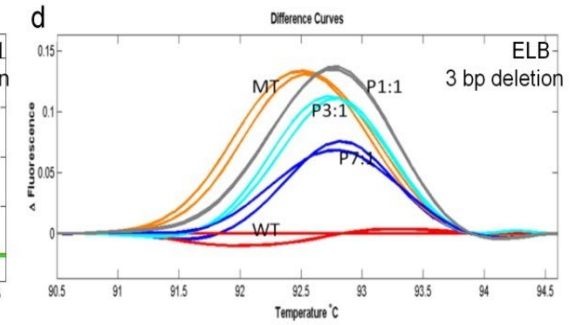
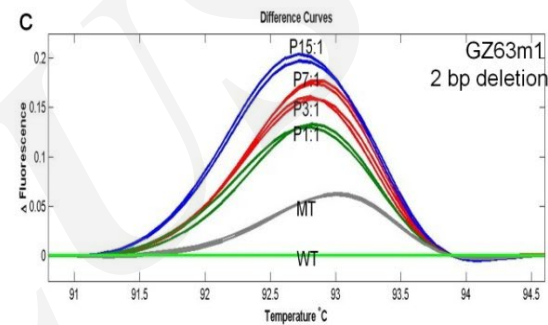
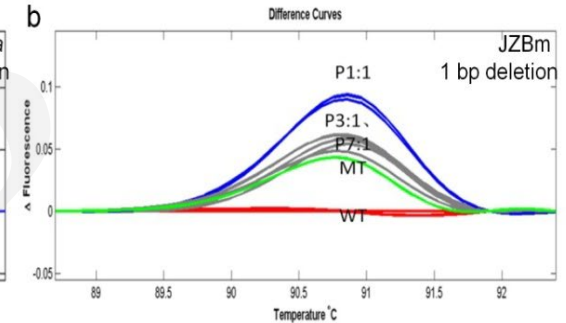
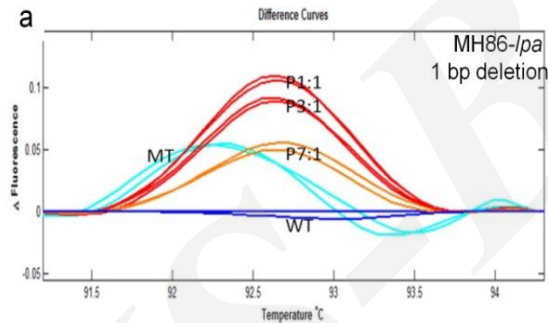
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High-resolution melting-based TILLING of γ ray-induced mutations in rice

Key words: Mutation screening, High-resolution melting (HRM) analysis, Targeting Induced Local Lesions IN Genomes (TILLING), Mutant, Indel, γ ray, Rice

Research Summary

- Pooled samples mixed at a 1:7 ratio of Indel mutant to wild-type DNA could be distinguished from the wild-type controls by HRM.
- Mutations including one single nucleotide substitution (G→A) and one single nucleotide insertion (A) were identified in *OsLCT1*, and one trinucleotide (TTC) deletion was in *SPDT*.



Innovation points

- The present study represents the first report on HRM-TILLING of γ ray-induced mutations in a seed crop.
- The findings are of importance for the application of γ ray mutagenesis to the breeding of rice and other seed crops.

