



Methodology

A modified method for high-quality DNA extraction for molecular analysis in cereal plants

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ABSTRACT. Cereal crops that have rigid non-cellulose components in the cell wall tissues of leaves and high starch and protein content in grains face limitations in DNA extraction. Advanced molecular genetic techniques such as mapping and marker-assisted selection programs require pure and quick DNA extraction. In this study, we developed methods for isolating high-quality genomic DNA from leaves and seeds of major cereal crops with minor modifications. DNA yields ranged from 300 to 1800 ng for 0.01 g seed or leaf tissue.

Key words: DNA extraction; PCR; Cereal seeds