



Fig. 1. PCR analysis to confirm the presence of an introduced modified PR $\beta(1,3)$ -glucanase gene in regenerated tobacco plants. (A) Schematic diagram to illustrate the position of primer sites on the tDNA. (B) PCR products separated on a 0.8% agarose gel. In this example, the presence of a native $\beta(1,3)$ -glucanase gene within the tobacco DNA served as a positive control for the PCR reaction. The native gene contains an intron of approx 500 bp, so it is readily distinguishable from the transgene. This example shows that some of the regenerated plants did not contain the introduced $\beta(1,3)$ -glucanase gene (e.g., samples A9 PR #10 and A3 PR #3), and therefore represented escapes.

$\beta(1,3)$ -glucanase primer sequences:

Forward primer 5' GGGTCTAGACCATGGCTGCTATCACACTCCTAGG 3'

Reverse primer 5' GGGCCGCGGTCACCCAAAGTTGATATTATATTGG 3'

2.3. Analysis of PCR Products

1. High gelling temperature agarose (molecular biology grade, e.g., Seakem™, Flowgen, Lichfield, UK).
2. Electrophoresis buffer (10X TAE): 4M Tris-acetate, pH 8.0, 10 mM EDTA.