## Silencing of quinolinic acid phosphoribosyl transferase (QPT) gene for enhanced production of scopolamine in hairy root culture of Duboisia leichhardtii

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Fig. S1

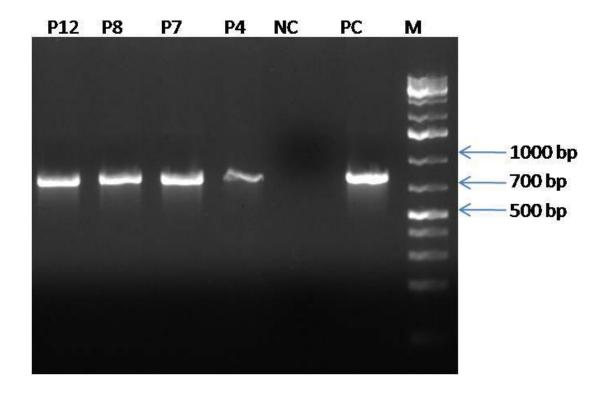
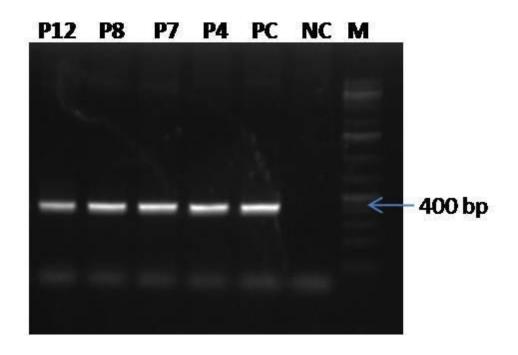
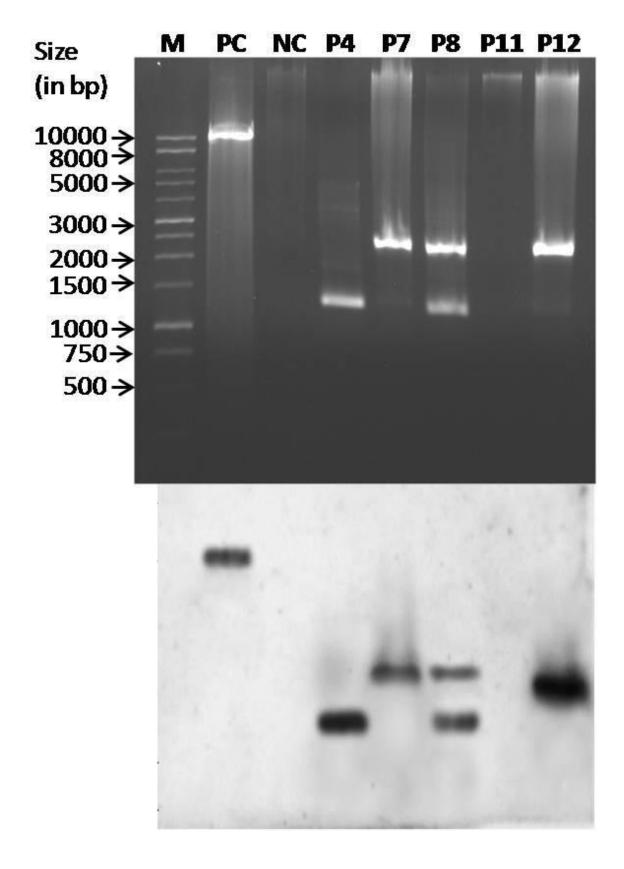


Fig.S2





## clustalw.aln

## CLUSTAL 2.1 multiple sequence alignment

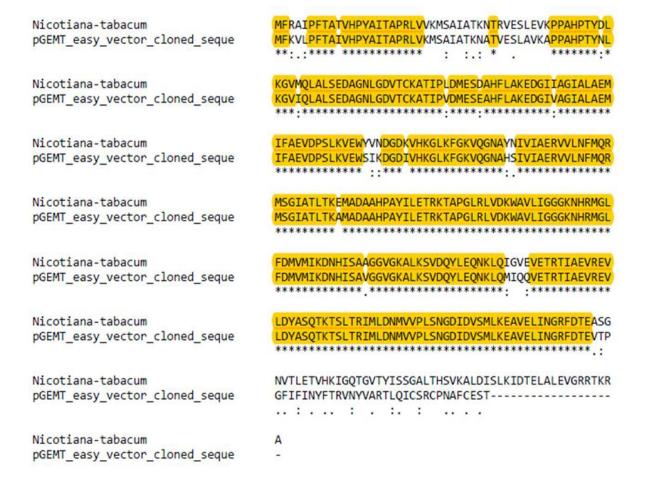
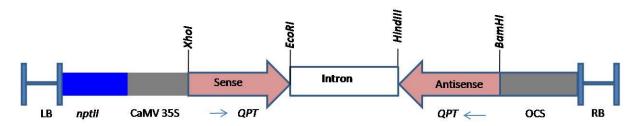


Fig.S5



AGGCAATGGCAGATGCTGCACACCCTGCTTATATCTTGGAGACAAGGAAAACTGCTCCAGGATTACGTTTGGTGGATAAATGGGCGG TATTGATTGGCGGGGGAAAGAATCACAGGATGGGCTTATTTGATATGGTAATGATAAAAGACAATCACATATCTGCTGTTGGAGGTGT CGGCAAAGCTCTAAAATCTGTGGATCAGTATTTGGAGCAAAATAAACTTCAAATGATCCAACAGGTTGAAACCAGGACAA

## Legends

- **Fig. S1.** PCR amplification of the *nptII* gene produced 786 bp of the amplicon. M -marker (1 kb plus ladder), PC-Positive Control, NC-Negative Control. P4, P7, P8 & P12 are the putative transformants. (uncropped image).
- **Fig. S2.** PCR amplification of *rol* B gene produced 400bp of the amplicon. M marker 1 kb plus ladder, PC-positive control, NC -Negative Control, P4, P7, P8 & P12 are the putative transformants. (uncropped image).
- **Fig. S3.** Gel image with respective southern blot of putative transgenic hairy root lines. M-marker (1 Kb ladder), PC-Positive Control, NC- Negative Control, P4, P7, P8, P11, and P12 are putative transgenic hairy root lines.
- **Fig. S4.** Multiple sequence alignment of *Nicotiana tabacum* and cloned sequence in a pGEMT easy vector. The amino acid sequence which represented with asterisk showed the most identical, sequence show with double dot represents the most conserved region, while a single dot represents the identical region.
- **Fig. S5**. Schematic representation of the QPT hairpin (hpRNAi) construct map. Sequence highlighted with pink color, cloned in sense and antisense orientation with the respective restriction enzyme which shown in construct map at 5' end of forward and reverse primers.