

Transformation of *R. glutinosa* mediated by PAP-inserted *Agrobacterium*

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A system has been developed for the transfer of genes by *Agrobacterium tumefaciens* to *Rehmania glutinosa* and optimal conditions for *Agrobacterium*-mediated transformation have been determined. Chinese foxglove is one of the important medicinal plants which has been contaminated with virus disease. This study was conducted to establish the transformation system for production of virus tolerant plants. The PAP (pokeweed antiviral protein) is one of antiviral proteins (PAP, PAP-S, PAP-II). Recently, the sequence of PAP-cDNA was found out. The pJMC102-inserted *Agrobacterium tumefaciens* LBA 4404 was cultured in shaking incubator, 28 °C, 250rpm for 48 hours. After explants were precultured on medium (MS salts+1mg/ l BAP+2mg/ l TDZ+0.2mg/ l NAA+MS vitamin+3% sucrose+0.8% agar, pH5.8) for 1 day, they were co-cultured with *Agrobacterium*. Then they were transferred on same medium, and cultured in dark condition, 28 °C for 2 days. PCR analysis was conducted to detect transgenic plant.