Transformation and Expression of a Mammalian Detoxifying Gene in

*Epipremnum aureum*

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Abstract.

The goal of this research is to produce a transgenic form of golden pothos (*Epipremnum aureum*) expressing the transgene for cytochrome p450 2E1, enabling it to efficiently degrade home air pollutants such as benzene and chloroform. Sterilized wild type explants will be infected with transformed *Agrobacterium tumefaciens* which harbor the plasmid p1302 r2E1. Grown explants will be tested for presence of the 2E1 gene. Tests will be conducted to compare the efficiency of transformed golden pothos with 2E1 gene to wild type on home air pollutant degradation. Transformed golden pothos with 2E1 are expected to reduce the amount of air pollutants in atmosphere more than that of wild type.