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**HAIRY ROOTS INDUCTION QUALITY ON LEAF EXPLANTS OF
SALVIA VIRGATA JACQ. BY VARIOUS STRAINS OF
*AGROBACTERIUM RHIZOGENES***

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Salvia virgata Jacq. a valuable medicinal plant belongs to the Lamiaceae family has tremendous beneficial properties [1]. Hairy roots culture is considered a prominent technique for development of *in vitro* production of secondary metabolites in this species. To improve our protocols for manipulating hairy roots induction in *S. virgata* and to obtain more qualified hairy roots, leaf explants from one-month old seedlings were inoculated with five *Agrobacterium rhizogenes* strains (A4, ATCC15834, R1000, GM1534, and C58C1). Results showed that all strains of *A. rhizogenes* were capable to produce hairy roots on leaf segments, but the induction rate and the quality was significantly different. The highest (55%) and the lowest (20%) infection rate were obtained by strains of ATCC 15834 and C58C1, respectively. By overall hairy root induction was developed and improved in *S. virgata* in this study as an alternative and potent method for future plant-based studies [2, 3].

References

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