

**A study on Neuroprotective potential of *in vitro* and field tissues
of *Withania somnifera* using *Caenorhabditis elegans* model**

**Thesis submitted in partial fulfilment of the degree of
Doctor of Philosophy in Biotechnology**

By

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80_Recommendations

1. In collaboration with industrialists, large scale production of the *in vitro* developed shoots can be attempted.
2. It is necessary to study the mechanisms involved in the *W. somnifera*- mediated neuroprotection using *C. elegans* and using higher animals.
3. The design of bioreactors, along with the scaling up of technologies for the growth of cultures in large scale industrial bioreactors, should be standardised.
4. For the findings of this study to be substantiated, clinical trials of the *in vitro* developed shoot extracts are required.