

Effect of extracts of different parts of *Gloriosa superba* L. on *in vitro* seed germination and growth in *Avena sativa* L.

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SUMMARY

Effects of extracts of *Gloriosa superba* plant parts were evaluated on growth of biosensor plant *Avena sativa* (oat). Effects of aqueous extracts of different concentrations of leaves, root, stem and mixture of flower, seeds and root of *Gloriosa superba* were studied on the *in vitro* seed germination and seedling growth of *A. sativa*. The study was replicated three times in Completely Randomized Design with five gradual concentrations of extracts such as 12.5, 25, 50, 75 and 100 per cent. Germination parameters *i.e.* per cent (%) seed germination, radicle length and plumule length were recorded. Extract prepared from mixture of flowers, seeds and roots was found most inhibitory to *A. sativa* growth. Result clearly indicated strong inhibitory nature of the plant extracts.

Key Words : Allelopathy, *Gloriosa superba*, *Avena sativa*, Germination

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