



Allelopathic Evaluation and Dried Leaf Aqueous Extract Effect of *Tecoma stans* L on Seed Germination and Biochemical Changes in *Vigna radiata* L.

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ABSTRACT

Allelopathy influence the growth, survival, development,
and reproduction of other organisms. Generally, these
interactions are deleterious to the receiver plants but may
also provide a selective advantage to the donor. The
current study is to find effect of *Tecoma stans* extract on
the growth of *Vigna radiata* to understand its
Allelopathic potential. It had a positive effect at lower
concentration Upto 10% Howe reverse at higher
concentration of 20% had inhibitory effect.

Keywords: Allelopathy, *Vigna*, *Tecoma*, Seed
germination, Protein profile SDS PAGE.

Introduction

Allelopathy plays an important part in agroecosystems,
and affects the growth, quality and quantity of the
products by the interactions among crops, weeds and
trees. Generally, these interactions are deleterious to the
receiver plants but may also provide a selective
advantage to the donor [1]. Allelochemicals released
from plant parts are largely classified as secondary plant
metabolites (such as alkaloids, isoprenoids, phenolics,
flavonoids, terpanoids and gluconolates etc.). These
chemicals are present virtually in all plant tissues,
including leaves, flowers, fruits, stems, roots, rhizomes,
seeds and pollen. Among the plant parts, leaves seem to
be the most consistent producers of these allelochemicals.
Several chemicals can be released together and may exert
toxicities in an additive or synergistic manner [2].