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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 revere 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 chemicalscan be released together and may exert toxicities in an additive or synergistic manner [2].