

## GERMINATING ABILITY, PHOTOSYNTHETIC ACTIVITY AND BIOCHEMICAL CHANGES OF COWPEA (*VIGNA UNGUICULATA* L. WALP) UNDER ZINC APPLICATION

Anvar Basha. S<sup>1</sup> & Selvaraju. M<sup>2</sup>

<sup>1</sup>Research Scholar, Research and Development Centre, Bharathiyar University, Coimbatore, Tamil Nadu, India

<sup>2</sup>Research Scholar, Annamalai University, Annamalai Nagar, Chidambaram, Tamil Nadu, India

Received: 10 Oct 2020

Accepted: 15 Oct 2020

Published: 31 Oct 2020

### ABSTRACT

*Effect of different concentrations of Zinc on, germination studies, photosynthetic pigments, and biochemical analysis of cow pea (*Vigna unguiculata* L.Walp) was studied. The different concentrations (0, 10, 25, 50, 100, 150, 200.) of zinc solutions were used to study in this experiment. The higher growth of germination percentage, seedling growth, dry weight, photosynthetic pigments such as chlorophyll "a", chlorophyll "b" total chlorophyll, and carotenoid contents, biochemical analysis such as sugar, starch, protein, and amino acids, contents of cow pea (*Vigna unguiculata* L) was observed in 10% concentration of zinc application. However increasing concentrations of Zinc reduce the growth of Cow pea.*

**KEYWORDS:** Zinc, Growth, Cowpea, Bio-Chemicals, Pigments