Journal of Research in Ecology

An International Scientific Research Journal

ISSN No: Print: 2319 –1546; Online: 2319-1554

Effect of $CaCl_2$, $ZnSo_4$ and gibberellic acid spray on growth, development and propagative characteristics of strawberry cv. Camarosa

Authors:
Azar Seydi[1]
Elham Faryabi[2] and
Farzad Kianersi[3]

Institution:
1. M.Sc of Agricultural and Natural Resources Research and Education Center, Ilam, Iran

2. Department of Agriculture, Payame Noor University of Iran

3. Ph.D. Student of Plant Breeding, Bu-Ali Sina University, Hamedan, Iran

Corresponding author:
Azar Seydi

ABSTRACT:

Spraying has a main effect on the increasing of fruits elements. In the present study held at 2015, pre-harvest was investigated after spraying CaCl2, ZnSO4 and Gibberellic Acid (GA) and then growth, development and propagative characteristics of strawberry cv. Camarosa were analysed. The experiment was performed in Complementary Randomized Design (CRD) with four replications. CaCl2, ZnSO4 and gibberellic acid were sprayed and Total Acidity (TA) and Total Soluble Solids (TSS) were analyzed for studying the fruit quality. The results showed that GA, CaCl2 and ZnSO4 treatments increased the leaf area and root length of strawberry. The application of 150 mg/l ZnSO4, 100 mg/l GA and 10 mM CaCl2 increased the number of flowers and weight of primary and secondary fruit. Higher percentage of total soluble solids and ascorbic acid were obtained in fruits at the concentration of 150 mg/l of ZnSO4 and lowest values was recorded in control. In general, 150 mg/l ZnSO4, 100 mg/l GA and 10mM CaCl2 spray were proposed for increasing strawberry production.

Keywords:
Gibberellic acid, $CaCl_2$, $ZnSo_4$, strawberry, total acidity and total soluble solids