



Journal

*J. Biol. Chem.
Environ. Sci., 2017,
Vol. 12(1): 263-279
www.acepsag.org*

EFFECT OF SEAWEED EXTRACT AND COMPOST ON GROWTH, PRODUCTIVITY AND QUALITY OF CHINESE CABBAGE BY

**Nofal, A. S. A.; M. T. G. El- Abd; A. A.
Mohammed and A. E. Ashmawi**

*Department of Horticulture, Faculty of Agriculture, Al azhar
University, Cairo, Egypt.*

ABSTRACT

This work was conducted on Chinese cabbage, (*Brassica campestris* L. ssp. *Pekinensis*) cv. "Manoko F1". at Elmansouria village, Giza governorate, Egypt during the two winter seasons of 2013 and 2014 to study the effect of foliar spray by seaweed extract at the concentrations of (0.0, 250, 500, 750 ppm) and soil compost addition at the rates of (0.0, 5, 10 and 15 ton/fed) and their interactions on growth, yield, and head contents. The results show that the high concentration of seaweed extract (750 ppm) significantly increased the vegetative growth expressed as plant fresh weight, head fresh weight, total yield, marketable yield beside ascorbic acid and total sugars content in the two seasons. On the other hand the application of compost at the high rate (15 ton/fed) significantly increased plant fresh weight, head fresh weight, size, diameter, firmness, total yield, marketable yield beside ascorbic acid, total soluble solids, total sugars, phosphorus, and potassium content. It was concluded that growth, yield and head quality responded positively to the application of 750 ppm of seaweed extract accompanied with the compost rate of 15 ton/fed.

Key words: Chinese cabbage, compost, Growth, Quality. Seaweed extract, Yield,