THE INFLUENCE OF CLIPPING OF FLOWER STALKS ON THE YIELD OF RED ONION (*Allium cepa* L. *Aggregatum Group*) LANDRACES IN EASTERN REGION

By

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A RESEARCH REPORT

SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIRMENT FOR THE

ADVANCE COURCE

IN

CROP SCIENCE

FOR THE AWARD OF

THE DEGREE OF BECHELOR OF SCIENCE IN AGRICULTURE

EASTERN UNIVERSITY

SRI LANKA

2003

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ABSTRACT

Bolting (flowering) is occasionally a problem in planted onion, particularly in onions grown from sets or transplants. This research evaluated the influence of clipping of flower stalk on the yield of Red Onion landraces in eastern region. The Vethalan, Muri vethalan and Kal vethalan red onion landraces were planted in Randomize complete block design (RCBD) with four replication and six treatments. The trial was carried out during the period Sept-Dec, 2003 period at the Agronomy farm of Faculty of Agriculture, Eastern University, Sri Lanka.

The agronomical important traits were studied both in the laboratory and in the field upto harvest. These include character of yield components namely bulb-let weight, bulb-let diameter, number of bulb-let per plant, marketable bulb-let percentage, and other traits number of leaves, plant height, plant weight, twenty plant bulb-let weight, bulb-let rotten percentage were significant difference observed between the flower clipped and flower unclipped treatments.

The difference in percentage of flowering and leaf twist disease among the flower clipped and flower unclipped treatments were not significant. However significant difference was observed within the red onion landraces. The bulb-let weight and twenty plant bulb-lets weight were significantly different between Vethalan and other land races.

The yield increase due to flower clipping was found to be14.9% in Muri vethalan, 14.3% in Kal vethalan and 15.1% in Vethalan. The cost of production to produce one Kg of Red Onion; flower clipped with stalk was Rs 15.67, flower clipped without stalk was Rs 14.86 and flower unclipped was Rs 16.88

The experiment concludes that clipping of flower stalks in tested landraces of red onions increases bulb-let yield but interactions between Red Onion landraces and flower clipped treatments were not observed. Further studies are suggested to compare different method of flower clipping on the yield of red onion land races.

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