

Effects of Tomato-Crispy Salad Intercropping on Diameter of Tomato Fruits under Greenhouse Conditions

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Abstract : This study, in which crispy salad plants was cultivated between the two rows of tomato, was conducted in Spring 2007 in a research glasshouse at Akdeniz University. Crispy salad (*Lactuca sativa* var. *crispa* cv. *Bohemia*) plants were intercropped with tomato (*Solanum lycopersicon* cv. *Selin F1*) plants as the main crop. Tomato seedlings were planted according to double line plantation system with 100 cm large spacing, 50 cm narrow spacing and 50 cm within row plant spacing. In both control and intercropping applications, each plot was 9.75 m² according to plantation distances and there were 26 plants per each plot for tomato. Crispy salad seedlings were planted with 30 cm spacing as one row in the middle of tomato plants and with 30x30 spacing as two rows between plants rows. Moreover, salad seedlings were transplanted between tomato plants above the tomato rows that were planted in two rows with intervals of 50 cm and also with 25x25 cm spacing as the third row in the middle of tomato rows. While tomato plants were growing during the research, fruit width and height were measured periodically with 15 days in the tomato fruits of the third cluster from the formation of fruit to fruit ripening. According to results, while there were no differences between cropping systems in terms of fruit width, the highest fruit height was found in Control trial in the first measurement. In the second measurement while the highest fruit width was determined with 64.39 mm in Control, there were no differences between cropping systems. In the third measurement, the highest fruit width and height were obtained from Control with 68.47 mm and 55.52 mm, respectively. As a conclusion the trial, which crispy salad seedlings were planted with 30x30 cm spacing as two rows between tomato plants rows, was determined as a best intercropping application.

Keywords : crispy salad, glasshouse, intercropping, tomato

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