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Yield of Jerusalem artichoke associated with different soil water content

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Abstract

This study aimed to determine the effect of organic matter content and water condition in soil on yield, carbohydrate, and inulin contents of two varieties of Jerusalem artichoke. The plants were grown with high and low organic soil either under irrigation or no irrigation in a randomized complete block design (RCBD) with three replications. In result, the yield of Jerusalem artichoke was higher about 7 kg in soil with high organic matter than in soil with low organic matter, while it was higher about 11 kg under the irrigation than under no irrigation. The yield of white variety was higher about 9 kg than that of purple variety. Under the irrigation, a 12 kg and 9 kg of higher yields were observed in the soil with high and low organic matter content, respectively, than under no irrigation.

Keywords: Jerusalem artichoke, Soil water content, irrigation

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