تأثير التعقيم الشمسي على المحصول والجودة للجرجير والبقدونس الطازج

رسالة مقدمة من

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للحصول على درجة الماجستير في العلوم الزراعية (خضر)

قسم البساتين كلية الزراعة جامعة عين شمس

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EFFECT OF SOLARIZATION ON YIELD, QUALITY OF ROCKET AND PARSLEY FRESH HERBS

BY

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B.Sc. Agric. agric. Chorticulture), Ain Shams University, 2003

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in Agricultural Science (Vegetable Crops)

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ABSTRACT

Rehab Abd El-Aziz Mahmoud Shaddad: Effect of Solarization on Yield, Quality of Rocket and Parsley Fresh Herbs. Unpublished M.Sc. Thesis, Department of Horticulture, Faculty of Agriculture, Ain Shams University, 2009.

Studies conducted at the vegetable experimental farm. Ain shams university and Horticultural research Institute, Agricultural research center (A.R.C) in 2005/2006 and 2006/2007 seasons.

Solarization for 6 weeks reduced significantly total fungi, total bacteria infestation and number, fresh and dry weight of annual and perennial weeds/pot and weeds/m², in the open field plots compared with non-solarized treatment. Solarization improved ratio of nutrient content in soil and make it available to plants. Also improved rocket (*Eruca sativa* Mill) and parsley (*petroselinum crispum* Mill) plant growth and yield.

Plants were significantly longer, had more number of leaves and heaviest fresh and dry weight.

Concerning organic fertilizer effect showed significant decrease in total fungi, bacteria and weeds and significant increase in rocket and parsley length, number of leaves and fresh and dry weight. Also vegetative growth, yield and quality of rocket and parsley increased by solarization with organic fertilizer over control treatment and maintained visual quality during storage and reduced the weight loss percentage.

Solarization and organic fertilizer in the field of rocket and parsley showed that the treatments were technically viable and gave beneficial changes.

Rocket and parsley plants were attractive to users and environment friendly, when planted in solarized soil after adding organic fertilization.

Keywords:

Eruca Sativa Mill, Petroselinum crispum Mill, solarization, organic fertilizer, visual quality and weight loss.

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