

POSSIBILITIES OF FIELD PRODUCTION OF FRESH POTATO IN THE SPRING AND IN THE AUTUMN

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The climatic conditions of Hungary are favourable for the production of short-season fresh potatoes. Early production is increasing. The dry matter and starch content of fresh potato are low, the other inner content parameters (high vitamin C content, lysine, methionine and cystine content) are favourable regarding nutrition physiology and it is suitable for preparing special dishes.

A "special way" of producing fresh potato is to plant it in the summer, not only after cereals but also after other forecrops, furthermore, it can also be planted after early potato (double cropping).

In 2006 and 2007, we set up a field experiment at Mórahalom by planting an early potato and then after its harvest fresh potato was produced in the same field by summer planting. Our aim was to study and develop experimentally the possibilities of double cropping, that is production of fresh potato twice in the same season. The new Hungarian variety Pannónia was used for the experiment, which has a short vegetation period, good resistance, high yielding capacity and good taste.

In the experiment, the double cropping of fresh potato resulted in an annual yield of 72.3 t/ha, 49% and 51% of which was spring and autumn fresh potato, respectively. The distribution among size categories and the quality of yield were favourable. The total annual fresh potato yield in the experiment was 47.3 t/ha (289%) higher than the national average. According to the results, the outcome of the experiment was positive.

The double cropping system can be recommended primarily in the southern, irrigated parts of the Homokhát region with the variety *Pannónia*. With this new production system, a 50% higher annual income can be achieved than with a one-time early field production. The new product, the autumn fresh potato with thin skin can have a higher value and enriches the product assortment in the winter period. According to the consumption habits in Hungary, customers demand and buy the fresh potato from the end of April until the end of June. Autumn fresh potato produced in double cropping can have a significant market in the winter period (Christmas and New Year).

Keywords: fresh potato, summer planting, double cropping, sandy soil, variety *Pannónia*