## EXPERIMENTS OF SWEETPOTATO [IPOMEA BATATAS (L.) LAM.] CULTIVATION TECHNOLOGIES IN SOUTH HUNGARY IN 2021

# Adrienn Szarvas<sup>1</sup>, Tamás Monostori<sup>1</sup>, Klára Tóth Marótiné<sup>2</sup>, Zsuzsanna Ábrahám Táborosiné<sup>2</sup>, Róbert Bráj<sup>2</sup>

<sup>1</sup>University of Szeged, Faculty of Agriculture, Hódmezővásárhely, Hungary
<sup>2</sup>Hungarian University of Agriculture and Life Sciencis Institute of Horticulture Vegetable
Research Centre, Szeged Research Station

One of the biggest problems of domestic crop production is that the sowing structure is limited to a few large crops. However, under certain field conditions it is possible to grow special plants, such as sweet potato (*Ipomoea batatas* (L.) Lam.). Sweet potato is an important crop in many parts of the world. Following rice, wheat, potato, maize and cassava, sweet potato is the sixth most important food crop in the world. In Hungary, sweet potato is cultivated for thirty years, but it became well-known in the last five years only. In Hungary the storage root yields ranging between 20 and 25 ha<sup>-1</sup>, depending on the production site and the applied technology. The experiments was conducted in Deszk and in Ötthalom.

The seedlings derived from the Bivalyos Tanya Family Farm. For the experiments, we used the Ásotthalmi-12 orange-fleshed sweet potato variety. The experimental plots were harvested on the middle of October. The aim of our work was to compare the cultivation technology in two different soil types in two different places. In Deszk we have clay loam soil of medium to very good nutrient content, in Ötthalom the soil type is meadow chernozem soil of medium nutrient content.

We evaluated the yields given by the experiments set up in Deszk and Ötthalom. In the case of sweet potato transplants planted with a 100 x 30 cm set-up in both places, the highest average yield was observed in Deszk (28,05 t ha<sup>-1</sup>), followed by the average yield in Ötthalom (23,17 t ha<sup>-1</sup>). In both area we got good yield result, but we had problem with the soil born insects like wireworms. Because of this wireworm damage we could not sell our tubers first class production and it caused us significantly less incomes.

The research was supported by the "VP3-16.1.1-4.1.5-4.2.1-4.2.2-8.1.1-8.2.1-8.3.1-8.5.1-8.5.2-8.6.1-17" Rural Development Program, in connection with the grant document with the identification number 1924527185.















## 19th WELLMANN INTERNATIONAL SCIENTIFIC CONFERENCE

## **BOOK OF ABSTRACTS**



28<sup>th</sup> April 2022 Hódmezővásárhely

### University of Szeged Faculty of Agriculture Hódmezővásárhely (Hungary)

Banat's University of Agricultural Sciences and Veterinary Medicine "King Michael I of Romania" from Timisoara

Faculty of Management and Rural Turism (Romania)

Hungarian Academy of Sciences Regional Committee in Szeged (Hungary)

Foundation for Agricultural Modernization and Rural Development, Hódmezővásárhely (Hungary)

### 19<sup>TH</sup> WELLMANN INTERNATIONAL SCIENTIFIC CONFERENCE

**Book of Abstracts** 

University of Szeged Faculty of Agriculture 28<sup>th</sup> April 2022

### Published by:

University of Szeged
Faculty of Agriculture
Andrássy út 15.
6800 Hódmezővásárhely, Hungary

## Responsible publisher: Edit Mikó

dean

Ábri

### **Executive editor:**

Orsoly Kiss

#### The members of the Editorial Board:

Dr. Tamás Monostori Dr. Adrienn Szarvas Dr. Levente Komarek Dr. Ágnes Süli Dr. Júlia Hupuczi Dr. István Majzinger

ISBN 2978-963-306-860-1