

number per spike (17.90) was observed with a seeding density of 400 grain per square meter. Among seeding densities, the maximum spikelet number per square meter (535.6) and flag leaf area (24.51 cm²) was obtained when a seeding density of 500 kernel numbers per square meter was used. **Conclusion.** Although the effect of seed density was not significant, the highest yield was determined in 500 seeds. The use of 400 seed per square me-

ter produced higher peduncle length and spike length. The maximum spikelet number per spike was observed with a seed rate of 400 grain. Among seeding rates, the maximum spikelet number per square meter and flag leaf area was obtained when using seeding densities of 500 kernel numbers per square meter was used.

Keywords: *bread wheat, seeding density, grain yield, yield component*

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Weed control of maize (*Zea mays* L.) in university farming

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Regarding the area of maize in Hungary, we can state that it is one of the largest crops grown in the area. Maize was grown on 1,048,070 hectares in Hungary in 2019. The purchase price depends, among other things, on the size of the sown area and the yields, but many other things can also have an impact in either a positive or negative direction. In recent years, the purchase price of maize has been around HUF 50,000 / tonne. Maize is one of the heat-demanding plants that needs 500 mm of rainfall during its growing season to develop smoothly. The expected yield is signifi-

cantly influenced by the type of soil grown. Meadow chernozem and brown forest soil are the most favorable for maize. **The purpose** of our experiment was to learn about weeds in maize culture, which was established by multiple weed surveys. Furthermore, the effectiveness of the herbicides used in controlling harmful weeds. The maize was sown on April 17, 2020. In the experimental area were selected 5 squares. A square has a floor area of 4 m². In the research area were conducted three weed surveys. The dates were: May 18, June 22, and July 29, 2020. The following herbicides were released on 15th May: Sulcotrek (sulcotrione and terbuthylazine); Tegoplant (trisiloxane); Trend (adjuvant). The maize harvest took place on September 21.

Keywords: *weed control, maize (*Zea mays* L.), experiment, square, herbicides*

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Sampling for vegetative propagation: A phytosanitary status survey of grapevines collection by One Step RT-PCR method

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Grapevines (*Vitis* spp.) are affected by many viral diseases causing serious pathological problems. Among the most widespread leafroll viruses is GLRaV-3 meanwhile, grapevine fanleaf virus (GFLV) is a destructive viral disease that reduce longevity of vineyards. Considering the impact and the spread of these diseases, we have analysed for viral presence several grapevine varieties in grapevine collection at ATTC Vlorë, in order to estimate whether it is feasible sampling for vegetative propagation, due to mandatory rules for usage of certified plant material for propagation

purposes, as an effective way to prevent spread of pathogens. The presence of two common viruses were tested using virus specific primers; LC1/LC2 primer pair designed in the hHSP70 gene for detecting Grapevine Leafroll-associated Virus-3 (GLRaV3) and Grapevine Fanleaf Virus (GFLV) was tested with C3390/H2999 primer pair, in six varieties: 'Merlot', 'Kallmet', 'Shesh i zi', 'Shesh i bardhë', 'Debinë', 'Pulëz', provided through a randomised sampling procedure. One Step Reverse Transcription Polymerase Chain Reaction assay was used to detect presence of two viral diseases. The results showed a high prevalence of GLRaV3 virus (100%) in all of samples analyzed, resulting as the most outspread infection among analyzed samples. Analysis for the presence of GFLV vi-

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