

P-24-T1**MICROPROPAGATION OF DIFFERENT AROMATIC PLANTS****Koleva Gudeva L., Iljovska Tushev J., Trajkova F.***Faculty of Agriculture, Goce Delcev University – Stip, Goce Delcev Str., No. 89, 2000 Stip, Republic of Macedonia***Keywords:** *In vitro*, micropropagation, phytohormones, aromatic plants.

Aromatic plants have been used for centuries as species, natural flavor, raw material for essential-oil industry and other purposes. Micropropagation has advantage over conventional propagation because of high multiplication rate, but it depends on the performance of the starting material, media composition, phytohormones and environmental factors.

In this study, aromatic plants as peppermint (*Menta piperita* L.) and *Menta sp.*, rosemary (*Rosmarinus sp.*), rocket (*Eruca sativa* Mill.), coriander (*Coriandrum sativum* L.) and oregano (*Origanum vulgare* L.) were tested in different media in *in vitro* conditions. Commercially available seeds were used as starting material for the species rosemary, rocket, coriander and oregano. Apical and axillary buds were used as starting material for micropropagation of the peppermint and *Menta sp.*

The starting materials of the studied aromatic plants species were micropropagated either on MS media or on the modified MS media with the phytohormones application using different concentrations. Specific results in proliferation, callus and shoots formation were obtained in dependence on type of initial explants and growth media.

Presenting author: jasmina.iljovska@gmail.com**P-25-T1****ASSESSMENT OF FRUIT MORPHOLOGICAL CHARACTERISTICS FROM ANDROGENIC PEPPER LINES DERIVED FROM SWEET PEPPER (*CAPISCU M ANNUUM* L. CV. FEHEROZON)****Trajkova F., Koleva Gudeva L.***Faculty of Agriculture, Goce Delcev University – Stip, Goce Delcev Str., No. 89, 2000 Stip, Republic of Macedonia***Keywords:** Pepper, androgenic lines, fruit morphology.

This research was carried out for characterization and evaluation of the agronomic potentials of pepper androgenic lines F5, F6 and F7 obtained from the pepper variety Feherozon. For this purpose, the most significant morphological and productivity fruit traits were investigated and compared to the parental genotypes used for their induction in *in vitro* conditions via the method of androgenesis. The analysis of fruit traits validates that the androgenic lines, as compared to their parental genotypes, differ in various fruit morphological traits. This research determines the significance and feasibility of obtaining pepper androgenic lines, as new genetic resources for improvement of the autochthonous agrobiodiversity and opens possibilities for their further utilization for molecular, genetic and breeding research works.

Presenting author: fidanka.trajkova@ugd.edu.mk**P-26-T1****BIOLOGICAL CHARACTERISTICS OF DIFFERENT ANDROGENIC PEPPER LINES (*CAPISCU M ANNUUM* L.)****Trajkova F., Koleva Gudeva L.***Faculty of Agriculture, Goce Delcev University – Stip, Goce Delcev Str., No. 89, 2000 Stip, Republic of Macedonia***Keywords:** Pepper, androgenic lines, germination, flowering, vegetation period, earliness.

The biology of pepper growth and development is strongly dependent on complex influence of environmental abiotic factors as light, temperature, air humidity and soil moisture. The occurrence and the duration of different pepper phenophases are specific to a variety and depend on the development in specific agroecological conditions. In this study the vegetation period as earliness indicator of seven androgenic pepper lines derived from three different sweet pepper varieties was compared in four-year-experiment under greenhouse conditions. The studied androgenic pepper lines KK1 and KK2