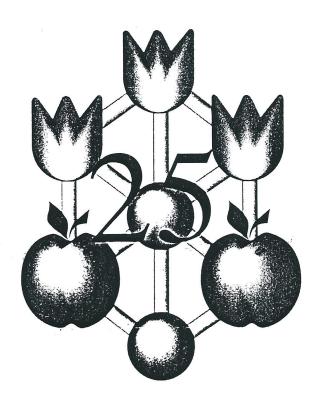


# **ABSTRACTS**

# XXV International Horticultural Congress (IHC)

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# Theme 1: Cultural techniques

# Poster presentations

In 1994 and 1995 favourable air temperature of 20-24°C following transplanting, also 15-18°C in time of inflorescence forming gave significant higher total yields in both years. Under Duncan's test according to total yield in three year investigation, cultivars Citation, Bolivia and Fiesta (7.4, 7.4, 7.0 t•ha<sup>-1</sup>) had best assessment. The highest yield and average mass of top inflorescence was achieved with cultivars Bolivia. Fiesta and Platini (6.2, 6.3 and 6.2 t•ha<sup>-1</sup>, resp. 169, 168, and 168g). The evaluation of compactness of these inflorescences suggest an exceptional firmness. The cultivars Cruiser, Citation and Excelsior (2.4, 2.2 and 1.6 t•ha<sup>-1</sup>) excel as regards the production and side inflorescence yield.

This investigation proved that the climatic conditions of north-west Croatia during the summer-autumn period favour the broccoli cultivars for the fresh market having firm and big top inflorescence as well as high yield: Bolivia, Fiesta and Platini. For the supply of processing industries the cultivars of high production of small side inflorescences (Cruiser, Citation and Excelsior) can be recommended.

# PP 1/04/B-3

# CORRELATION'S BETWEEN SOME OF THE YIELD COMPONENTS OF CABBAGE (Brassica oleracea var. Capitata L.)

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A two year experiment has been established at the experiment field of the Institute of field and Vegetable Crops, in Novi Sad on a chernozem soil, in order to study the phenotypic and genetic correlation's of yield component of cabbage. The experiment was conducted after the system of random blocks in three replications. Twelve divergent cabbage genotypes were studied. The study included the following morphologic characters: head mass, head height and diameter, and yield. The measurements were done at the stage of technological maturity of the heads. Average values were calculated for all characteristics studied. Our analyses showed the high statistical significance of genetic correlation's between head mass and head diameter, head mass and yield, head diameter and yield.

Correlation's between had height and head mass, head height and head diameter, and between head height and yield do not meet the strict breeding criteria, they still can serve as an indication of negative relationships that may occur in the breeding cycle.

### PP 1/04/B-4

## ASSESMENT OF HOLLAND-TYPE APPLE ORCHARDS IN VARIOUS PARTS OF UKRAINE

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Results of studying of apple production in high density orchards on M9 T337 rootstock (2500-3333 trees per hectare) with fertigation in various soil and climate zones of Ukraine will be presented.

An experimental orchards on 1 ha were planted with Holland production trees in spring of 1995 at spacing of 3...4.5m X 1m and 10-20 cm graft high above the ground. Gala (Red and Must clones), Granny Smith, Elstar Elshof, Golden delicious (clones B and Reinders), Jonagold (Wilmuta, Jonaweld, Jonica), Fuji and Boskoop Red varieties were investigated.

The peculiarities of vigour and tree fruiting, cold damage and irrigation control, orchard soil management and trees nutrient requirements, fruit storage and economical effects are estimated.

The highest crop of 22.3 tons per hectare in the second year after planting was obtained in Kherson area in the South zone. The cold damage of trees after winter of 1995/96 did not reach 1.6 on a -point scale.

# PP 1/04/B-5

# DROUGHT RESISTANCE OF SOME PEACH CULTIVARS GRAFTED ON DIFFERENT ROOTSTOCKS

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In this study, drought resistance ability of some peach cultivars grafted on seedling, GF-305 and Nemaguard rootstocks were investigated. Moreover, leaf water potential (LWP) and relative water content (RWC) changes of these combinations in different watering regimes were observed.

When the plants were subjected to four watering treatments at 100 %, 75 %, 50 %, and 25 % of full water, the differences between the drought resistance ability of all variety / rootstock combinations were significantly important. The plants of J. H. Hale and Rio-Oso-Gem cultivars grafted on Nemaguard were found to be more drought resistant than the others. As the amount of water given to the plants decreased, the LWP and RWC also decreased.