RESEARCH ON QUALITY OF FRUITS FROM SOME MICROZONES FROM OLTENIA

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Abstract. Under the environmental conditions of the South of Romania and especially the microzones of culture from Oltenia, the qualitative performance of apple and plum fruits are dependent of cultivar and culture technology. The quality parameters of the fruits and trade competition take place in terms of modern technology, by applying on time and correctly all the technological measures. Depending on the growing technology used the apple cultivars Florina, Jonathan, Golden Delicious, Starkrimson, Jonagold and Idared have achieved in Rm. Vâlcea and Horezu microzones average fruit yields between 12.7 t/ha and 28.3 t/ha. The plum yields in the two microzones varied between 10 to 25 t/ha in case of Tuleu gras and Agen 707 cultivars, depending on culture technology applied. The nitrate and nitrite contents in apple fruits analyzed did not exceed the permissible limits, the average level of 33.67 mg/kg fresh product being about 1.8 times lower than the maximum level allowed by law. Lead content of fruits fall in the range from 1.6 to 20.5 mg/kg, with an average of 9.56 mg/kg, which is 1.05 times lower then permissible limits and for cadmium analysis the values recorded were 0.55 mg/kg, which is about nine times less than the permissible limit.

Key words: micro zone, technology, nitrates, nitrites, lead, cadmium.

1.Introduction

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Apple and plum are fruit tree crops that provide the majority of fruit in Romania. Their importance lays in the food value of the fruits, in their high productive potential, pronounced ecological plasticity, the suitability to various growing technologies [1], [2].

The values of the fruits are due to their quality given in terms of both chemical composition of morphological elements but also in toxic waste in terms of fruits, due to the growing technologies applied [3].

The nutritional and healthy role of fruits remain directly related to the ecological zone in which they are grown and the technologies applied [6].

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