

Comparative Study Regarding the Quality of Different Origins of Strawberry Fruits



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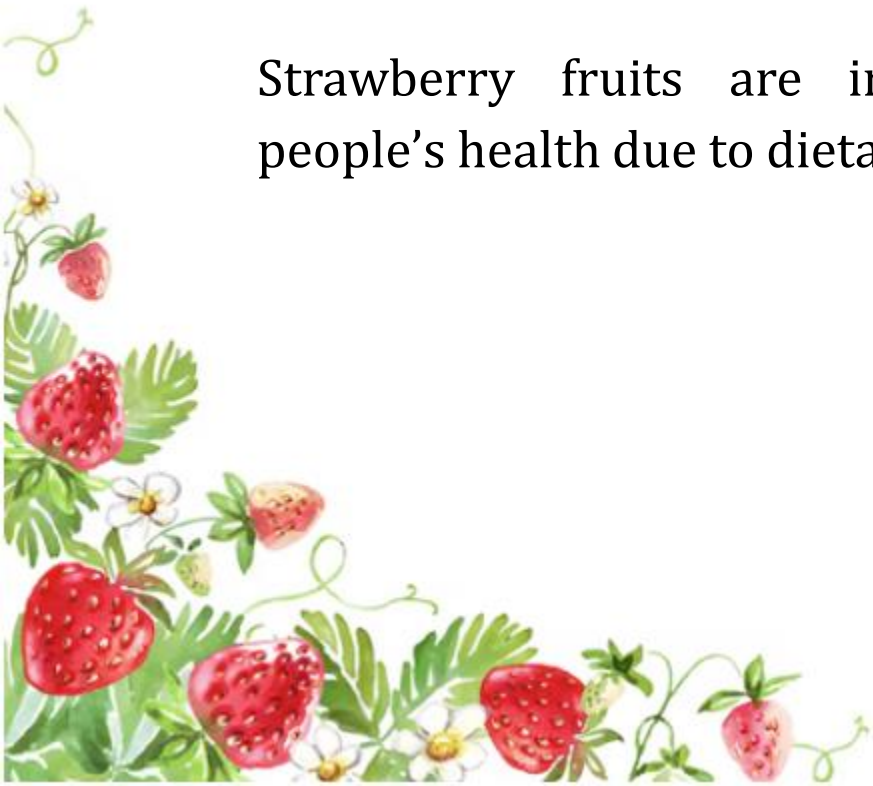
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Strawberry is one of the most important fruits shrubs, because of its cultivation potential in all regions of the country, ranging from the plains to the mountain ranges, but especially that it can be grown in the field and protected areas, ensuring fresh fruit production throughout the whole year.

Strawberry fruits are indispensable for maintaining people's health due to dietary values.



Strawberries have certain particularities such as high content in ascorbic acid.

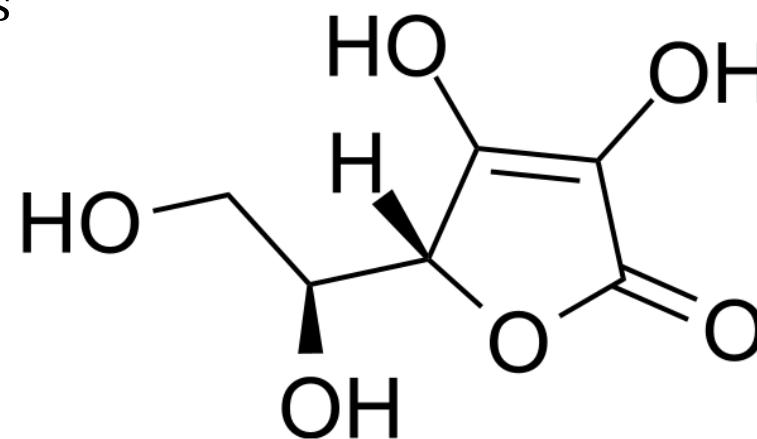
Ascorbic acid is one of the most important quality factors in most horticultural products, being directly involved in the biological activities of the human body.

Due to the importance of strawberry consumption, we have analysed in this paper the content of soluble dry substance, the content in vitamin C and the total acidity of three strawberry varieties from Romania compared to a variety from Greece.

The study was made to highlight the positive characteristics of strawberry cultivated in our country.



Greece Clery Alba Arosa



Results and discussions

Summary of results on strawberry fruit mass

| Order no. | Variety | Fruit mass (versus Mt1) | | | | Fruit mass (versus Mt2) | | |
|--------------------------|--------------|-------------------------|--------|-------------------------|-----------------------------|-------------------------|-------------------------|-----------------------------|
| | | (g) | (%) | $\pm d$ Mt ₁ | Signification of difference | (%) | $\pm d$ Mt ₂ | Signification of difference |
| 1 | Grecia (Mt1) | 56.60 | 100 | - | - | 57.49 | -41.85 | ooo |
| 2 | Clery | 74.44 | 131.51 | 17.85 | ** | 75.61 | -24.01 | ooo |
| 3 | Alba | 120.21 | 212.40 | 63.62 | *** | 122.1 | 21.76 | *** |
| 4 | Arosa | 145.54 | 251.86 | 85.95 | *** | 144.78 | 44.09 | *** |
| Experience average (Mt2) | | 98.45 | - | - | | 100 | | |
| DL5%= | | 7.40 | | | | 7.40 | | |
| DL1%= | | 11.20 | | | | 11.20 | | |
| DL0.1%= | | 18.00 | | | | 18.00 | | |

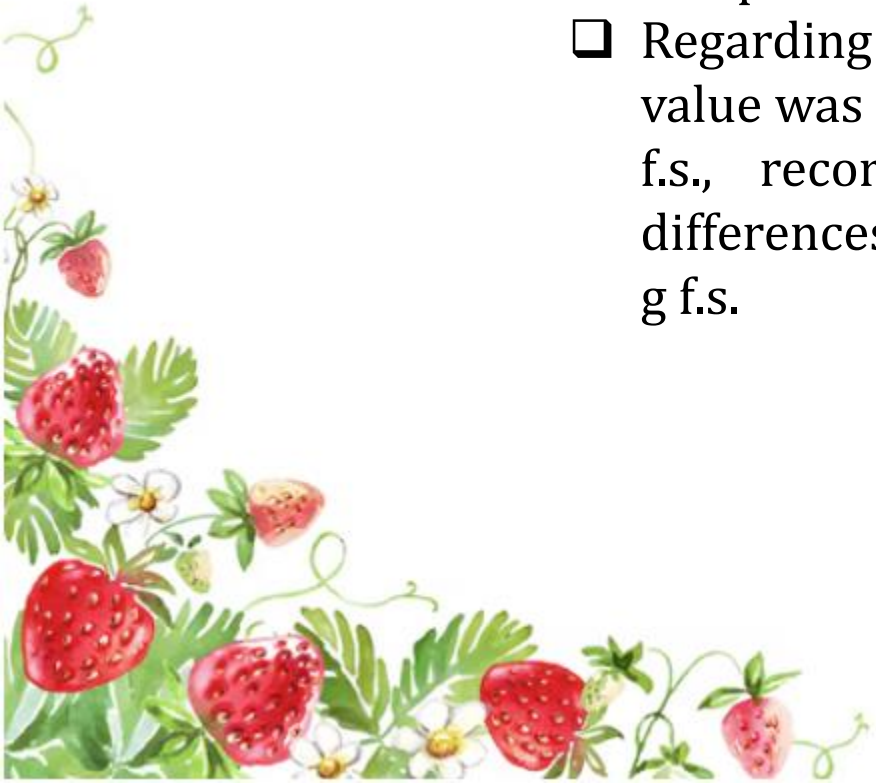
Results and discussions

Summary of results regarding C vitamin content

| Order no. | Experimental variant | C vitamin content (versus Mt1) | | | | C vitamin content (versus Mt2) | | |
|--------------------------|----------------------|--------------------------------|--------|--------------------|-----------------------------|--------------------------------|--------------------|-----------------------------|
| | | mg/100 g.f.s. | % | ±d Mt ₁ | Signification of difference | % | ±d Mt ₂ | Signification of difference |
| 1 | Grecia (Mt1) | 21.6 | 100 | - | - | 80.83 | -5.12 | oo |
| 2 | Clery | 25.37 | 177.46 | 3.77 | ** | 94.94 | -1.36 | - |
| 3 | Alba | 25.93 | 120.06 | 4.33 | ** | 97.24 | -0.79 | - |
| 4 | Arosa | 33.96 | 157.23 | 12.36 | *** | 127.09 | 7.24 | *** |
| Experience average (Mt2) | | 26.72 | - | - | | 100 | | |
| DL5%= | | | | 2.11 | | 2.11 | | |
| DL1%= | | | | 3.19 | | 3.19 | | |
| DL0.1%= | | | | 5.89 | | 5.89 | | |

Conclusions

- ❑ Regarding the mass of strawberry fruits, very significant positive differences were obtained in the 'Alba' and 'Arosa' varieties, respectively 120.21 g and 145.54 g compared to the control variety from Greece 56.60 g.
- ❑ Regarding the analysis of vitamin C content, the highest value was recorded by the 'Arosa' variety 33.96 mg/100 g f.s., recording statistically very significant positive differences compared to the control variety 21.6 mg/100 g f.s.





Thank
You

