

Tab. 2. The content of dry matter (g/100 g fw), vitamin C and carotenoids (mg/100 g fw) in organic and conventional produced tomatoes juice in two years of experiment (average value  $\pm$  standard deviation)

| <b>2008</b>                 | dry matter         | vitamin C          | lycopene           | beta-carotene     |
|-----------------------------|--------------------|--------------------|--------------------|-------------------|
| Org.1                       | 5.47 $\pm$ 0.29    | 14.79 $\pm$ 0.14   | 11.54 $\pm$ 0.68   | 0.34 $\pm$ 0.02   |
| Org.2                       | 5.92 $\pm$ 0.03    | 11.55 $\pm$ 0.91   | 12.51 $\pm$ 0.20   | 0.25 $\pm$ 0.01   |
| Org.3                       | 5.98 $\pm$ 0.04    | 10.84 $\pm$ 0.11   | 14.12 $\pm$ 0.11   | 0.22 $\pm$ 0.01   |
| Org.4                       | 4.32 $\pm$ 0.01    | 11.85 $\pm$ 0.31   | 17.23 $\pm$ 0.88   | 0.23 $\pm$ 0.01   |
| Org.5                       | 5.31 $\pm$ 0.04    | 13.93 $\pm$ 0.29   | 14.03 $\pm$ 0.39   | 0.39 $\pm$ 0.01   |
| Org.6                       | 5.16 $\pm$ 0.05    | 12.71 $\pm$ 1.33   | 12.60 $\pm$ 0.35   | 0.25 $\pm$ 0.03   |
|                             |                    |                    |                    |                   |
| Non-org.1                   | 4.60 $\pm$ 0.02    | 9.74 $\pm$ 0.08    | 17.98 $\pm$ 0.08   | 0.19 $\pm$ 0.01   |
| Non-org.2                   | 6.95 $\pm$ 0.03    | 14.77 $\pm$ 0.77   | 14.20 $\pm$ 0.09   | 0.18 $\pm$ 0.01   |
| Non-org.3                   | 4.37 $\pm$ 0.01    | 8.21 $\pm$ 0.12    | 15.14 $\pm$ 0.07   | 0.27 $\pm$ 0.01   |
| Non-org.4                   | 6.31 $\pm$ 0.04    | 14.03 $\pm$ 0.28   | 16.43 $\pm$ 0.36   | 0.11 $\pm$ 0.01   |
| Non-org.5                   | 5.08 $\pm$ 0.03    | 13.06 $\pm$ 0.59   | 16.47 $\pm$ 0.22   | 0.42 $\pm$ 0.02   |
| Non-org.6                   | 5.90 $\pm$ 0.03    | 13.81 $\pm$ 0.45   | 15.31 $\pm$ 0.30   | 0.36 $\pm$ 0.01   |
|                             |                    |                    |                    |                   |
| <b>2009</b>                 |                    |                    |                    |                   |
| Org.1                       | 5.57 $\pm$ 0.32    | 24.57 $\pm$ 0.28   | 10.18 $\pm$ 0.09   | 0.15 $\pm$ 0.01   |
| Org.2                       | 6.55 $\pm$ 0.34    | 17.73 $\pm$ 0.77   | 11.47 $\pm$ 0.34   | 0.21 $\pm$ 0.01   |
| Org.3                       | 5.43 $\pm$ 0.41    | 23.34 $\pm$ 0.12   | 12.45 $\pm$ 1.18   | 0.20 $\pm$ 0.01   |
| Org.4                       | 4.55 $\pm$ 0.08    | 11.63 $\pm$ 0.28   | 14.50 $\pm$ 0.29   | 0.12 $\pm$ 0.02   |
| Org.5                       | 6.33 $\pm$ 0.08    | 24.23 $\pm$ 0.59   | 10.35 $\pm$ 0.10   | 0.26 $\pm$ 0.02   |
| Org.6                       | 7.31 $\pm$ 0.12    | 24.41 $\pm$ 0.23   | 9.26 $\pm$ 0.17    | 0.19 $\pm$ 0.02   |
|                             |                    |                    |                    |                   |
| Non-org.1                   | 5.93 $\pm$ 0.03    | 25.22 $\pm$ 0.10   | 14.62 $\pm$ 0.02   | 0.09 $\pm$ 0.01   |
| Non-org.2                   | 5.44 $\pm$ 0.03    | 24.09 $\pm$ 0.53   | 15.34 $\pm$ 0.10   | 0.10 $\pm$ 0.01   |
| Non-org.3                   | 5.25 $\pm$ 0.06    | 27.29 $\pm$ 0.30   | 18.31 $\pm$ 0.08   | 0.10 $\pm$ 0.01   |
| Non-org.4                   | 5.46 $\pm$ 0.11    | 24.64 $\pm$ 0.87   | 14.15 $\pm$ 0.83   | 0.09 $\pm$ 0.02   |
| Non-org.5                   | 6.21 $\pm$ 0.01    | 30.75 $\pm$ 0.21   | 12.89 $\pm$ 0.77   | 0.24 $\pm$ 0.01   |
| Non-org.6                   | 6.13 $\pm$ 0.10    | 26.01 $\pm$ 0.57   | 14.33 $\pm$ 0.34   | 0.23 $\pm$ 0.01   |
|                             |                    |                    |                    |                   |
| mean Org. juices            | 5.66 $\pm$ 1.02 a* | 16.80 $\pm$ 5.56 a | 12.52 $\pm$ 2.18 a | 0.23 $\pm$ 0.07 b |
| mean Non-org. juices        | 5.63 $\pm$ 0.72 a  | 19.30 $\pm$ 7.42 b | 15.43 $\pm$ 1.59 b | 0.20 $\pm$ 0.11 a |
| mean tomatoes juices (2008) | 5.44 $\pm$ 0.91 A  | 12.44 $\pm$ 2.06 A | 14.80 $\pm$ 1.95 B | 0.27 $\pm$ 0.09 B |
| mean tomatoes juices (2009) | 5.85 $\pm$ 0.71 B  | 23.66 $\pm$ 4.68 B | 13.15 $\pm$ 2.52 A | 0.16 $\pm$ 0.06 A |
|                             |                    |                    |                    |                   |
| <b>p-value</b>              |                    |                    |                    |                   |
| production system           | n.s.**             | 0.0013             | 0.0001             | 0.049             |
| year                        | 0.0002             | <0.0001            | <0.0001            | <0.0001           |
| production x year           | 0.005              | 0.0003             | n.s.               | n.s.              |

\* means in a columns followed by the different letter are significantly different at the 5% level of probability ( $\alpha=0.05$ ) by Tukey's test; \*\* not significant statistically ( $\alpha>0.05$ )

small letter focused differences between juice production system, CAPITAL letter focused differences between experimental years