United States Department of Agriculture
National Agricultural Statistics Service

## CITRUS $\begin{aligned} & \text { Freeze Damage Report and } \\ & \text { Maturity Test Results }\end{aligned}$



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January 18, 2011
A special survey was conducted on January 10-11, 2011 to assess the effect of sub-freezing temperatures that occurred throughout the Florida citrus producing region during the month of December 2010. Using the Federal-State Inspection Service standards, fruit was cut and scored for damage at depths of $1 / 4$-inch, $1 / 2$-inch, and at the center, recording the point of greatest severity of damage.
The tables below show the distribution and severity of fruit damage. For all varieties, the majority of samples observed fell into the "no damage apparent" category.

Florida Citrus - Condition of Fruit on Trees by Fruit Type: January 15, 2011

| Fruit type (Number of groves) | No damage apparent | Damage at $1 / 4$-inch cut | Damage at $1 / 2$-inch cut | Damage at center cut |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Minor | Major |
|  | (percent) | (percent) | (percent) | (percent) | (percent) |
| Oranges: |  |  |  |  |  |
| Early (57)............... | 66.4 | 11.0 | 11.4 | 6.7 | 4.5 |
| Midseason (35)....... | 54.3 | 20.0 | 12.5 | 6.8 | 6.4 |
| Late (148)............... | 87.4 | 6.5 | 3.8 | 1.5 | 0.8 |
| Grapefruit: |  |  |  |  |  |
| White (47).............. | 97.9 | 0.8 | - | 1.3 | - |
| Colored (43) ........... | 96.5 | 2.6 | 0.9 | - | - |

- Represents zero.

Florida Citrus - Condition of Fruit on Trees by Production Area and Fruit Type: January 15, 2011

| Production Area | No damage apparent |  |  | Damage at $1 / 4$-inch cut |  |  | Damage at $1 / 2$-inch cut |  |  | Damage at center cut |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Minor | Major |  |  |
|  | E \& M | Late | Gft |  |  |  | E \& M | Late | Gft | E \& M | Late | Gft | E \& M | Late | Gft | E \& M | Late | Gft |
|  | (percent) |  |  | (percent) |  |  |  |  |  | (percent) |  |  | (percent) |  |  | (percent) |  |  |
| Indian River. | 37.5 | 72.7 | 97.0 | 28.6 | 12.5 | 1.9 | 17.9 | 11.1 | 0.2 | 8.0 | 3.2 | 0.9 | 8.0 | 0.5 | - |
| Northern. | 25.0 | 62.5 | (NA) | 25.0 | 10.0 | (NA) | 37.5 | 10.0 | (NA) | - | 7.5 | (NA) | 12.5 | 10.0 | (NA) |
| Central | 68.1 | 94.8 | 100.0 | 12.5 | 4.0 | - | 9.0 | 0.9 | - | 5.5 | 0.3 | - | 4.9 | - | - |
| Western. | 62.5 | 91.9 | 100.0 | 14.2 | 3.7 | - | 10.8 | 2.6 | - | 8.8 | 1.8 | - | 3.7 | - | - |
| Southern.. | 72.2 | 89.0 | 95.8 | 7.1 | 7.0 | 1.4 | 10.9 | 2.2 | 2.8 | 3.8 | 0.6 | - | 6.0 | 1.2 | - |
| Total................... | 61.8 | 87.4 | 97.2 | 14.4 | 6.5 | 1.7 | 11.8 | 3.8 | 0.4 | 6.7 | 1.5 | 0.7 | 5.3 | 0.8 | - |

[^0]NA Not available.
The next two tables show the distribution and severity of leaf damage. For all varieties, the majority of samples observed fell into the "no leaf damage" category.

Florida Citrus — Leaf Damage by Fruit Type: January 15, 2011

| Fruit type <br> (Number of groves) | No leaf damage | Minor leaf damage | Major leaf Damage | Serious leaf damage |
| :---: | :---: | :---: | :---: | :---: |
| ORANGES: | (percent) | (percent) | (percent) | (percent) |
| Early (57)................. | 84.1 | 11.2 | 3.0 | 1.7 |
| Midseason (35).......... | 82.8 | 14.3 | 2.9 | - |
| Late (148)............... | 91.2 | 8.8 | - | - |
| GRAPEFRUIT: |  |  | - | - |
| White (47)................. | 92.0 | 8.0 | - |  |
| Colored (43) ............ | 88.4 | 9.9 | 1.7 | - |

[^1]Florida Citrus — Leaf Damage by Production Area and Fruit Type: January 15, 2011

| Production Area | No leaf damage |  |  | Minor leaf damage |  |  | Major leaf Damage |  |  | Serious leaf damage |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | E \& M | Late | Gft | E \& M | Late | Gft | E \& M | Late | Gft | E \& M | Late | Gft |
|  | (percent) |  |  | (percent) |  |  | (percent) |  |  | (percent) |  |  |
| Indian River... | 98.2 | 97.2 | 91.3 | 1.8 | 2.8 | 8.3 | - | - | 0.4 | - |  | - |
| Northern. | 100.0 | 80.0 | (NA) | - | 20.0 | (NA) | - |  | (NA) | - |  | (NA) |
| Central. | 88.9 | 91.5 | 93.7 | 11.1 | 8.5 | 6.3 | - |  | - | - |  | - |
| Western. | 73.7 | 86.8 | 100.0 | 16.2 | 13.2 | - | 7.4 |  | - | 2.7 |  | - |
| Southern. | 85.9 | 92.1 | 77.8 | 14.1 | 7.9 | 16.7 | - |  | 5.5 | - |  | - |
| Total... | 83.6 | 91.2 | 90.3 | 12.4 | 8.8 | 8.9 | 2.9 | - | 0.8 | 1.1 |  | - |

- Represents Zero

NA Not Available

## Maturity

Samples collected January 10-11, 2011 were tested January 12-13, 2011 at the USDA, NASS, Florida Field Office laboratory. Test results show a decrease in acid percent from the January 1, 2011 survey for all fruit types. Solids to acid ratios are higher for all fruit types. Solids per box is higher for early and late oranges but lower for midseason oranges. No FCOJ projections are made from these results. The next FCOJ projection will be included in the February 9, 2011 forecast available at 8:30 a.m.

Citrus Unadjusted Maturity Tests - Florida: 2009-2010 and 2010-2011
[Averages of regular bloom fruit from sample groves. Juice and solids per box are unadjusted and not comparable to juice processing plant test results. All samples were run through an FMC 091 machine using mechanical pressure only. This machine utilizes a .040 short strainer and standard $5 / 8$ inch orifice tube. The beam settings are also identical to past tests and no restrictors are used]

| Fruit type (number of groves) test date | Acid |  | Solids (Brix) |  | Ratio |  | Unfinished juice per box |  | Solids per box |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2009-2010 | 2010-2011 | 2009-2010 | 2010-2011 | 2009-2010 | 2010-2011 | 2009-2010 | 2010-2011 | 2009-2010 | 2010-2011 |
|  | (percent) | (percent) | (percent) | (percent) |  |  | (pounds) | (pounds) | (pounds) | (pounds) |
| Early (81-57) |  |  |  |  |  |  |  |  |  |  |
| Sep 1... | 1.56 | 1.70 | 9.28 | 9.17 | 6.06 | 5.45 | 42.18 | 41.53 | 3.91 | 3.81 |
| Oct 1.................. | 1.16 | 1.28 | 9.32 | 9.56 | 8.18 | 7.54 | 46.44 | 46.36 | 4.33 | 4.43 |
| Nov 1................. | 0.87 | 0.97 | 10.36 | 10.45 | 12.14 | 10.97 | 49.42 | 50.79 | 5.11 | 5.30 |
| Dec 1................. | 0.74 | 0.83 | 11.13 | 11.21 | 15.41 | 13.77 | 50.77 | 49.97 | 5.65 | 5.60 |
| Jan $1 . . . . . . . . . . . . . . . . . ~$ | 0.73 | 0.82 | 11.78 | 11.66 | 16.40 | 14.28 | 50.35 | 48.51 | 5.93 | 5.65 |
| Jan 15 ................ | (NA) | 0.77 | (NA) | 12.07 | (NA) | 15.93 | (NA) | 48.04 | (NA) | 5.80 |
| Midseason (42-35) |  |  |  |  |  |  |  |  |  |  |
| Sep $1 .$. | 1.74 | 2.05 | 9.24 | 9.42 | 5.39 | 4.70 | 42.20 | 40.08 | 3.90 | 3.77 |
| Oct 1.................. | 1.33 | 1.58 | 9.25 | 9.46 | 7.10 | 6.07 | 47.51 | 44.25 | 4.40 | 4.19 |
| Nov 1................. | 1.00 | 1.15 | 10.28 | 10.37 | 10.51 | 9.24 | 51.37 | 48.43 | 5.28 | 5.02 |
| Dec 1................. | 0.85 | 0.95 | 11.10 | 11.33 | 13.31 | 12.26 | 51.56 | 49.85 | 5.72 | 5.65 |
| Jan 1 ................. | 0.78 | 0.93 | 11.88 | 11.84 | 15.38 | 12.86 | 51.58 | 49.07 | 6.13 | 5.81 |
| Jan 15 ................ | (NA) | 0.85 | (NA) | 12.15 | (NA) | 14.57 | (NA) | 46.51 | (NA) | 5.66 |
| Late (150-148) |  |  |  |  |  |  |  |  |  |  |
| Sep 1................. | (NA) | (NA) | (NA) | (NA) | (NA) | (NA) | (NA) | (NA) | (NA) | (NA) |
| Oct 1................. | 2.41 | 2.56 | 8.86 | 8.95 | 3.73 | 3.52 | 43.46 | 43.83 | 3.85 | 3.92 |
| Nov 1................. | 1.86 | 2.01 | 9.32 | 9.67 | 5.07 | 4.86 | 48.08 | 48.85 | 4.48 | 4.72 |
| Dec 1................. | 1.52 | 1.62 | 10.22 | 10.42 | 6.83 | 6.51 | 50.91 | 51.47 | 5.20 | 5.36 |
| Jan $1 . . . . . . . . . . . . . . . . . ~$ | 1.30 | 1.49 | 10.89 | 11.05 | 8.50 | 7.47 | 53.03 | 50.97 | 5.77 | 5.63 |
| Jan 15 ................ | (NA) | 1.42 | (NA) | 11.37 | (NA) | 8.13 | (NA) | 51.34 | (NA) | 5.84 |

[^2]
[^0]:    Represents zero.

[^1]:    - Represents zero.

[^2]:    NA Not available.

