

## VIDALIA VEGETABLE NEWS

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### VIDALIA ONION VARIETY TRIAL RESULTS

Attached as an Excel workbook are the results of this year's variety trial sorted in decenting order of jumbo yields. There were 42 entries in the trial this year from 11 different companies. Varieties were harvested as they matured with harvests starting on April 10<sup>th</sup> and continuing till May 4<sup>th</sup>. This year's harvest was approximately 2 weeks earlier than 2005. The harvest was completed in 25 days in 2006 compared to 29 days in 2005 with five harvests each year. We continue to be plagued with sour skin and slippery skin with later harvested onions. The approximately 25% of varieties harvested on May 4<sup>th</sup>, I would deem as unmarketable because of these diseases even though we did run them across the grader. This is also reflected in the low percent marketable onions with most of these late harvested onions.

Total or field yield ranged from 536 to 1,279 50-lb bags/acre with XP Red having the lowest field yield and DY 606 having the highest field yield. Remarkably over 80% of the entries had field yields of 1,000 50-lb bags or better.

Jumbo yields ranged from 242 to 955 50-lb bags with Yel. Granex 129101 having the highest and J 3002 having the lowest. In addition, there were very few medium sized onions harvested this year. They ranged from 1 to 42 50-lb bags/acre with 79% of the varieties only averaging single digit medium yields.

Only a select few entries were evaluated for center-rot. The top five entries for Pantoea (center-rot) incidence were J 3002, Pegasus, Savannah Sweet, Granex Yellow PRR, and Yel. Granex 15094. Although all of these entries had 28 or more incidences per plot, this only represents about a 10% infection rate.

Percent marketable yield (jumbos & mediums/field yield) ranged from 23-91%. The highest percent marketable was with XP Red, which is probably an anomaly. This variety had a very poor stand on the beds and consequently had very low yields.

Pyruvate values ranged from 2.8 to 6.3 um/gfw with an average for all varieties of 4.5 um/gfw, which was slightly higher than last year. The mildest onion was DY72766 and the hottest was Ohoopie Sweet. Finally sugar content ranged from 7.8 to 11.6% with the highest sugar content in Ohoopie Sweet and the lowest in FS2011.

### PLANT AND HUMAN PATHOGENS

Generally speaking plant pathogens cannot infect humans nor can human pathogens infect plants. There are some interesting exceptions to the former, the most common of which is *Aspergillus* spp. where some species can infect humans usually with a

respiratory infection. Of particular interest is the conjecture on the part of some, that the curse of King Tutankhamen may have been caused by Aspergillus. Several individuals connected with the discovery of this Egyptian tomb died untimely deaths, most notably Lord Carnarvon who sponsored Howard Carter's work and was present for the opening of the tomb and who died shortly after of unknown causes.

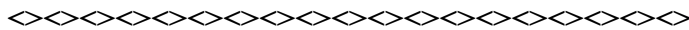
Along this same line, an article appeared in the Journal of Clinical Microbiology of a 73 year old man who developed a bacterial infection that was finally identified as *Pantoea ananatis*, the same pathogen that causes center-rot in onions. Before becoming alarmed it should be noted that this elderly gentleman suffered from many ailments including type II diabetes, which made him more susceptible to infection and he was successfully treated for this infection.

Probably of more concern is the possibility of contamination of fruits and vegetables with human pathogens due to unsanitary handling. It is easy to recognize fruits and vegetables that are infected with plant pathogens, they generally exhibit some type of symptoms. Human pathogens on the other hand don't cause any such outward symptoms so a perfectly good looking piece of fruit or vegetable can be a source of human pathogens if improperly handled. Buyers are becoming more concerned about this and are requiring their suppliers to engage in good agricultural practices or to get third party audits to minimize such problems. If you have a grower interested in a third party audit they should contact either the Georgia Fruit and Vegetable Grower Association or the Georgia Crop Improvement Association for more information.

#### FROM MY DESK

As mentioned above, an Excel workbook of the Vidalia onion variety trial is attached. I'll be working on other onion data collected this season including fertility and organic onion production. I will share these results through the newsletter as I get them analyzed. To update everyone on my recent surgery, I still have problems talking, but my wife and daughter don't seem to mind. Talk to you next month.

Regards,



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