



Adams County
Extension

9755 Henderson Rd.
Brighton, CO 80601-8114
303.637.8100

www.adamscountyextension.org

To: The Colorado Onion Industry

From: Dr. Thaddeus Gourd, Extension Director & Agent (Agriculture)
Eric Hammond, Agent (Horticulture)
Cassey Anderson, Master Gardener Coordinator (Horticulture)

Storage assessments of the 2016-2017 Northern Colorado Onion Variety Trials have been completed at the Adams County Extension Office. Again I want to thank the cooperating onion seed companies, Bob Sakata and R.T. Sakata for supporting this year's onion trials. Also, thanks to the Colorado Onion Association for its interest in our onion research projects. It is our hope that this research provides onion producers in Colorado with information to make educated decisions on variety selection based on environmental and pest conditions experienced here in Northern Colorado.

Both trial sites were set up on Sakata Farms locations. One site was located north of Wattenberg, (Stieber location), and the other to the northwest of Brighton, (Struck location). In general, weather conditions were similar to last year, that is, cooler and wetter than normal in the spring followed by hot dry conditions in July through September. Onions were planted at the Stieber location on March 15 and at the Struck location on March 14, 2016. The Stieber location used flood irrigation and the Struck location used sprinkler center pivot irrigation.

Research evaluations performed this year at both locations included emergence, thrips, pink root severity, maturity, yield and storability. Onion emergence evaluations occurred on June 9 at the Stieber location and June 8 at the Struck location. Good emergence of the onions was noted at both locations. Thrips populations were counted on July 7 at the Stieber location and June 27 at the Struck location. The Steiber location averaged 39.4 thrips per onion plant, and the Struck location averaged 13.3 thrips per plant. The Iris Yellow Spot Virus (IYSV) assessments were not taken because of very low disease incidence at both locations. The pink root severity assessments were performed on August 22 at the Stieber location and August 23 at the Struck location. This disease pressure had a significant impact on onion yield. Some varieties appeared to exhibit tolerance to the pink root pathogen. Maturity data was taken on August 19 and again on September 1 at the Stieber location. At Struck location, maturity data was taken on September 1 and 26 (Tables 1 and 2).

The Northern Colorado Onion Variety Trials Field Tour was held on Friday, August 18, 2016. This field tour, with breakfast, was again sponsored by Jose Solorzano of American Takii.

Harvest at the Stieber location occurred on September 16, followed by processing on September 19. Harvest at the Struck location occurred on September 27 with processing on September 28 (Table 3 and 4).

Storage assessments occurred on January 12, 2017. In general, the onions had less rot than in previous years but, the bulbs were less firm and had lower scale retention values compared to last year's crop (Table 5 and 6).

The attached six tables, summarize all evaluations performed for the 2016-2017 Northern Colorado Onion Variety Trials. Contact Cassey Anderson at 303-637-8103 or cmanderson@adcogov.org or Thaddeus Gourd with comments or questions at 303-637-8117. You can visit our web site at www.adamscountyextension.org for 2016-2017 onion variety trial results.

Emergence, Thrips, Maturity, Pink Root Severity, Harvest and Disease Reports

- The harvest yield is in tons per acre and includes colossals, jumbos, and mediums, prepacks and defects. Market yield does not include pre-packs or defects.
- The defects are a combination of scallions, sprouts and rots.
- Measurements for the various grades were:
 - Colossal onion – greater than 4 inches
 - Jumbo onion – 3 to 4 inches
 - Medium onion – 2 ¼ to 3 inches
 - Prepack onion – under 2 ¼ inches

Again, Special thanks to Bob and R. T. Sakata in Brighton for allowing us to use their fields for this year's research project.

2017 Northern Colorado Onion Variety Trials

The cost of the 2017 variety trials will be **\$200** per **coated** seed variety for two locations. **Raw** seed variety cost for the 2017 trials will be **\$300** per seed variety for two locations

Please mark your calendars, place your orders and send **at least 8 oz. of coated** seed no later than February **24, 2017**. Coated seed is now used to facilitate consistent planting with farm equipment. If you are unable to provide coated seed, a special effort will be made to thin these raw seed plots to compare with the coated varieties. **It is imperative that we receive this seed by February 24, 2017, so we can plant when the surrounding fields are planted.**

Please include a brief description of any variety that has not been in the trials previously. Also provide the color and storage capability such as: Long term, Intermediate, or Short Term for each variety.

Send varieties to:

Cassey Anderson
CSU Cooperative Extension
9755 Henderson Road
Brighton, CO 80601-8114

Make checks payable to: Adams County

If there are problems getting the seed to us in time, please contact Cassey at 303-637-8103 or email her at cmanderson@adcogov.org.