



Adams County
Extension

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www.adamscountyextension.org

To: The Colorado Onion Industry

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

Storage assessments of the 2017-2018 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 Fruit and Vegetable Growers 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.

This year we only had one trial site. This site hosted by Sakata Farms, was located north of Ft. Lupton (Ewing location). In general, weather conditions were favorable for growing onions. We did have a cool wet spring and moderate temperatures in July and August. Little to no rain was recorded for the entire month of August which is usually our monsoon season. Onions were planted on March 13, 2017. The trial site used flood irrigation.

Research evaluations performed this year included emergence, thrips, pink root severity, fusarium basal rot infective levels, maturity, and yield. Onion emergence evaluations occurred on May 24, 2017. Thrips populations were counted on June 15 and averaged only 5.5 thrips per onion plant. The Iris Yellow Spot Virus (IYSV) assessments were not taken because of very low disease incidence. The pink root severity and fusarium basal rot assessments were performed on August 15. This pink root disease pressure averaged 41.9% of roots infected and had a significant impact on onion yield. The percent of fusarium infected planted averaged 2.1%. Some varieties appeared to exhibit tolerance the pink root pathogen. Maturity data was taken on August 2 and August 15, 2017. (Table 1).

The Northern Colorado Onion Variety Trials Field Tour was held on Friday, August 31, 2017. This field tour, with breakfast, was again sponsored by Jose Solorzano of American Takii. Harvest of onions occurred on August 28, followed by processing on August 29. (Table 2).

Storage assessments occurred on January 10, 2018. A special thanks to Robert Sakata, Emma Locke and Larry Duell for helping to evaluate the stored onions. Assessments performed included storage yield, bulb firmness, scale retention and internal bulb disease. Red intensity of all red onion lines was also evaluated (Table 3).

The attached 3 tables, summarize all evaluations performed for the 2017-2018 Northern Colorado Onion Variety Trials.

Contact Cassey Anderson at 303-637-8103 or cmanderson@adcogov.org with comments or questions. You can visit our web site at www.adamscountyextension.org for 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.

2018 Northern Colorado Onion Variety Trials

The cost of the 2018 variety trials will be **\$200** per **coated** seed variety for two locations. **Raw** seed variety cost for the 2018 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** or raw seed no later than February **23, 2018**. 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 23, 2018, 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.