



Adams County
Extension

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To: The Colorado Onion Industry

From: Dr. Thaddeus Gourd, Extension Director & Agent (Agriculture)
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This year is one for the books! The cool wet weather delayed planting until April 10, 2019. The cool weather after planting did set the onions back. The trial site hosted by Sakata Farms, was located north of Brighton (Howard Farm). In general, weather conditions were favorable for growing onions. We did have a cool wet spring and moderate temperatures until July and August when temperatures spiked. Little rain was recorded for the entire month of August which is usually our monsoon season. The trial site used sprinkler irrigation.

Research evaluations performed this year included emergence, thrips, pink root severity, fusarium basal rot infection, maturity and yield. Onion population evaluations occurred on July 7, 2019. Thrips populations were counted on July 25 and averaged 22.7 thrips per onion plant. The Iris Yellow Spot Virus (IYSV) assessment was taken on August 29 and the disease incidence averaged 41.5%. Also, the pink root severity and fusarium basal rot assessments were performed on August 29. Pink root disease pressure averaged 35.2% of roots infected and had a significant impact on onion yield. The percent of fusarium infected plants averaged 10.2%. Some varieties appeared to exhibit tolerance to the pink root and fusarium pathogens. Maturity data was taken on August 20 and August 29 (Table 1).

The Northern Colorado Onion Variety Trial Field Tour was held on Thursday, September 5, 2019 and again sponsored by Jose Solorzano of American Takii.

Harvest of onions occurred on September 19. We processed the onions on September 20. Market yields across all onion varieties averaged 13.3 tons per acre (Table 2).

Storage evaluations occurred on January 17, 2020. 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 Adams County Extension Office and I want to thank the cooperating onion seed companies, Bob Sakata, R.T. Sakata and Larry Duell for supporting this year's Northern Colorado Onion Trials. 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 during the 2019 growing season.

The three tables, summarize all evaluations performed for the 2019-2020 Northern Colorado Onion Variety Trial. You can visit our web site at www.adamscountyextension.org for 2019 onion variety trial results.

Onion Harvest Parameters

- The harvest yield is in tons per acre and includes colossal, jumbo, and medium, prepack and defect onions. 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 farm for this year's research project.

2020 Northern Colorado Onion Variety Trials

The cost of the 2020 variety trials will be **\$200** per **coated** seed variety. **Raw** seed variety cost for the 2020 trials will be **\$300** per seed variety.

Please mark your calendars, place your orders and send **at least 8 oz.** of **coated** seed no later than February 27, 2020. 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 27, 2020, 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.*