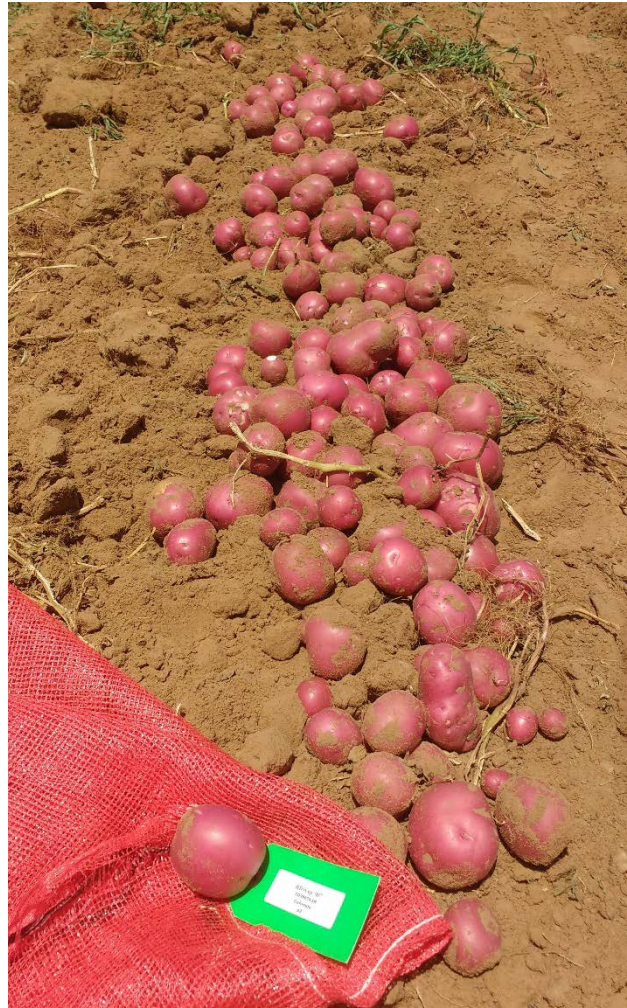


2018 Western Regional



Red/Specialty Trial

2018 Western Regional Red/Specialty Trial

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Table 1. Western Regional Red/Specialty Potato Variety Trial - Locations, Cooperators, and Cultural Information

| Locations | Cooperators | Trial | Irrigation | Fertilizer | Vine Kill | Planting | Vine Kill | Harvest | Pesticides Applied | | |
|-----------------------------------|---|-------|----------------------|--|---------------|-----------|-----------|-----------|---|--|--|
| | | | | N-P-K-S (lb./A) | Method | Date | Date | Date | Herbicides | Insecticides | Fungicides |
| Ontario Oregon (ON) | C. Shock E. Feibert M. Saunders | | Sprinkler, solid set | 100 N preplant, 15 N, 75 K, sprinkler applied | Mechanical | 4/11/2018 | 9/14/2018 | 9/24/2018 | Metolachlor, pendimethalin preemergence rimsulfuron | Imidacloprid preplant Spirotetramat abamectin | Chlorothalonil Zoxamide, chlorothalonil |
| Tulelake California (TUL)* | R. Wilson D. Culp K. Nicholson | Late | Sprinkler | 205-0-0 | Reglone / Rol | 5/21/2018 | 9/7/2018 | 10/8/2018 | Prowl H2O Outlook Matrix SG | Admire Pro | Maxim 4FS Quadris Luna Tranquility |
| San Luis Valley Colorado (SLV) | D. Holm C. Gray K. Gaudreau | Pivot | | 143-35-20-17-1 | Reglone | 5/10/2018 | 9/1/2018 | 9/27/2018 | Eptam Tuscany Dual Magnum Prowl H2O | Pure Spray Green Cruiser Maxx Vibrance (Thiametho- | Quadris Endura Champ Ion++ Agri Tin Cruiser Maxx Vibrance (Mefenoxam, Fludioxonil, Sedaxane) |
| Aberdeen Idaho (AB) | J. Stark, R. Novy, J. Whitworth, J. Hatch C. Lowder | Early | Sprinkler | 205-80-10Zn-5Mn | Mechanical | 5/4/2018 | 8/10/2018 | 8/27/2018 | TriCor 4F Matrix Eptam | Admire | |
| Springlake Texas (SPL) | I. Vales J. C. Miller Jr., J. Koym, D. Scheuring | Early | Pivot | 124-43-37 | Mechanical | 3/20/2018 | 6/26/2018 | 7/2/2018 | Bronc Triple, Dual Magnum Matrix, Stealth, Makaze Brawl, Gly Star Original, Metribuzin 75 CA | Movento, Minecto Pro Transform WG, Sivanto Cruiser Maxx Vibrance | Scala Luna Tranquility NUCOP |
| Dalhart Texas (DAL) | I. Vales J. C. Miller Jr., J. Koym, D. Scheuring | Early | Pivot | 224-74-282 | Reglone | 5/13/2018 | 8/29/2018 | 9/17/2018 | Matrix SG Herbicide, Echo Zn Chateau Herbicide SW, Acume- K-Tone, Select Max, Tricor 4F, Reglone | Cruiser Maxx Vibrance Movento, Fulfill, Beleaf 50 SC Sivanto™ prime, Torac | Curzate 60DF Aframe, Luna Tranquility Penncozeb 75DF |

*

Table 2. Description of Clones - 2017 Western Regional Red/Specialty Trial

| Clone/Variety | Parents | | Flower Color | Vine Size | Maturity | Tuber Shape | Skin Type | Flesh Color | Entered | | | DISPO |
|--------------------------------|----------------|--------------|--------------|-----------|-----------|-------------|--------------------|-------------|---------|------|------|-------|
| | Female | Male | | | | | | | By | Seed | Year | |
| Red/White Flesh | | | | | | | | | | | | |
| 1 Chieftain | La 1354 | Ia 1027-18 | Lavender | Med-Large | Medium | Oblong | Lt. Red | White | Check | OR | *** | CHECK |
| 2 Red LaSoda | Triumph | Katahdin | Red-purple | Med | Med | Oval | Lt. Red | White | Check | OR | *** | CHECK |
| Red-Purple/Yellow Flesh | | | | | | | | | | | | |
| 3 ATTX05175S-1R/Y | A99331-2RY □ | COA99261-1RY | Purple | Large | Late | Round | Red | Yellow | TX | CO | 1 | |
| 4 COTX04193S-2R/Y | ATC98515-1R/Y | ND3574-5R | Purple | Medium | Early | Round | Red | Yellow | TX | CO | 1 | |
| 5 CO09079-5PW/Y | CO04117-5PW/Y | A00286-3Y | Purple | Medium | Medium | Oval | Purple/White | Yellow | CO | CO | 1 | |
| Purple | | | | | | | | | | | | |
| 6 Purple Majesty | All Blue | ND2008-2 | Blue | Medium | Early | Oval | Purple | Purple | Check | OR | *** | CHECK |
| 7 CO08037-2P/P | CO03031-2R/R | CO97215-2P/P | White | Medium | Med-late | Oval | Purple | Purple | CO | CO | 1 | |
| Yellow Flesh | | | | | | | | | | | | |
| 8 Yukon Gold | Norgleam | W5279-4 | Pink | Medium | Early | Oval | White | Yellow | Check | OR | *** | CHECK |
| 9 CO09128-3W/Y | A00293-2Y | CO03060-2W/Y | Lt. Purple | Med-small | Early | Oval | White | Yellow | CO | CO | 1 | |
| 10 CO09128-5W/Y | A00293-2Y | CO03060-2W/Y | White | Medium | Early | Round | White | Yellow | CO | CO | 1 | |
| 11 CO09218-4W/Y | ATC00293 -1W/Y | CO00412-5W/Y | White | Large | Late | Oval | White | Yellow | CO | CO | 1 | |
| Fingerling | | | | | | | | | | | | |
| 12 LaRatte | | | | | | Finger | Yellow | Yellow | Check | - | *** | CHECK |
| 13 POR11PG62-3 | Diverse | High Car | Purple | Small-Med | Med-early | Finger | Yellow/Pink Splash | Yellow | OR | OR | 1 | |

Table 3. Percent Stand

| Entry | Clone/Variety | Percent Stand | | | | | Mean |
|--------------------------------|-----------------|---------------|-----------|----------|-----------|-----------|------|
| | | CA TUL | CO SLV | ID AB | TX SPL | TX DAL | |
| Red/White Flesh | | | | | | | |
| 1 | Chieftain | 100 | 83 | 97 | 96 | 100 | 95 |
| 2 | Red LaSoda | 100 | 100 | 98 | 99 | 100 | 99 |
| Red-Purple/Yellow Flesh | | | | | | | |
| 3 | ATTX05175S-1R/Y | 100 | 100 | 96 | 99 | 100 | 99 |
| 4 | COTX04193S-2R/Y | 100 | | 96 | 100 | 100 | 99 |
| 5 | CO09079-5PW/Y | 100 | 95 | 93 | 95 | 98 | 96 |
| Purple | | | | | | | |
| 6 | Purple Majesty | | 94 | 98 | 97 | 100 | 97 |
| 7 | CO08037-2P/P | 90 | 96 | 98 | 100 | 86 | 94 |
| Yellow Flesh | | | | | | | |
| 8 | Yukon Gold | 80 | 98 | 97 | 96 | 89 | 92 |
| 9 | CO09128-3W/Y | 90 | 89 | 95 | 96 | 90 | 92 |
| 10 | CO09128-5W/Y | 100 | 99 | 96 | 100 | 92 | 97 |
| 11 | CO09218-4W/Y | 90 | 97 | 95 | 85 | 43 | 82 |
| Fingerling | | | | | | | |
| 12 | LaRatte | | 98 | 99 | 100 | 100 | 99 |
| 13 | POR11PG62-3 | | 97 | 95 | 99 | 88 | 95 |
| Mean | | 95 | 96 | 96 | 97 | 91 | 95 |

Table 4. Vine Size and Vine Maturity

| Entry Clone/Variety | Vine Size (1-5 large) | | | | | OR ON | Vine Maturity (1-5 late) | | | | |
|--------------------------------|-----------------------|----------|----------|----------|----------|----------|--------------------------|----------|----------|----------|----------|
| | CO | ID | TX | TX | Mean | | CO | ID | TX | TX | Mean |
| | SLV | AB | SPL | DAL | | | SLV | AB | SPL | DAL | |
| Red/White Flesh | | | | | | | | | | | |
| 1 Chieftain | 3.3 | 2.5 | 3.6 | 4.5 | 3.5 | 2.0 | 3.3 | 3.5 | 3.5 | 3.6 | 3.2 |
| 2 Red LaSoda | 4.0 | 3.0 | 3.8 | 4.9 | 3.9 | 2.0 | 3.0 | 3.4 | 4.2 | 4.5 | 3.4 |
| Red-Purple/Yellow Flesh | | | | | | | | | | | |
| 3 ATTX05175S-1R/Y | 3.3 | 2.0 | 3.3 | 4.4 | 3.2 | 2.0 | 3.3 | 2.8 | 4.4 | 4.8 | 3.4 |
| 4 COTX04193S-2R/Y | | 2.0 | 3.7 | 4.4 | 3.3 | 2.0 | | 1.8 | 3.6 | 3.2 | 2.6 |
| 5 CO09079-5PW/Y | 3.8 | 2.0 | 2.3 | 4.2 | 3.1 | 2.0 | 2.8 | 1.5 | 3.7 | 3.4 | 2.7 |
| Purple | | | | | | | | | | | |
| 6 Purple Majesty | 3.3 | 2.0 | 3.9 | 5.0 | 3.5 | 2.0 | 3.0 | 1.5 | 3.8 | 3.9 | 2.8 |
| 7 CO08037-2P/P | 3.0 | 2.3 | 2.6 | 4.4 | 3.1 | 2.0 | 3.0 | 3.6 | 4.1 | 4.9 | 3.5 |
| Yellow Flesh | | | | | | | | | | | |
| 8 Yukon Gold | 2.5 | 2.5 | 3.6 | 4.1 | 3.2 | 2.0 | 2.0 | 2.0 | 3.8 | 4.8 | 2.9 |
| 9 CO09128-3W/Y | 2.3 | 2.0 | 3.3 | 4.3 | 2.9 | 3.5 | 3.0 | 3.0 | 3.6 | 4.1 | 3.4 |
| 10 CO09128-5W/Y | 2.0 | 1.3 | 3.9 | 4.2 | 2.8 | 2.6 | 2.5 | 2.6 | 3.4 | 4.2 | 3.1 |
| 11 CO09218-4W/Y | 4.3 | 2.8 | 2.1 | 3.7 | 3.2 | 3.5 | 4.0 | 3.9 | 4.4 | 5.0 | 4.2 |
| Fingerling | | | | | | | | | | | |
| 12 LaRatte | 3.8 | 2.5 | 3.9 | 4.8 | 3.7 | 2.0 | 3.0 | 2.9 | 5.0 | 3.6 | 3.3 |
| 13 POR11PG62-3 | 3.5 | 2.0 | 3.0 | 3.9 | 3.1 | 2.0 | 3.8 | 3.3 | 4.1 | 3.8 | 3.4 |
| Mean | 3 | 2 | 3 | 4 | 3 | 2 | 3 | 3 | 4 | 4 | 3 |

Table 5. Total Yield

| Entry Clone/Variety | Total Yield (cwt/a) | | | | | | Mean | Rank |
|--------------------------------|---------------------|------------|------------|------------|------------|------------|------------|------|
| | OR ON | CA TUL | CO SLV | ID AB | TX SPL | TX DAL | | |
| Red/White Flesh | | | | | | | | |
| 1 Chieftain | 694 | 632 | 458 | 461 | 176 | 543 | 494 | 2 |
| 2 Red LaSoda | 787 | 613 | 642 | 514 | 160 | 713 | 572 | 1 |
| Red-Purple/Yellow Flesh | | | | | | | | |
| 3 ATTX05175S-1R/Y | 608 | 550 | 518 | 372 | 141 | 307 | 416 | 1 |
| 4 COTX04193S-2R/Y | 486 | 480 | | 318 | 160 | 321 | 353 | 2 |
| 5 CO09079-5PW/Y | 420 | 433 | 417 | 242 | 62 | 226 | 300 | 3 |
| Purple | | | | | | | | |
| 6 Purple Majesty | 561 | | 493 | 407 | 154 | 465 | 416 | 1 |
| 7 CO08037-2P/P | 305 | 354 | 422 | 270 | 88 | 373 | 302 | 2 |
| Yellow Flesh | | | | | | | | |
| 8 Yukon Gold | 495 | 438 | 383 | 347 | 194 | 328 | 364 | 1 |
| 9 CO09128-3W/Y | 390 | 335 | 323 | 271 | 105 | 330 | 292 | 4 |
| 10 CO09128-5W/Y | 513 | 345 | 379 | 283 | 165 | 342 | 338 | 2 |
| 11 CO09218-4W/Y | 523 | 390 | 496 | 268 | 58 | 153 | 315 | 3 |
| Fingerling | | | | | | | | |
| 12 LaRatte | 359 | | 453 | 275 | 53 | 126 | 253 | 1 |
| 13 POR11PG62-3 | 349 | | 384 | 107 | 109 | 198 | 229 | 2 |
| Mean | 499 | 457 | 447 | 318 | 125 | 340 | 357 | |

Table 6. Yield and Percent < 4 oz

| Entry | Clone/Variety | Yield < 4 oz (cwt/a) | | | | | | | | Percent < 4 oz | | | | | | | |
|--------------------------------|-----------------|----------------------|-----|------------------|-----|-----|-----|------|------|----------------|-----|-----|----|-----|-----|------|------|
| | | OR | CA | CO | ID | TX | TX | Mean | Rank | OR | CA | CO | ID | TX | TX | Mean | Rank |
| | | ON | TUL | SLV ¹ | AB | SPL | DAL | | | ON | TUL | SLV | AB | SPL | DAL | | |
| Red/White Flesh | | | | | | | | | | | | | | | | | |
| 1 | Chieftain | 90 | 73 | 21 | 70 | 52 | 78 | 64 | 1 | 13 | 12 | 5 | 15 | 30 | 14 | 15 | 1 |
| 2 | Red LaSoda | 56 | 43 | 31 | 41 | 56 | 48 | 46 | 2 | 7 | 7 | 5 | 8 | 35 | 7 | 11 | 2 |
| Red-Purple/Yellow Flesh | | | | | | | | | | | | | | | | | |
| 3 | ATX05175S-1R/Y | 355 | 319 | 328 | 287 | 136 | 211 | 273 | 1 | 58 | 58 | 63 | 77 | 96 | 69 | 70 | 2 |
| 4 | COTX04193S-2R/Y | 213 | 237 | 0 | 224 | 153 | 222 | 175 | 3 | 44 | 49 | | 70 | 96 | 69 | 66 | 3 |
| 5 | CO09079-5PW/Y | 346 | 337 | 240 | 210 | 57 | 156 | 224 | 2 | 82 | 78 | 57 | 87 | 92 | 69 | 78 | 1 |
| Purple | | | | | | | | | | | | | | | | | |
| 6 | Purple Majesty | 247 | | 113 | 253 | 128 | 269 | 202 | 1 | 44 | | 23 | 62 | 83 | 58 | 54 | 1 |
| 7 | CO08037-2P/P | 140 | 215 | 85 | 173 | 78 | 142 | 139 | 2 | 46 | 61 | 20 | 64 | 89 | 38 | 53 | 2 |
| Yellow Flesh | | | | | | | | | | | | | | | | | |
| 8 | Yukon Gold | 59 | 51 | 25 | 57 | 48 | 15 | 43 | 4 | 12 | 12 | 7 | 17 | 25 | 5 | 13 | 4 |
| 9 | CO09128-3W/Y | 250 | 289 | 259 | 256 | 104 | 184 | 223 | 2 | 64 | 86 | 80 | 94 | 99 | 56 | 80 | 2 |
| 10 | CO09128-5W/Y | 310 | 308 | 291 | 263 | 161 | 221 | 259 | 1 | 61 | 89 | 77 | 93 | 98 | 64 | 80 | 1 |
| 11 | CO09218-4W/Y | 280 | 201 | 108 | 226 | 38 | 63 | 153 | 3 | 53 | 52 | 22 | 84 | 66 | 42 | 53 | 3 |
| Fingerling | | | | | | | | | | | | | | | | | |
| 12 | LaRatte | 314 | | 188 | 244 | 26 | 52 | 165 | 1 | 87 | | 42 | 89 | 50 | 41 | 62 | 2 |
| 13 | POR11PG62-3 | 296 | | 108 | 98 | 108 | 105 | 143 | 2 | 85 | | 28 | 92 | 99 | 53 | 72 | 1 |
| Mean | | 227 | 207 | 138 | 185 | 88 | 136 | 162 | | 51 | 50 | 36 | 66 | 74 | 45 | 54 | |

¹ 4-6 inch for fingerling

Table 7. Yield and Percent 4-6 oz.

| Entry | Clone/Variety | Yield 4-6 oz (cwt/a) | | | | | | Percent 4-6 oz (%) | | | | | | | |
|--------------------------------|-----------------|----------------------|-----------|-----------|-----------|-----------|--------------|--------------------|-----------|-----------|-----------|-----------|--------------|-----------|---|
| | | OR ON | CA TUL | ID AB | TX SPL | TX DAL | Mean Rank | OR ON | CA TUL | ID AB | TX SPL | TX DAL | Mean Rank | | |
| Red/White Flesh | | | | | | | | | | | | | | | |
| 1 | Chieftain | 133 | 122 | 105 | 50 | 179 | 118 | 1 | 19 | 19 | 23 | 28 | 33 | 33 | 1 |
| 2 | Red LaSoda | 80 | 63 | 66 | 48 | 141 | 80 | 2 | 10 | 10 | 13 | 30 | 20 | 20 | 2 |
| Red-Purple/Yellow Flesh | | | | | | | | | | | | | | | |
| 3 | ATTX05175S-1R/Y | 138 | 134 | 74 | 0 | 83 | 86 | 2 | 23 | 24 | 20 | 0 | 27 | 27 | 1 |
| 4 | COTX04193S-2R/Y | 148 | 159 | 75 | 2 | 68 | 90 | 1 | 30 | 33 | 23 | 1 | 21 | 21 | 3 |
| 5 | CO09079-5PW/Y | 46 | 69 | 20 | 4 | 52 | 38 | 3 | 11 | 16 | 8 | 6 | 23 | 23 | 2 |
| Purple | | | | | | | | | | | | | | | |
| 6 | Purple Majesty | 117 | | 92 | 8 | 151 | 92 | 1 | 21 | | 23 | 5 | 32 | 32 | 2 |
| 7 | CO08037-2P/P | 91 | 90 | 86 | 5 | 143 | 83 | 2 | 30 | 26 | 32 | 6 | 38 | 38 | 1 |
| Yellow Flesh | | | | | | | | | | | | | | | |
| 8 | Yukon Gold | 78 | 63 | 80 | 75 | 49 | 69 | 1 | 16 | 14 | 23 | 39 | 15 | 15 | 4 |
| 9 | CO09128-3W/Y | 13 | 29 | 13 | 1 | 105 | 32 | 4 | 3 | 9 | 5 | 1 | 32 | 32 | 2 |
| 10 | CO09128-5W/Y | 61 | 29 | 15 | 2 | 115 | 44 | 3 | 12 | 8 | 5 | 1 | 34 | 34 | 1 |
| 11 | CO09218-4W/Y | 139 | 119 | 35 | 3 | 44 | 68 | 2 | 27 | 31 | 13 | 5 | 29 | 29 | 3 |
| Fingerling | | | | | | | | | | | | | | | |
| 12 | LaRatte | 11 | | 7 | 0 | 43 | 15 | 2 | 3 | | 3 | 0 | 34 | 34 | 1 |
| 13 | POR11PG62-3 | 41 | | 3 | 1 | 23 | 17 | 1 | 12 | | 3 | 1 | 12 | 12 | 2 |
| Mean | | 84 | 88 | 52 | 15 | 92 | 64 | | 17 | 19 | 15 | 9 | 27 | 27 | |

Table 8. Yield and Percent 6-10 oz.

| | | | | | | | | Percent 6-10 oz (%) | | | | | | | |
|--------------------------------|-----------------|-----|-----|-----|-----|-----|------|---------------------|----|-----|----|-----|-----|------|------|
| Entry | Clone/Variety | OR | CA | ID | TX | TX | Mean | Rank | OR | CA | ID | TX | TX | Mean | Rank |
| | | ON | TUL | AB | SPL | DAL | | | ON | TUL | AB | SPL | DAL | | |
| Red/White Flesh | | | | | | | | | | | | | | | |
| 1 | Chieftain | 279 | 41 | 212 | 68 | 114 | 143 | 1 | 40 | 6 | 46 | 39 | 21 | 21 | 2 |
| 2 | Red LaSoda | 194 | 31 | 180 | 32 | 179 | 123 | 2 | 25 | 5 | 35 | 20 | 25 | 25 | 1 |
| Red-Purple/Yellow Flesh | | | | | | | | | | | | | | | |
| 3 | ATTX05175S-1R/Y | 39 | 13 | 11 | 0 | 13 | 15 | 2 | 6 | 2 | 3 | 0 | 4 | 4 | 3 |
| 4 | COTX04193S-2R/Y | 99 | 14 | 18 | 0 | 31 | 32 | 1 | 20 | 3 | 6 | 0 | 10 | 10 | 1 |
| 5 | CO09079-5PW/Y | 10 | 2 | 11 | 0 | 10 | 7 | 3 | 2 | 1 | 5 | 0 | 5 | 5 | 2 |
| Purple | | | | | | | | | | | | | | | |
| 6 | Purple Majesty | 96 | | 42 | 1 | 46 | 46 | 1 | 17 | | 10 | 1 | 10 | 10 | 2 |
| 7 | CO08037-2P/P | 62 | 10 | 11 | 1 | 69 | 31 | 2 | 20 | 3 | 4 | 1 | 18 | 18 | 1 |
| Yellow Flesh | | | | | | | | | | | | | | | |
| 8 | Yukon Gold | 166 | 32 | 143 | 48 | 82 | 94 | 1 | 34 | 7 | 41 | 25 | 25 | 25 | 1 |
| 9 | CO09128-3W/Y | 1 | 2 | 1 | 0 | 37 | 8 | 3 | 0 | 0 | 0 | 0 | 11 | 11 | 2 |
| 10 | CO09128-5W/Y | 13 | 1 | 3 | 1 | 7 | 5 | 4 | 3 | 0 | 1 | 1 | 2 | 2 | 4 |
| 11 | CO09218-4W/Y | 83 | 14 | 5 | 0 | 8 | 22 | 2 | 16 | 4 | 2 | 0 | 5 | 5 | 3 |
| Fingerling | | | | | | | | | | | | | | | |
| 12 | LaRatte | 2 | | 2 | 0 | 18 | 5 | 1 | 0 | | 1 | 0 | 14 | 14 | 1 |
| 13 | POR11PG62-3 | 4 | | 0 | 0 | 0 | 1 | 2 | 1 | | 0 | 0 | 0 | 0 | 2 |
| Mean | | | | | | | | | | | | | | | |
| | | 81 | 16 | 49 | 12 | 47 | 41 | | 14 | 3 | 12 | 7 | 12 | 12 | |

Table 9. Yield and Percent >10 oz.

| Entry | Clone/Variety | Yield >10 oz (cwt/a) | | | | | | | | Percent >10 oz (%) | | | | | | | |
|--------------------------------|-----------------|----------------------|-----------|------------------|-----------|----------|-----------|-----------|------|--------------------|----------|-----------|----------|----------|-----------|----------|------|
| | | OR | CA | CO | ID | TX | TX | | | OR | CA | CO | ID | TX | TX | | |
| | | ON | TUL | SLV ¹ | AB | SPL | DAL | Mean | Rank | ON | TUL | SLV | AB | SPL | DAL | Mean | Rank |
| Red/White Flesh | | | | | | | | | | | | | | | | | |
| 1 | Chieftain | 180 | 143 | 222 | 67 | 4 | 172 | 131 | 2 | 26 | 23 | 49 | 15 | 2 | 32 | 24 | 2 |
| 2 | Red LaSoda | 436 | 202 | 424 | 216 | 14 | 345 | 273 | 1 | 55 | 33 | 66 | 42 | 9 | 48 | 42 | 1 |
| Red-Purple/Yellow Flesh | | | | | | | | | | | | | | | | | |
| 3 | ATTX05175S-1R/Y | 2 | 7 | 8 | 0 | 0 | 0 | 3 | 1 | 0 | 1 | 2 | 0 | 0 | 0 | 1 | 2 |
| 4 | COTX04193S-2R/Y | 12 | 2 | | 0 | 0 | 0 | 3 | 2 | 3 | 0 | | 0 | 0 | 0 | 1 | 1 |
| 5 | CO09079-5PW/Y | 0 | 0 | 8 | 0 | 0 | 0 | 1 | 3 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 3 |
| Purple | | | | | | | | | | | | | | | | | |
| 6 | Purple Majesty | 11 | | 42 | 14 | 0 | 0 | 13 | 1 | 2 | | 9 | 3 | 0 | 0 | 3 | 2 |
| 7 | CO08037-2P/P | 6 | 4 | 51 | 0 | 0 | 20 | 13 | 2 | 2 | 1 | 12 | 0 | 0 | 5 | 3 | 1 |
| Yellow Flesh | | | | | | | | | | | | | | | | | |
| 8 | Yukon Gold | 174 | 151 | 144 | 59 | 21 | 135 | 114 | 1 | 35 | 34 | 38 | 17 | 11 | 41 | 29 | 1 |
| 9 | CO09128-3W/Y | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 4 |
| 10 | CO09128-5W/Y | 5 | 0 | 0 | 0 | 1 | 0 | 1 | 3 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 3 |
| 11 | CO09218-4W/Y | 5 | 1 | 48 | 1 | 0 | 0 | 9 | 2 | 1 | 0 | 10 | 0 | 0 | 0 | 2 | 2 |
| Fingerling | | | | | | | | | | | | | | | | | |
| 12 | LaRatte | 0 | | 42 | 0 | 0 | 0 | 8 | 2 | 0 | | 9 | 0 | 0 | 0 | 2 | 2 |
| 13 | POR11PG62-3 | 0 | | 52 | 0 | 0 | 0 | 10 | 1 | 0 | | 13 | 0 | 0 | 0 | 3 | 1 |
| Mean | | 64 | 51 | 87 | 27 | 3 | 52 | 45 | | 10 | 9 | 17 | 6 | 2 | 10 | 8 | |

¹ > 6 inch for fingerling

Table 10. Yield and Percent 4 -10 oz.

| Entry | Clone/Variety | Yield 4-10 oz (cwt/a) | | | | | | | | Percent 4-10 oz (%) | | | | | | | |
|--------------------------------|-----------------|-----------------------|-----|-----|-----|-----|-----|------|------|---------------------|-----|-----|----|-----|-----|------|------|
| | | OR | CA | CO | ID | TX | TX | | | OR | CA | CO | ID | TX | TX | | |
| | | ON | TUL | SLV | AB | SPL | DAL | Mean | Rank | ON | TUL | SLV | AB | SPL | DAL | Mean | Rank |
| Red/White Flesh | | | | | | | | | | | | | | | | | |
| 1 | Chieftain | 412 | 381 | 211 | 316 | 118 | 293 | 289 | 1 | 59 | 60 | 46 | 69 | 67 | 54 | 59 | 1 |
| 2 | Red LaSoda | 274 | 255 | 152 | 246 | 80 | 320 | 221 | 2 | 35 | 42 | 24 | 48 | 50 | 45 | 40 | 2 |
| Red-Purple/Yellow Flesh | | | | | | | | | | | | | | | | | |
| 3 | ATX05175S-1R/Y | 177 | 206 | 178 | 85 | 0 | 96 | 124 | 2 | 29 | 37 | 34 | 23 | 0 | 31 | 26 | 2 |
| 4 | COTX04193S-2R/Y | 247 | 225 | | 92 | 2 | 99 | 133 | 1 | 51 | 47 | | 29 | 1 | 31 | 32 | 1 |
| 5 | CO09079-5PW/Y | 56 | 79 | 164 | 31 | 4 | 63 | 66 | 3 | 13 | 18 | 39 | 13 | 6 | 28 | 20 | 3 |
| Purple | | | | | | | | | | | | | | | | | |
| 6 | Purple Majesty | 213 | | 331 | 134 | 9 | 197 | 177 | 1 | 38 | | 67 | 33 | 6 | 42 | 37 | 2 |
| 7 | CO08037-2P/P | 153 | 127 | 286 | 97 | 6 | 211 | 147 | 2 | 50 | 36 | 68 | 36 | 7 | 57 | 42 | 1 |
| Yellow Flesh | | | | | | | | | | | | | | | | | |
| 8 | Yukon Gold | 244 | 206 | 209 | 223 | 123 | 131 | 189 | 1 | 49 | 47 | 55 | 64 | 63 | 40 | 53 | 1 |
| 9 | CO09128-3W/Y | 14 | 34 | 60 | 14 | 1 | 142 | 44 | 4 | 4 | 10 | 19 | 5 | 1 | 43 | 14 | 4 |
| 10 | CO09128-5W/Y | 74 | 31 | 86 | 18 | 3 | 122 | 56 | 3 | 14 | 9 | 23 | 6 | 2 | 36 | 15 | 3 |
| 11 | CO09218-4W/Y | 222 | 174 | 327 | 40 | 3 | 52 | 136 | 2 | 42 | 45 | 66 | 15 | 5 | 34 | 34 | 2 |
| Fingerling | | | | | | | | | | | | | | | | | |
| 12 | LaRatte | 13 | | 103 | 9 | 0 | 61 | 37 | 1 | 4 | | 23 | 3 | 0 | 48 | 16 | 1 |
| 13 | POR11PG62-3 | 45 | | 93 | 3 | 0 | 23 | 33 | 2 | 13 | | 24 | 3 | 0 | 12 | 10 | 2 |
| Mean | | 165 | 172 | 183 | 101 | 27 | 139 | 127 | | 31 | 35 | 41 | 27 | 16 | 38 | 31 | |

¹ 4-6 inch for fingerling

Table 11. Yield and Percent Culls

| Entry | Clone/Variety | Yield Culls (cwt/a) | | | | | | | | Percent Culls (%) | | | | | | | |
|--------------------------------|-----------------|---------------------|-----|-----|----|-----|-----|------|------|-------------------|-----|-----|----|-----|-----|------|------|
| | | OR ¹ | CA | CO | ID | TX | TX | | | OR | CA | CO | ID | TX | TX | | |
| | | ON | TUL | SLV | AB | SPL | DAL | Mean | Rank | ON | TUL | SLV | AB | SPL | DAL | Mean | Rank |
| Red/White Flesh | | | | | | | | | | | | | | | | | |
| 1 | Chieftain | 12 | 34 | 3 | 7 | 2 | 0 | 10 | 2 | 2 | 5 | 1 | 1 | 1 | 0 | 2 | 2 |
| 2 | Red LaSoda | 21 | 114 | 34 | 11 | 10 | 0 | 32 | 1 | 3 | 19 | 5 | 2 | 6 | 0 | 6 | 1 |
| Red-Purple/Yellow Flesh | | | | | | | | | | | | | | | | | |
| 3 | ATTX05175S-1R/Y | 74 | 19 | 5 | 0 | 6 | 0 | 17 | 1 | 12 | 3 | 1 | 0 | 4 | 0 | 3 | 1 |
| 4 | COTX04193S-2R/Y | 14 | 17 | | 2 | 5 | 0 | 7 | 3 | 3 | 3 | | 1 | 3 | 0 | 2 | 3 |
| 5 | CO09079-5PW/Y | 17 | 17 | 6 | 1 | 1 | 7 | 8 | 2 | 4 | 4 | 2 | 0 | 2 | 3 | 3 | 2 |
| Purple | | | | | | | | | | | | | | | | | |
| 6 | Purple Majesty | 90 | | 8 | 6 | 17 | 0 | 24 | 1 | 16 | | 2 | 2 | 11 | 0 | 6 | 1 |
| 7 | CO08037-2P/P | 7 | 8 | 0 | 0 | 4 | 0 | 3 | 2 | 2 | 2 | 0 | 0 | 4 | 0 | 2 | 2 |
| Yellow Flesh | | | | | | | | | | | | | | | | | |
| 8 | Yukon Gold | 17 | 31 | 5 | 8 | 2 | 47 | 18 | 3 | 3 | 7 | 1 | 2 | 1 | 14 | 5 | 3 |
| 9 | CO09128-3W/Y | 126 | 9 | 3 | 1 | 0 | 5 | 24 | 1 | 32 | 3 | 1 | 0 | 0 | 1 | 6 | 2 |
| 10 | CO09128-5W/Y | 123 | 6 | 2 | 1 | 0 | 0 | 22 | 2 | 24 | 2 | 1 | 0 | 0 | 0 | 4 | 4 |
| 11 | CO09218-4W/Y | 16 | 14 | 12 | 1 | 17 | 37 | 16 | 4 | 3 | 4 | 3 | 0 | 29 | 24 | 10 | 1 |
| Fingerling | | | | | | | | | | | | | | | | | |
| 12 | LaRatte | 32 | | 120 | 22 | 0 | 13 | 38 | 2 | 9 | | 26 | 8 | 0 | 11 | 11 | 2 |
| 13 | POR11PG62-3 | 9 | | 86 | 5 | 27 | 70 | 39 | 1 | 2 | | 22 | 5 | 24 | 35 | 18 | 1 |
| Mean | | 43 | 27 | 24 | 5 | 7 | 14 | 20 | | 9 | 5 | 5 | 2 | 7 | 7 | 6 | |

¹ sprouted tubers were graded as culls

Table 12. Specific Gravity

| Entry | Clone/Variety | Specific Gravity | | | | | | Mean | Rank |
|--------------------------------|-----------------|------------------|-----------|-----------|----------|-----------|-----------|-------|------|
| | | OR ON | CA TUL | CO SLV | ID AB | TX SPL | TX DAL | | |
| Red/White Flesh | | | | | | | | | |
| 1 | Chieftain | 1.073 | 1.088 | 1.076 | 1.073 | 1.062 | 1.066 | 1.073 | 2 |
| 2 | Red LaSoda | 1.076 | 1.093 | 1.087 | 1.074 | 1.056 | 1.060 | 1.074 | 1 |
| Red-Purple/Yellow Flesh | | | | | | | | | |
| 3 | ATTX05175S-1R/Y | 1.075 | 1.093 | 1.088 | 1.078 | 1.061 | 1.072 | 1.078 | 1 |
| 4 | COTX04193S-2R/Y | 1.078 | 1.080 | | 1.071 | 1.062 | 1.060 | 1.070 | 2 |
| 5 | CO09079-5PW/Y | 1.071 | 1.093 | 1.072 | 1.069 | 1.061 | 1.055 | 1.070 | 3 |
| Purple | | | | | | | | | |
| 6 | Purple Majesty | 1.084 | | 1.088 | 1.077 | 1.072 | 1.069 | 1.078 | 1 |
| 7 | CO08037-2P/P | 1.062 | 1.090 | 1.089 | 1.077 | 1.073 | 1.072 | 1.077 | 2 |
| Yellow Flesh | | | | | | | | | |
| 8 | Yukon Gold | 1.080 | 1.085 | 1.091 | 1.088 | 1.070 | 1.071 | 1.081 | 2 |
| 9 | CO09128-3W/Y | 1.060 | 1.095 | 1.077 | 1.072 | 1.062 | 1.059 | 1.071 | 3 |
| 10 | CO09128-5W/Y | 1.078 | 1.100 | 1.091 | 1.084 | 1.072 | 1.071 | 1.082 | 1 |
| 11 | CO09218-4W/Y | 1.078 | 1.098 | 1.078 | 1.059 | 1.053 | 1.058 | 1.071 | 4 |
| Fingerling | | | | | | | | | |
| 12 | LaRatte | 1.072 | | 1.080 | 1.073 | nd | 1.063 | 1.072 | 2 |
| 13 | POR11PG62-3 | 1.078 | | 1.088 | 1.074 | nd | 1.061 | 1.076 | 1 |
| Mean | | 1.074 | 1.092 | 1.084 | 1.074 | 1.064 | 1.064 | 1.075 | |

Table 13. Average Tuber Size and Tubers Per Plant

| Entry | Clone/Variety | Average Tuber Size (oz) | | | | | | Tubers/plant | | | | | |
|--------------------------------|-----------------|-------------------------|-----|-----|-----|-----|------|--------------|-----|----|-----|-----|------|
| | | OR | CA | ID | TX | TX | | OR | CA | ID | TX | TX | |
| | | ON | TUL | AB | SPL | DAL | Mean | ON | TUL | AB | SPL | DAL | Mean |
| Red/White Flesh | | | | | | | | | | | | | |
| 1 | Chieftain | 5.7 | 6.2 | 5.7 | 3.9 | 5.6 | 5.4 | 10 | 10 | 7 | 4 | 7 | 8 |
| 2 | Red LaSoda | 7.5 | 7.5 | 7.3 | 3.7 | 7.6 | 6.7 | 9 | 8 | 6 | 4 | 7 | 7 |
| Red-Purple/Yellow Flesh | | | | | | | | | | | | | |
| 3 | ATTX05175S-1R/Y | 2.4 | 2.9 | 2.4 | 1.0 | 2.5 | 2.2 | 21 | 18 | 14 | 11 | 9 | 15 |
| 4 | COTX04193S-2R/Y | 3.4 | 3.3 | 2.6 | 1.4 | 2.4 | 2.6 | 12 | 14 | 11 | 9 | 10 | 11 |
| 5 | CO09079-5PW/Y | 1.8 | 2.3 | 1.9 | 1.4 | 2.6 | 2.0 | 19 | 18 | 12 | 4 | 7 | 12 |
| Purple | | | | | | | | | | | | | |
| 6 | Purple Majesty | 2.9 | | 2.6 | 1.6 | 2.5 | 2.4 | 16 | | 14 | 8 | 13 | 13 |
| 7 | CO08037-2P/P | 3.1 | 2.9 | 2.7 | 1.8 | 3.8 | 2.9 | 8 | 12 | 9 | 4 | 8 | 8 |
| Yellow Flesh | | | | | | | | | | | | | |
| 8 | Yukon Gold | 5.9 | 6.4 | 5.5 | 4.4 | 8.9 | 6.2 | 7 | 8 | 6 | 4 | 3 | 5 |
| 9 | CO09128-3W/Y | 1.5 | 1.9 | 1.5 | 0.7 | 2.7 | 1.7 | 22 | 18 | 17 | 12 | 10 | 16 |
| 10 | CO09128-5W/Y | 1.9 | 1.9 | 1.8 | 1.1 | 2.6 | 1.9 | 23 | 17 | 14 | 12 | 11 | 15 |
| 11 | CO09218-4W/Y | 2.6 | 3.1 | 2.3 | 1.1 | 2.6 | 2.3 | 17 | 13 | 10 | 5 | 11 | 11 |
| Fingerling | | | | | | | | | | | | | |
| 12 | LaRatte | 0.8 | | 1.3 | 0.4 | 1.7 | 1.1 | 35 | | 18 | 10 | 5 | 17 |
| 13 | POR11PG62-3 | 1.7 | | 1.5 | 0.9 | 2.1 | 1.6 | 17 | | 6 | 10 | 8 | 10 |
| Mean | | | | | | | | | | | | | |
| | | 3.2 | 3.8 | 3.0 | 1.8 | 3.7 | 3.0 | 17 | 13 | 11 | 8 | 8 | 11 |

Table 14. Tuber Uniformity, Fresh Merit Score, Process Merit Score and Process Color

| Entry | Clone/Variety | Tuber Uniformity (1-5 excellent) | | | | Fresh Merit Score (1-5 best) | | | | | | | Process Merit | Process CO/SLV | |
|--------------------------------|-----------------|----------------------------------|-----|-----|------|------------------------------|-----|-----|-----|-----|------|------|------------------|-----------------------|------|
| | | OR | CA | ID | Mean | CA | CO | ID | TX | TX | Mean | Rank | score (1-5 best) | fry color (4=darkest) | |
| | | ON | TUL | AB | | TUL | SLV | AB | SPL | DAL | | | CO/SLV | Harvest | 45°F |
| Red/White Flesh | | | | | | | | | | | | | | | |
| 1 | Chieftain | 5.0 | 4.0 | 3.6 | 4 | 3.8 | 3.0 | 3.1 | 3.7 | 3.9 | 3.5 | 1 | 1.0 | 3.0 | 3.0 |
| 2 | Red LaSoda | 3.0 | 2.9 | 2.9 | 3 | 2.5 | 1.0 | 2.0 | 3.5 | 3.8 | 2.6 | 2 | 1.0 | 2.0 | 3.0 |
| Red-Purple/Yellow Flesh | | | | | | | | | | | | | | | |
| 3 | ATTX05175S-1R/Y | 5.0 | 3.9 | 3.8 | 4 | 3.8 | 5.0 | 3.6 | 3.2 | 3.6 | 3.8 | 1 | 5.0 | 1.0 | 2.0 |
| 4 | COTX04193S-2R/Y | 5.0 | 4.0 | 4.0 | 4 | 3.9 | | 3.9 | 3.4 | 3.7 | 3.7 | 2 | | | |
| 5 | CO09079-5PW/Y | 3.0 | 3.3 | 3.6 | 3 | 2.8 | 3.0 | 3.5 | 2.5 | 3.4 | 3.0 | 3 | 1.0 | 4.0 | 4.0 |
| Purple | | | | | | | | | | | | | | | |
| 6 | Purple Majesty | 4.0 | | 2.6 | 3 | | 5.0 | 3.0 | 3.4 | 3.8 | 3.8 | 1 | | - | - |
| 7 | CO08037-2P/P | 3.0 | 4.0 | 3.3 | 3 | 4.0 | 3.0 | 3.4 | 2.6 | 3.8 | 3.3 | 2 | | - | - |
| Yellow Flesh | | | | | | | | | | | | | | | |
| 8 | Yukon Gold | 3.0 | 3.6 | 3.4 | 3 | 3.5 | 2.0 | 3.3 | 4.2 | 3.0 | 3.2 | 3 | 1.0 | 2.0 | 3.0 |
| 9 | CO09128-3W/Y | 3.0 | 3.6 | 4.4 | 4 | 2.9 | 1.0 | 4.4 | 3.2 | 3.6 | 3.0 | 4 | 1.0 | 4.0 | 3.0 |
| 10 | CO09128-5W/Y | 4.0 | 3.8 | 4.4 | 4 | 3.5 | 2.0 | 4.4 | 3.8 | 3.6 | 3.4 | 1 | 4.0 | 0.0 | 0.0 |
| 11 | CO09218-4W/Y | 2.0 | 4.0 | 4.0 | 3 | 3.1 | 5.0 | 3.8 | 2.5 | 2.7 | 3.4 | 2 | 3.0 | 3.0 | 2.0 |
| Fingerling | | | | | | | | | | | | | | | |
| 12 | LaRatte | 3.0 | | 3.0 | 3 | | 5.0 | 2.9 | 2.6 | 3.2 | 3.4 | 1 | 1.0 | 4.0 | 4.0 |
| 13 | POR11PG62-3 | 4.0 | | 3.4 | 4 | | 2.0 | 3.0 | 3.1 | 3.3 | 2.9 | 2 | 4.0 | 2.0 | 1.0 |
| Mean | | | | | | | | | | | | | | | |
| | | 4 | 4 | 4 | 4 | 3 | 3 | 3 | 3 | 3 | 3 | | 2.2 | 2.5 | 2.5 |

Table 15. Tuber Shape and Length Width Ratio

| Entry | Clone/Variety | Tuber Shape | | | | | | | L/W | | | | | | | W/T ¹ | | | | | |
|--------------------------------|-----------------|-------------|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|------|------------------|------|------|------|------|------|
| | | OR | CA | CO | ID | TX | TX | | OR | CA | CO | ID | TX | TX | | OR | ID | CO | TX | TX | |
| | | ON | TUL | SLV | AB | SPL | DAL | Mean | ON | TUL | SLV | AB | SPL | DAL | Mean | ON | AB | SLV | SPL | DAL | Mean |
| Red/White Flesh | | | | | | | | | | | | | | | | | | | | | |
| 1 | Chieftain | 1.0 | 2.3 | 2.0 | 1.9 | 2.0 | 2.5 | 1.9 | 1.06 | 1.15 | 1.20 | 1.13 | 1.09 | 1.12 | 1.12 | 1.33 | 1.27 | 1.26 | 1.24 | 1.26 | 1.27 |
| 2 | Red LaSoda | 2.0 | 2.1 | 1.0 | 2.0 | 2.0 | 2.7 | 2.0 | 1.09 | 1.12 | 1.04 | 1.07 | 1.12 | 1.21 | 1.11 | 1.30 | 1.26 | 1.30 | 1.16 | 1.23 | 1.25 |
| Red-Purple/Yellow Flesh | | | | | | | | | | | | | | | | | | | | | |
| 3 | ATTX05175S-1R/Y | 1.0 | 1.4 | 1.0 | 1.5 | 1.0 | 1.0 | 1.2 | 1.18 | 0.95 | 0.88 | 0.90 | 1.09 | 1.05 | 1.01 | 1.23 | 1.28 | 1.34 | 1.11 | 1.16 | 1.22 |
| 4 | COTX04193S-2R/Y | 1.0 | 1.4 | | 1.6 | 1.5 | 2.5 | 1.6 | 1.07 | 1.04 | | 1.01 | 1.08 | 1.07 | 1.05 | 1.31 | 1.36 | | 1.20 | 1.27 | 1.29 |
| 5 | CO09079-5PW/Y | 1.0 | 3.4 | 2.0 | 2.9 | 2.0 | 2.4 | 2.3 | 1.02 | 1.37 | 1.30 | 1.44 | 1.18 | 1.37 | 1.28 | 1.39 | 1.19 | 1.23 | 1.17 | 1.15 | 1.22 |
| Purple | | | | | | | | | | | | | | | | | | | | | |
| 6 | Purple Majesty | 1.0 | | 2.0 | 3.0 | 2.0 | 2.5 | 2.1 | 1.24 | | 1.41 | 1.36 | 1.39 | 1.40 | 1.36 | 1.19 | 1.23 | 1.19 | 1.14 | 1.10 | 1.17 |
| 7 | CO08037-2P/P | 2.0 | 2.5 | 2.0 | 2.8 | 1.4 | 3.3 | 2.3 | 1.20 | 1.27 | 1.40 | 1.42 | 1.19 | 1.50 | 1.33 | 1.29 | 1.09 | 1.07 | 1.09 | 1.10 | 1.13 |
| Yellow Flesh | | | | | | | | | | | | | | | | | | | | | |
| 8 | Yukon Gold | 1.0 | 2.5 | 1.0 | 1.8 | 2.0 | 2.6 | 1.8 | 1.11 | 1.15 | 1.08 | 1.11 | 1.09 | 1.17 | 1.12 | 1.25 | 1.25 | 1.26 | 1.27 | 1.27 | 1.26 |
| 9 | CO09128-3W/Y | 1.0 | 2.4 | 2.0 | 1.5 | 1.0 | 2.4 | 1.7 | 1.32 | 1.20 | 1.41 | 1.26 | 1.10 | 1.32 | 1.27 | 1.23 | 1.18 | 1.13 | 1.12 | 1.18 | 1.17 |
| 10 | CO09128-5W/Y | 1.0 | 1.9 | 1.0 | 1.3 | 1.0 | 1.0 | 1.2 | 1.04 | 1.03 | 1.07 | 0.97 | 1.12 | 1.06 | 1.05 | 1.24 | 1.25 | 1.18 | 1.11 | 1.10 | 1.17 |
| 11 | CO09218-4W/Y | 2.0 | 2.4 | 1.0 | 1.5 | 1.4 | 2.4 | 1.8 | 1.16 | 1.27 | 1.12 | 1.08 | 1.12 | 1.36 | 1.18 | 1.25 | 1.27 | 1.36 | 1.24 | 1.21 | 1.27 |
| Fingerling | | | | | | | | | | | | | | | | | | | | | |
| 12 | LaRatte | 5.0 | | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 2.48 | | 3.75 | 3.26 | 2.36 | 3.71 | 3.11 | 1.33 | 1.12 | 1.21 | 1.08 | 1.15 | 1.18 |
| 13 | POR11PG62-3 | 4.0 | | 5.0 | 4.0 | 3.0 | 5.0 | 4.2 | 2.33 | | 2.40 | 1.81 | 1.58 | 2.77 | 2.18 | 1.36 | 1.13 | 1.19 | 1.14 | 1.12 | 1.19 |
| Mean | | 1.8 | 2.2 | 2.1 | 2.4 | 1.9 | 2.7 | 2.2 | 1.33 | 1.16 | 1.50 | 1.37 | 1.27 | 1.55 | 1.40 | 1.28 | 1.22 | 1.23 | 1.16 | 1.18 | 1.21 |

¹Width/thickness ratio or width/depth ratio. This info might be good to tell us how round or flat a potato is looking at it from the end.

Table 16. Skin and Flesh Color

| Entry | Clone/Variety | Skin Color (1 - 5 dark) | | | | | Flesh Color (1 - 5 dark) | | | | | | |
|--------------------------------|-----------------|-------------------------|------------|------------|------------|------------|--------------------------|------------|------------|------------|------------|------------|------------|
| | | CA | CO | ID | TX | TX | | CA | CO | ID | TX | TX | |
| | | TUL | SLV | AB | SPL | DAL | Mean | TUL | SLV | AB | SPL | DAL | Mean |
| Red/White Flesh | | | | | | | | | | | | | |
| 1 | Chieftain | 2.1 | 1.0 | 2.8 | 2.0 | 2.5 | 2.1 | 1.1 | 1.0 | 2.5 | 1.0 | 1.0 | 1.3 |
| 2 | Red LaSoda | 1.9 | 2.0 | 3.0 | 2.4 | 3.0 | 2.5 | 1.5 | 1.0 | 1.3 | 1.0 | 1.0 | 1.2 |
| Red-Purple/Yellow Flesh | | | | | | | | | | | | | |
| 3 | ATTX05175S-1R/Y | 3.3 | 2.0 | 3.0 | 3.5 | 3.5 | 3.1 | 3.4 | 3.0 | 3.0 | 3.4 | 4.3 | 3.4 |
| 4 | COTX04193S-2R/Y | 3.4 | | 3.0 | 3.9 | 3.5 | 3.4 | 2.5 | | 3.0 | 4.0 | 4.5 | 3.5 |
| 5 | CO09079-5PW/Y | 2.1 | 1.0 | 2/3 | 1.0 | 1.0 | 1.3 | 3.9 | 3.0 | 2.5 | 3.4 | 4.5 | 3.5 |
| Purple | | | | | | | | | | | | | |
| 6 | Purple Majesty | | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | | 5.0 | 5.0 | 4.0 | 3.5 | 4.4 |
| 7 | CO08037-2P/P | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 4.5 | 4.5 | 4.8 |
| Yellow Flesh | | | | | | | | | | | | | |
| 8 | Yukon Gold | 2.5 | 1.0 | 2.5 | 1.0 | 1.0 | 1.6 | 3.0 | 2.0 | 2.5 | 3.5 | 2.8 | 2.8 |
| 9 | CO09128-3W/Y | 2.6 | 1.0 | 3.0 | 1.0 | 1.0 | 1.7 | 3.8 | 4.0 | 3.0 | 4.0 | 4.0 | 3.8 |
| 10 | CO09128-5W/Y | 1.8 | 1.0 | 2.8 | 1.0 | 1.0 | 1.5 | 4.1 | 4.0 | 3.3 | 4.4 | 4.1 | 4.0 |
| 11 | CO09218-4W/Y | 2.1 | 1.0 | 2.8 | 1.0 | 1.0 | 1.6 | 3.8 | 3.0 | 3.5 | 3.8 | 4.0 | 3.6 |
| Fingerling | | | | | | | | | | | | | |
| 12 | LaRatte | | 1.0 | 2.3 | 1.0 | 1.0 | 1.3 | | 3.0 | 2.0 | 2.0 | 2.9 | 2.5 |
| 13 | POR11PG62-3 | | 2.0 | 3.0 | 1.0 | 1.0 | 1.8 | | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 |
| Mean | | 2.7 | 1.9 | 3.2 | 2.2 | 2.3 | 2.4 | 3.2 | 3.1 | 3.0 | 3.2 | 3.4 | 3.2 |

Table 17. Eye Depth and External Defects

| Entry | Clone/Variety | OR | CA | ID | TX | TX | Eye | OR | CA | CO | ID | TX | TX | Growth | OR | CA | CO | ID | TX | TX | Knobs | OR | TX | TX | Shatter | OR | ID | TX | TX | Scab |
|--------------------------------|-----------------|-----|-----|-----|-----|-----|-------|-----------------|------------------|-----|-----|-----|-----|--------|-----------------|------------------|-----|-----|-----|-----|-------|-----|-----|-----|---------|-----|-----|-----|-----|------|
| | | ON | TUL | AB | SPL | DAL | Depth | ON ¹ | TUL ¹ | SLV | AB | SPL | DAL | Cracks | ON ¹ | TUL ¹ | SLV | AB | SPL | DAL | | ON | SPL | DAL | Bruise | ON | AB | SPL | DAL | |
| Red/White Flesh | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | Chieftain | 2.0 | 3.4 | 2.8 | 3.8 | 3.8 | 3.2 | 0.0 | 0.1 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 0.0 | 0.5 | 4.0 | 4.9 | 5.0 | 4.8 | 4.7 | 5.0 | 5.0 | 5.0 | 4.9 | 5.0 | 4.9 | 5.0 | 5.0 | 5.0 |
| 2 | Red LaSoda | 2.0 | 2.5 | 1.8 | 2.8 | 3.5 | 2.5 | 10.0 | 5.0 | 4.0 | 4.8 | 4.9 | 4.8 | 4.6 | 10.0 | 0.5 | 5.0 | 5.0 | 5.0 | 4.8 | 4.9 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 4.8 | 4.8 | 4.9 |
| Red-Purple/Yellow Flesh | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | ATTX05175S-1R/Y | 4.0 | 3.4 | 3.1 | 3.4 | 3.5 | 3.5 | 0.0 | 0.2 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 0.0 | 0.4 | 4.0 | 5.0 | 5.0 | 5.0 | 4.8 | 5.0 | 5.0 | 5.0 | 4.9 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 |
| 4 | COTX04193S-2R/Y | 5.0 | 3.1 | 3.4 | 3.8 | 4.0 | 3.8 | 0.0 | 0.4 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 0.0 | 0.2 | 5.0 | 5.0 | 4.8 | 4.9 | 4.9 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 |
| 5 | CO09079-5PW/Y | 5.0 | 3.6 | 3.9 | 4.0 | 4.0 | 4.1 | 0.0 | 0.0 | 5.0 | 4.9 | 5.0 | 5.0 | 5.0 | 0.0 | 0.6 | 5.0 | 5.0 | 5.0 | 4.5 | 4.9 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 |
| Purple | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | Purple Majesty | 4.0 | | 3.6 | 4.0 | 4.0 | 3.9 | 10.0 | | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 0.0 | | 4.0 | 5.0 | 5.0 | 4.8 | 4.7 | 5.0 | 5.0 | 5.0 | 4.9 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 |
| 7 | CO08037-2P/P | 4.0 | 4.1 | 4.3 | 4.0 | 3.9 | 4.1 | 0.0 | 0.7 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 0.0 | 0.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 4.0 | 5.0 | 5.0 | 5.0 | 4.8 |
| Yellow Flesh | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | Yukon Gold | 4.0 | 4.1 | 3.5 | 3.8 | 4.0 | 3.9 | 0.0 | 0.2 | 5.0 | 5.0 | 5.0 | 4.5 | 4.9 | 10.0 | 0.8 | 4.0 | 4.9 | 5.0 | 3.5 | 4.3 | 5.0 | 5.0 | 5.0 | 4.8 | 5.0 | 4.9 | 5.0 | 5.0 | 5.0 |
| 9 | CO09128-3W/Y | 5.0 | 4.3 | 4.0 | 4.5 | 4.0 | 4.4 | 0.0 | 0.0 | 5.0 | 5.0 | 5.0 | 4.3 | 4.8 | 0.0 | 0.3 | 4.0 | 5.0 | 5.0 | 4.0 | 4.5 | 5.0 | 5.0 | 5.0 | 4.9 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 |
| 10 | CO09128-5W/Y | 5.0 | 3.9 | 3.9 | 5.0 | 3.9 | 4.3 | 0.0 | 0.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 0.0 | 0.2 | 5.0 | 5.0 | 5.0 | 4.8 | 4.9 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 4.8 | 4.8 | 4.9 |
| 11 | CO09218-4W/Y | 4.0 | 4.1 | 4.0 | 5.0 | 4.0 | 4.2 | 0.0 | 0.1 | 4.0 | 5.0 | 5.0 | 4.8 | 4.7 | 10.0 | 0.9 | 4.0 | 5.0 | 5.0 | 3.5 | 4.4 | 5.0 | 5.0 | 5.0 | 4.8 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 |
| Fingerling | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12 | LaRatte | 4.0 | | 3.6 | 5.0 | 4.0 | 4.2 | 0.0 | | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 0.0 | | 4.0 | 4.5 | 5.0 | 2.3 | 3.9 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 4.5 | 5.0 | 5.0 | 4.9 |
| 13 | POR11PG62-3 | 4.0 | | 3.1 | 4.0 | 4.0 | 3.8 | 0.0 | | 4.0 | 4.8 | 5.0 | 5.0 | 4.7 | 10.0 | | 4.0 | 4.3 | 4.8 | 1.0 | 3.5 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 4.3 | 5.0 | 5.0 | 4.8 |
| Mean | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 4.0 | 3.7 | 3.5 | 4.1 | 3.9 | 3.8 | 1.5 | 0.7 | 4.8 | 5.0 | 5.0 | 4.9 | 4.9 | 3.1 | 0.4 | 4.3 | 4.9 | 5.0 | 4.0 | 4.6 | 5.0 | 5.0 | 5.0 | 4.9 | 4.9 | 4.9 | 5.0 | 5.0 | 4.9 |

¹o%

Table 18. Internal Defects

| Entry | Clone/Variety | Percent Incidence (%) ¹ | | | | | | | | | | | Blackspot Bruise | | | | | | | | | | | | |
|--------------------------------|-----------------|------------------------------------|------|------|-----|-----|------|-----|------|-----|-----|------|------------------|-----|------|-----|------|------|-----------------|-----|-----------------|-----|------|------|-----|
| | | OR | CA | CO | ID | TX | TX | | OR | ID | TX | TX | | OR | CA | ID | TX | TX | OR ² | CA | CO ² | TX | TX | | |
| | | ON | TUL | SLV | AB | SPL | DAL | HH | ON | AB | SPL | DAL | IBS | ON | TUL | AB | SPL | DAL | VD | ON | TUL% | SLV | SPL% | DAL% | BB |
| Red/White Flesh | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | Chieftain | 0.0 | 5.0 | 0.9 | 0.0 | 0.0 | 0.0 | 1.0 | 45.0 | 0.0 | 0.0 | 5.0 | 12.5 | 0.0 | 3.0 | 0.0 | 0.0 | 0.0 | 0.6 | 2.5 | 8.0 | 3.8 | 0.0 | 0.0 | 2.7 |
| 2 | Red LaSoda | 2.5 | 5.0 | 13.4 | 0.0 | 0.0 | 0.0 | 3.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.5 | 8.0 | 0.0 | 18.0 | 0.0 | 5.7 | 5.0 | 3.0 | 4.1 | 0.0 | 0.0 | 1.0 |
| Red-Purple/Yellow Flesh | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | ATTX05175S-1R/Y | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 3.0 | 10.0 | 2.6 | 2.5 | 3.0 | 3.8 | 0.0 | 0.0 | 1.0 |
| 4 | COTX04193S-2R/Y | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 18.0 | 0.0 | 0.0 | 12.5 | 6.1 | 0.0 | 5.0 | | 0.0 | 0.0 | 1.7 |
| 5 | CO09079-5PW/Y | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.5 | 0.0 | 0.0 | 0.0 | 0.6 | 7.5 | 30.0 | 0.0 | 0.0 | 5.0 | 8.5 | 2.5 | 0.0 | 5.0 | 0.0 | 0.0 | 0.0 |
| Purple | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | Purple Majesty | 0.0 | | 2.4 | 2.5 | 0.0 | 0.0 | 1.0 | 0.0 | 0.0 | 3.0 | 8.0 | 2.8 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 2.5 | | - | 0.0 | 0.0 | 0.0 |
| 7 | CO08037-2P/P | 0.0 | 0.0 | 0.0 | 2.5 | 0.0 | 0.0 | 0.4 | 2.5 | 0.0 | 0.0 | 0.0 | 0.6 | 0.0 | 8.0 | 0.0 | 0.0 | 0.0 | 1.6 | 0.0 | 0.0 | - | 0.0 | 0.0 | 0.0 |
| Yellow Flesh | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | Yukon Gold | 0.0 | 10.0 | 0.9 | 2.5 | 0.0 | 12.5 | 4.3 | 2.5 | 0.0 | 0.0 | 12.5 | 3.8 | 0.0 | 8.0 | 0.0 | 40.0 | 0.0 | 9.6 | 0.0 | 3.0 | 4.5 | 0.0 | 0.0 | 1.0 |
| 9 | CO09128-3W/Y | 0.0 | 3.0 | 0.3 | 0.0 | 0.0 | 0.0 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 13.0 | 0.0 | 0.0 | 2.5 | 3.1 | 0.0 | 0.0 | 5.0 | 0.0 | 0.0 | 0.0 |
| 10 | CO09128-5W/Y | 0.0 | 20.0 | 0.5 | 0.0 | 0.0 | 0.0 | 3.4 | 5.0 | 0.0 | 0.0 | 25.0 | 7.5 | 0.0 | 3.0 | 0.0 | 0.0 | 17.5 | 4.1 | 5.0 | 3.0 | 4.6 | 0.0 | 0.0 | 1.0 |
| 11 | CO09218-4W/Y | 0.0 | 5.0 | 1.4 | 0.0 | 0.0 | 0.0 | 1.1 | 5.0 | 0.0 | 0.0 | 0.0 | 1.3 | 0.0 | 3.0 | 0.0 | 0.0 | 0.0 | 0.6 | 2.5 | 3.0 | 3.7 | 0.0 | 0.0 | 1.0 |
| Fingerling | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12 | LaRatte | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 5.0 | 0.0 | 0.0 | 3.0 | 2.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 4.8 | 0.0 | 0.0 | 0.0 |
| 13 | POR11PG62-3 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 5.0 | 0.0 | 0.0 | 0.0 |
| Mean | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 0.2 | 4.8 | 1.7 | 0.6 | 0.0 | 1.0 | 1.2 | 5.2 | 0.0 | 0.2 | 4.1 | 2.6 | 0.8 | 9.4 | 0.0 | 4.7 | 3.7 | 3.3 | 1.7 | 2.8 | 4.4 | 0.0 | 0.0 | 0.7 |

¹ Percent based on 10 cut tubers.

² 1 to 5=none

Table 19. Disease Evaluations, Metribuzin Reaction

| Entry Clone/Variety | Aberdeen | | | Tulelake | |
|--------------------------------|---|-------------------------------------|--------------------------------|---------------------|-----------------------------|
| | Vert. Wilt/ Early Dying ¹ Foliar | Early Blight ¹ Foliar | Metr. Reaction ² | Rating ⁴ | Vert. AUDPC ³ |
| Red/White Flesh | | | | | |
| 1 Chieftain | 5 | 5 | MR | 6 | 476 |
| 2 Red LaSoda | 5 | 4 | MS | 5 | 184 |
| Red-Purple/Yellow Flesh | | | | | |
| 3 ATTX05175S-1R/Y | 5 | 4 | MS | 6 | 324 |
| 4 COTX04193S-2R/Y | 3 | 4 | S | 8 | 896 |
| 5 CO09079-5PW/Y | 3 | 4 | MS | 8 | 749 |
| Purple | | | | | |
| 6 Purple Magesty | 4 | 4 | R | | |
| 7 CO08037-2P/P | 5 | 4 | S | 8 | 705 |
| Yellow Flesh | | | | | |
| 8 Yukon Gold | 3 | 3 | MR | 8 | 1134 |
| 9 CO09128-3W/Y | 5 | 3 | MR | 8 | 856 |
| 10 CO09128-5W/Y | 4 | 4 | MS | 9 | 1413 |
| 11 CO09218-4W/Y | 5 | 4 | MR | 4 | 156 |
| Fingerling | | | | | |
| 12 LaRatte | 5 | 5 | MS | | |
| 13 POR11PG62-3 | 4 | 5 | MS | | |

¹ Evaluations made at Aberdeen, ID by Potato Variety Team; scale as indicated with lowest number being most severe. For 1 to 5 5=no symptoms; 1=90-100% dead or dying with typical disease

² Metribuzin reaction measured at Aberdeen, ID. VR=very resistant, R=Resistant, MR=Moderately resistant, MS=moderately susceptible, S=susceptible VS=very susceptible

³ Area Under Disease Product Curve Based on reading taken 77, 83, 89, 96, 104 and 110 days from planting

⁴ 0 to 9=dead

Table 20. Tuber Composition

| | | Aberdeen | | | | | |
|--------------------------------|-----------------|--------------|----------------------|-----------------------|----------------------|------------------------|-----------------------------|
| Entry | Clone/Variety | Solids | Protein ¹ | Dextrose ² | Sucrose ² | Vitamin C ³ | Glycoalkaloids ⁴ |
| Red/White Flesh | | | | | | | |
| 1 | Chieftain | 19.64 | 0.055 | 0.218 | 5.77 | 26.76 | 6.18 |
| 2 | Red LaSoda | 19.04 | 0.152 | 0.160 | 6.52 | 31.89 | 3.46 |
| Red-Purple/Yellow Flesh | | | | | | | |
| 3 | ATTX05175S-1R/Y | 21.34 | 0.038 | 0.219 | 5.94 | 31.75 | 6.14 |
| 4 | COTX04193S-2R/Y | 19.31 | 0.021 | 0.242 | 6.44 | 25.26 | 0.82 |
| 5 | CO09079-5PW/Y | 18.56 | 0.217 | 0.257 | 6.30 | 29.98 | 4.90 |
| Purple | | | | | | | |
| 6 | Purple Majesty | 20.80 | 0.006 | 0.128 | 4.44 | 26.61 | 4.05 |
| 7 | CO08037-2P/P | 21.00 | 0.022 | 0.202 | 5.76 | 30.73 | 3.46 |
| Yellow Flesh | | | | | | | |
| 8 | Yukon Gold | 23.13 | 0.035 | 0.217 | 6.50 | 42.58 | 3.43 |
| 9 | CO09128-3W/Y | 19.63 | 0.084 | 0.263 | 4.58 | 29.04 | 3.49 |
| 10 | CO09128-5W/Y | 21.58 | 0.015 | 0.170 | 6.30 | 26.80 | 4.52 |
| 11 | CO09218-4W/Y | 16.93 | 0.054 | 0.143 | 6.21 | 15.82 | 4.93 |
| Fingerling | | | | | | | |
| 12 | LaRatte | 19.46 | 0.053 | 0.232 | 7.58 | 25.36 | 5.20 |
| 13 | POR11PG62-3 | 18.46 | 0.041 | 0.156 | 7.89 | 34.62 | 6.07 |
| Mean | | 19.91 | 0.061 | 0.201 | 6.17 | 29.01 | 4.36 |

^{1/} % Dry Weight Basis^{2/} % Fresh Weight Basis^{3/} % Fresh Weight Basis (mg/100g)^{4/} % Fresh Weight Basis (mg/100g), using Lenepe as check with reading of 20.59

Table 21. Entry Location Comments

| Entry | Clone/Variety | Aberdeen, ID | Ontario, OR | Tulelake, CA | Center, CO |
|--------------------------------|-----------------|--|--|--|------------|
| Red/White Flesh | | | | | |
| 1 | Chieftain | (2) | 3 dull, too big, poor color | Nice | |
| 2 | Red LaSoda | Deep eyes, bumps (4); big, not pretty (2) | 2 Irregular Shape, sprouted, 3 lumpy, 2 too big, poor color, 2 dull color, 2 large, misshapen tubers | High amount of powdery scab | |
| Red-Purple/Yellow Flesh | | | | | |
| 3 | ATTX05175S-1R/Y | Uniform, nice shape (2); nice size, few bumps | dull red, colorful | Deep eyes, nice skin color | |
| 4 | COTX04193S-2R/Y | Flat, uniform (4); nice size/shape (3) | dull red, good color | Deep red skin color, prone to shatter bruise | |
| 5 | CO09079-5PW/Y | Fairly consistent color and uniformity (2) some long/oblong | russeted purple, ugly, dull, dull color, sprouted | Dull purple skin, not visually appealing | |
| Purple | | | | | |
| 6 | Purple Majesty | Few misshapen, some elongated (3); few pear, some flat | russet skin, 2 sprouted, dull purple, ugly skin, rough skin | | |
| 7 | CO08037-2P/P | Few ats (2); uniform | nice, | Deep purple skin color, susceptible to black dot | |
| Yellow Flesh | | | | | |
| 8 | Yukon Gold | Flat (3); few misshapen/bumps (2) | greening, irregular shape, 2 too big, sprouted, skin crack | Nice | |
| 9 | CO09128-3W/Y | shape/size | 4 chain, 2 sprouted, Sprouted, Sticky Stem | Pink tinge to skin, prone to shatter bruise | |
| 10 | CO09128-5W/Y | Small, round (4); uniform (2); some russeting/deep ends | 4 Sprouted, growth cracks, Chain | igh % of golf ball size tubers, susceptible to black dot | |
| 11 | CO09218-4W/Y | Uniform, some flat (3); few ats (2) | Chain, 3 chain, 3 sprouted, knobs | Heavy russet for specialty, prone to black dot | |
| Fingerling | | | | | |
| 12 | LaRatte | green | 2 sprouted, 2 Sprouted, chain | | |
| 13 | POR11PG62-3 | Slight brow with a few bulging eyes (3) low yield (2) not consistent color | knobs, colorful | | |

Table 22. Entry Location Comments Continued

| Entry | Clone/Variety | Springlake, TX | Dalhart, TX |
|--------------------------------|-----------------|---|--|
| Red/White Flesh | | | |
| 1 | Chieftain | Nice+, Good Yield, light skin | Nice, Silver scurf, a little flat+ |
| 2 | Red LaSoda | Very deep eyes, heat sprouts, Sticky stolons+, Chain tubers, light skin | Large variation in shape, Some very large tubers, High tuber number |
| Red-Purple/Yellow Flesh | | | |
| 3 | ATTX05175S-1R/Y | bright skin, not uniform size+, Very small++, high tuber set+, a little compressed, Intense skin color+++, not uniform size, Small+, nice flesh skin color combination++, sticky stolons, Chain tubers, Nice, BOT | Parent only, Small, deep eyes, Pleasant skin color |
| 4 | COTX04193S-2R/Y | Light spectacle pattern++, Very small tubers+, Heat sprouts, small, yellow purple skin, Low tuber set, sticky flesh, | Silver scurf++, smooth skin, few eyes, uniform size and shape, small, Vascular Discoloration is red, a little flat |
| 5 | CO09079-5PW/Y | | White skin, no pattern, small, Low tuber number+, Knobs, no PW/Y |
| Purple | | | |
| 6 | Purple Majesty | Very dark skin, oval to oblong, BOT, Pointy, Rough skin, Small, Marble pattern, Nice flesh pattern | Uniform size, flesh has white marbling+, silver scurf+, High yield+, nice shape |
| 7 | CO08037-2P/P | Very dark skin, round, Very few tubers+, round, white center+++, Sticky stolons, small | Uniform shape, 90% with white center+, Noticeable eyebrows, Nice shape, shiny skin, very dark flesh |
| Yellow Flesh | | | |
| 8 | Yukon Gold | Nice, Large tubers+++, heavy, high tuber set, | Bulging eyes, large, snaps, Lenticels, not uniform shape nor size, snaps, Very large KNOBS, large ugly, check seed source |
| 9 | CO09128-3W/Y | Very small+++, late? Intense flesh color, road map | Small+, pointy, Knobs, growth cracks, hard to cut, High tuber number |
| 10 | CO09128-5W/Y | eyes | Internal heat necrosis+++, Smalls++, uniform size+ and shape, round |
| 11 | CO09218-4W/Y | Few tubers+, Heat Sprouts+++, low tuber number, variation for flesh color+, Very small, knobs | Knobs++, linked tubers++, very few tubers+, snaps+, buff skin, attached stolons+ |
| Fingerling | | | |
| 12 | LaRatte | Very small, Attached stolons, Late, few tubers, Heat sprouts+++, linked tubers+++++, Wrinkled, deformed | Smooth skin, very long linked tubers |
| 13 | POR11PG62-3 | It does not look like a fingerling+, splashed skin pattern, late, Knobs, small pink unique pattern+, Small, bulging eye, Nice | Knobs+, wild looking, DUCKS |

Table 23. Postharvest Evaluation Summary

| Clone | Boiled (25 max) | Baked (25 max) | Microwaved (25 max) | Total (75 max) |
|--------------|----------------------------|---------------------------|--------------------------------|---------------------------|
| 9 Yukon Gold | 17.4 | 20.8 | 19.8 | 57.9 |
| 10 A06336-2Y | 17.4 | 19.6 | 18.9 | 55.8 |
| 11 A06336-5Y | 17.1 | 18.8 | 18.8 | 54.7 |

Chipped: Aug. 21

Baked: Aug. 17

Boiled: Aug. 15

Microwaved: Aug. 24

Cooking Time: Aug. 11

Table 24. Summary Means

| Entry | Clone/Variety | Year | Yield Summary ¹ | | | | | | | Quality | | |
|--------------------------------|-----------------|------|----------------------------|---------|----------|----------|---------|-------|-------|-------------------------|----------------|-----------------------------|
| | | | <4 oz. | 4-6 oz. | 6-10 oz. | 4-10 oz. | >10 oz. | Culls | Total | Tuber Size oz./tuber | Spec. grav. | Fresh Merit ² |
| Red/White Flesh | | | | | | | | | | | | |
| 1 | Chieftain | *** | 64 | 118 | 143 | 289 | 131 | 10 | 494 | 5.4 | 1.073 | 3.5 |
| 2 | Red LaSoda | *** | 46 | 80 | 123 | 221 | 273 | 32 | 572 | 6.7 | 1.074 | 2.6 |
| Red-Purple/Yellow Flesh | | | | | | | | | | | | |
| 3 | ATX05175S-1R/Y | 1 | | | | | | | | | | |
| 4 | COTX04193S-2R/Y | 1 | 175 | 90 | 32 | 133 | 3 | 7 | 353 | 2.6 | 1.070 | 3.7 |
| 5 | CO09079-5PW/Y | 1 | 224 | 38 | 7 | 66 | 1 | 8 | 300 | 2.0 | 1.070 | 3.0 |
| Purple | | | | | | | | | | | | |
| 6 | Purple Majesty | *** | 202 | 92 | 46 | 177 | 13 | 24 | 416 | 2.4 | 1.078 | 3.8 |
| 7 | CO08037-2P/P | 1 | 139 | 83 | 31 | 147 | 13 | 3 | 302 | 2.9 | 1.077 | 3.3 |
| Yellow Flesh | | | | | | | | | | | | |
| 8 | Yukon Gold | *** | 43 | 69 | 94 | 189 | 114 | 18 | 364 | 6.2 | 1.081 | 3.2 |
| 9 | CO09128-3W/Y | 1 | 223 | 32 | 8 | 44 | 0 | 24 | 292 | 1.7 | 1.071 | 3.0 |
| 10 | CO09128-5W/Y | 1 | 259 | 44 | 5 | 56 | 1 | 22 | 338 | 1.9 | 1.082 | 3.4 |
| 11 | CO09218-4W/Y | 1 | 153 | 68 | 22 | 136 | 9 | 16 | 315 | 2.3 | 1.071 | 3.4 |
| Fingerling | | | | | | | | | | | | |
| 12 | LaRatte | *** | 165 | 15 | 5 | 37 | 8 | 38 | 253 | 1.1 | 1.072 | 3.4 |
| 13 | POR11PG62-3 | 1 | 143 | 17 | 1 | 33 | 10 | 39 | 229 | 1.6 | 1.076 | 2.9 |
| Mean | | | 175 | 49 | 36 | 96 | 38 | 21 | 331 | 3.2 | 1.078 | 3.2 |

^{1/}Mean weight fractions do not equal total average because some locations do not take measurements for all criteria.

^{2/}Scale = 1-5 best

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