

CHAPTER 2. EARLY-LINE FRESH MARKET POTATO VARIETY TRIAL, 2002

General Comments

Potato clones in this trial are new to the variety evaluation program. At this stage, seed supplies are usually limited. To maintain a replicated trial with a small seed lot, plot length is reduced to eight feet. This is a mixed trial with round white, red, and russet varieties.

Planting Information

Planting Site	Hastings REC, Yelvington Farm, Hastings, FL
Planting Date	January 30, 2002
Vine Kill Date	May 10, 2002
Harvest Date	May 21, 2002
Season Length	100 days
Fertilizer Program	preplant, 80-11-68 lb/A; sidedress (twice), 60-8-51 lb/A
Irrigation Program	seepage

Experimental Design

Number of Varieties	10 (Standard: LaChipper, Red LaSoda, Russet Norkotah)
Number of Clones	38
Within Row Spacing	12 in (30.5 cm)
Between Row Spacing	40 in (102 cm)
Replications	4
Plot Size	8 ft (2.4 m)

Production Statistics

Early Vigor Ratings	44 days after planting
Highest Total Yield	AF2290-8 (496 cwt/acre or 55.6 MT/ha)
Highest Marketable Yield	Pontiac (414 cwt/acre or 46.4 MT/ha)
Best Appearance Rating	AF2285-5 (7.7, good to excellent)

Specific Comments

LaChipper (MFX). LaChipper total and marketable tuber yields were 383 and 363 cwt/acre, respectively. Potato tuber skin color was white with a moderately smooth to smooth texture. Tuber flesh color was white to cream. Tuber shape was rated as ‘mostly round’ to ‘round to oblong’ with an eye depth of intermediate to shallow. Overall external tuber appearance was noted as good. Early plant vigor (size) was rated as 6 to 8 inches. Vine type at full flower was rated as spreading to upright with a good canopy. Plant maturity at harvest was rated as yellow and dying to completely dead. Average specific gravity for LaChipper tubers was 1.072.

Chieftain (MFX). Chieftain total and marketable tuber yields were 301 and 272 cwt/acre, respectively. Potato tuber skin color was pink to red with a slightly netted to moderately smooth texture. Tuber flesh color was white. Tuber shape was rated as ‘mostly round’ to ‘oblong’ with an eye depth of intermediate to shallow. Overall external tuber appearance was noted as fair to good. Early plant vigor (size) was rated as 4 to 6 inches. Vine type at full flower was rated as upright with a poor to fair canopy. Plant maturity at harvest was rated as yellow and dying to completely dead. Average specific gravity for Chieftain tubers was 1.057.

LaRouge (MFX). LaRouge total and marketable tuber yields were 397 and 344 cwt/acre, respectively. Potato tuber skin color was pink to red with a moderately smooth to smooth texture. Tuber flesh color was white. Tuber shape was rated as ‘round to oblong’ with an eye depth of intermediate to deep. Overall external tuber appearance was noted as fair to good. Early plant vigor (size) was rated as 6 to 8 inches. Vine type at full flower was rated as spreading to upright with a good canopy. Plant maturity at harvest was rated as yellow and dying. Average specific gravity for LaRouge tubers was 1.063.

Michigan Purple (MFX). Michigan Purple total and marketable tuber yields were 414 and 386 cwt/acre, respectively. Potato tuber skin color was purple with a moderately smooth to smooth texture. Tuber flesh color was white. Tuber shape was rated as ‘round to oblong’ to ‘mostly oblong’ with an eye depth of intermediate to deep. Overall external tuber appearance was noted as fair to good. Early plant vigor (size) was rated as 4 to 6 inches. Vine type at full flower was rated as spreading to upright with a fair canopy. Plant maturity at harvest was rated as moderately mature to yellow and dying. Average specific gravity for Michigan Purple tubers was 1.065.

Pontiac (MFX). Pontiac total and marketable tuber yields were 480 and 414 cwt/acre, respectively. Potato tuber skin color was pink to red with a slightly netted to moderately smooth texture. Tuber flesh color was white. Tuber shape was rated as ‘round to oblong’ with an eye depth of intermediate to deep. Overall external tuber appearance was noted as fair. Early plant vigor (size) was rated as 8 to 10 inches. Vine type at full flower was rated as spreading to upright with a good canopy. Plant maturity at harvest was rated as yellow and dying. Average specific gravity for Pontiac tubers was 1.059.

Red Companion (MFX). Red Companion total and marketable tuber yields were 242 and 210 cwt/acre, respectively. Potato tuber skin color was pink to red with a moderately smooth to smooth texture. Tuber flesh color was white. Tuber shape was rated as ‘mostly round’ to ‘round to oblong’ with an eye depth of intermediate to shallow. Overall external tuber appearance was noted as fair to good. Early plant vigor (size) was rated as 6 to 8 inches. Vine type at full flower was rated as upright with a poor to fair canopy. Plant maturity at harvest was rated as yellow and dying to completely dead. Average specific gravity for Red Companion tubers was 1.063.

Red LaSoda (MFX). Red LaSoda total and marketable tuber yields were 401 and 363 cwt/acre, respectively. Potato tuber skin color was pink to red with a moderately smooth to smooth texture. Tuber flesh color was white. Tuber shape was rated as ‘mostly round’ to ‘round to oblong’ with an eye depth of intermediate to deep. Overall external tuber appearance was noted as fair. Early plant vigor (size) was rated as 6 to 8 inches. Vine type at full flower was rated as spreading to upright with a good canopy. Plant maturity at harvest was rated as yellow and dying to completely dead. Average specific gravity for Red LaSoda tubers was 1.062.

Sebago (MFX). Sebago total and marketable tuber yields were 392 and 329 cwt/acre, respectively. Potato tuber skin color was brown to tan with a slightly netted to moderately smooth texture. Tuber flesh color was

white to cream. Tuber shape was rated as 'round to oblong' to 'mostly oblong' with an eye depth of intermediate to shallow. Overall external tuber appearance was noted as fair to good. Early plant vigor (size) was rated as 8 to 10 inches. Vine type at full flower was rated as spreading to upright with a good canopy. Plant maturity at harvest was rated as moderately mature to yellow and dying. Average specific gravity for Sebago tubers was 1.059.

Snowden (MFX). Snowden total and marketable tuber yields were 383 and 352 cwt/acre, respectively. Potato tuber skin color was tan to buff with a slightly netted to netted texture. Tuber flesh color was white. Tuber shape was rated as 'mostly round' with an eye depth of intermediate to shallow. Overall external tuber appearance was noted as fair. Early plant vigor (size) was rated as 6 to 8 inches. Vine type at full flower was rated as spreading to upright with a good canopy. Plant maturity at harvest was rated as moderately mature to yellow and dying. Average specific gravity for Snowden tubers was 1.074.

Yukon Gold (MFX). Yukon Gold total and marketable tuber yields were 358 and 315 cwt/acre, respectively. Potato tuber skin color was buff to white with a moderately smooth texture. Tuber flesh color was light to medium yellow. Tuber shape was rated as 'round to oblong' with an eye depth of intermediate to shallow. Overall external tuber appearance was noted as fair to good. Early plant vigor (size) was rated as 4 to 6 inches. Vine type at full flower was rated as upright with a poor to fair canopy. Plant maturity at harvest was rated as yellow and dying to completely dead. Average specific gravity for Yukon Gold tubers was 1.072.

AF2280-5 (UM). AF2280-5 total and marketable tuber yields were 322 and 203 cwt/acre, respectively. Potato tuber skin color was brown with a moderately moderate to heavy russet texture. Tuber flesh color was white to cream. Tuber shape was rated as 'oblong to long' with an eye depth of shallow to very shallow. Overall external tuber appearance was noted as fair to good. Early plant vigor (size) was rated as 6 to 8 inches. Vine type at full flower was rated as spreading to upright with a good canopy. Plant maturity at harvest was rated as yellow and dying to completely dead. Average specific gravity for AF2280-5 tubers was 1.068.

AF2285-5 (UM). AF2285-5 total and marketable tuber yields were 290 and 207 cwt/acre, respectively. Potato tuber skin color was brown with a moderate to heavy russet texture. Tuber flesh color was white. Tuber shape was rated as 'oblong to long' with an eye depth of shallow to very shallow. Overall external tuber appearance was noted as fair to good. Early plant vigor (size) was rated as 6 to 8 inches. Vine type at full flower was rated as upright with a fair canopy. Plant maturity at harvest was rated as yellow and dying to completely dead. Average specific gravity for AF2285-5 tubers was 1.065.

AF2290-8 (UM). AF2290-8 total and marketable tuber yields were 496 and 402 cwt/acre, respectively. Potato tuber skin color was buff to white with a moderately smooth texture. Tuber flesh color was white. Tuber shape was rated as 'mostly oblong' to 'oblong' with an eye depth of intermediate to shallow. Overall external tuber appearance was noted as fair to good. Early plant vigor (size) was rated as 6 to 8 inches. Vine type at full flower was rated as spreading to upright with a good canopy. Plant maturity at harvest was rated as moderately mature to yellow and dying. Average specific gravity for AF2290-8 tubers was 1.056.

AF2305-1 (UM). AF2305-1 total and marketable tuber yields were 216 and 150 cwt/acre, respectively. Potato tuber skin color was buff to white with a moderately smooth texture. Tuber flesh color was white. Tuber shape was rated as 'oblong to long' with an eye depth of shallow to very shallow. Overall external tuber appearance was noted as poor to fair. Early plant vigor (size) was rated as 6 to 8 inches. Vine type at full flower was rated as upright with a poor to fair canopy. Plant maturity at harvest was rated as yellow and dying to completely dead. Average specific gravity for AF2305-1 tubers was 1.069.

AF2314-1 (UM). AF2314-1 total and marketable tuber yields were 245 and 181 cwt/acre, respectively. Potato tuber skin color was brown to tan with a moderately russet texture. Tuber flesh color was white. Tuber shape was rated as 'oblong to long' to 'mostly long' with an eye depth of shallow to very shallow. Overall external tuber appearance was noted as fair to good. Early plant vigor (size) was rated as 6 to 8 inches. Vine type at full flower was rated as upright with a poor canopy. Plant maturity at harvest was rated as yellow and dying. Average specific gravity for AF2314-1 tubers was 1.067.

AF2314-2 (UM). AF2314-2 total and marketable tuber yields were 310 and 260 cwt/acre, respectively. Potato tuber skin color was tan to buff with a slightly netted to netted texture. Tuber flesh color was white. Tuber shape was rated as ‘oblong to long’ to ‘mostly long’ with an eye depth of shallow to very shallow. Overall external tuber appearance was noted as fair to good. Early plant vigor (size) was rated as 4 to 6 inches. Vine type at full flower was rated as spreading to upright with a good canopy. Plant maturity at harvest was rated as moderately mature to yellow and dying. Average specific gravity for AF2314-2 tubers was 1.069.

AF2321-3 (UM). AF2321-3 total and marketable tuber yields were 246 and 220 cwt/acre, respectively. Potato tuber skin color was buff to white with a slightly netted to moderately smooth texture. Tuber flesh color was white. Tuber shape was rated as ‘round to oblong’ with an eye depth of shallow. Overall external tuber appearance was noted as fair to good. Early plant vigor (size) was rated as 6 to 8 inches. Vine type at full flower was rated as spreading to upright with a fair canopy. Plant maturity at harvest was rated as moderately mature to yellow and dying. Average specific gravity for AF2321-3 tubers was 1.066.

AF2321-4 (UM). AF2321-4 total and marketable tuber yields were 166 and 145 cwt/acre, respectively. Potato tuber skin color was buff to white with a slightly netted to moderately smooth texture. Tuber flesh color was white. Tuber shape was rated as ‘mostly round’ to ‘round to oblong’ with an eye depth of intermediate to shallow. Overall external tuber appearance was noted as fair. Early plant vigor (size) was rated as less than 2 inches. Vine type at full flower was rated as upright with a poor canopy. Plant maturity at harvest was rated as moderately mature to yellow and dying. Average specific gravity for AF2321-4 tubers was 1.065.

AF2321-5 (UM). AF2321-5 total and marketable tuber yields were 248 and 235 cwt/acre, respectively. Potato tuber skin color was buff to white with a slightly netted to moderately smooth texture. Tuber flesh color was white. Tuber shape was rated as ‘mostly round’ to ‘round to oblong’ with an eye depth of intermediate to shallow. Overall external tuber appearance was noted as poor to fair. Early plant vigor (size) was rated as 4 to 6 inches. Vine type at full flower was rated as upright with a poor to fair canopy. Plant maturity at harvest was rated as moderately mature to yellow and dying. Average specific gravity for AF2321-5 tubers was 1.064.

AF2321-6 (UM). AF2321-6 total and marketable tuber yields were 238 and 212 cwt/acre, respectively. Potato tuber skin color was buff to white with a slightly netted to moderately smooth texture. Tuber flesh color was white. Tuber shape was rated as ‘mostly round’ to ‘round to oblong’ with an eye depth of intermediate to shallow. Overall external tuber appearance was noted as fair. Early plant vigor (size) was rated as 2 to 4 inches. Vine type at full flower was rated as upright with a poor to fair canopy. Plant maturity at harvest was rated as moderately mature to yellow and dying. Average specific gravity for AF2321-6 tubers was 1.068.

AF2322-1 (UM). AF2322-1 total and marketable tuber yields were 321 and 265 cwt/acre, respectively. Potato tuber skin color was white with a moderately smooth to smooth texture. Tuber flesh color was white. Tuber shape was rated as ‘mostly round’ to ‘round to oblong’ with an eye depth of shallow. Overall external tuber appearance was noted as fair to good. Early plant vigor (size) was rated as 6 to 8 inches. Vine type at full flower was rated as spreading to upright with a fair canopy. Plant maturity at harvest was rated as yellow and dying to completely dead. Average specific gravity for AF2322-1 tubers was 1.062.

AF2322-4 (UM). AF2322-4 total and marketable tuber yields were 267 and 198 cwt/acre, respectively. Potato tuber skin color was buff to white with a moderately smooth to smooth texture. Tuber flesh color was white. Tuber shape was rated as ‘mostly round’ to ‘round to oblong’ with an eye depth of shallow. Overall external tuber appearance was noted as fair to good. Early plant vigor (size) was rated as 4 to 6 inches. Vine type at full flower was rated as spreading to upright with a poor canopy. Plant maturity at harvest was rated as yellow and dying to completely dead. Average specific gravity for AF2322-4 tubers was 1.063.

AF2322-5 (UM). AF2322-5 total and marketable tuber yields were 370 and 273 cwt/acre, respectively. Potato tuber skin color was buff to white with a slightly netted to moderately smooth texture. Tuber flesh color was white to cream. Tuber shape was rated as ‘round to oblong’ with an eye depth of intermediate to shallow. Overall external tuber appearance was noted as poor to fair. Early plant vigor (size) was rated as 6 to 8 inches. Vine type at full flower was rated as spreading to upright with a fair canopy. Plant maturity at harvest was rated as yellow and dying. Average specific gravity for AF2322-5 tubers was 1.056.

AF2326-1 (UM). AF2326-1 total and marketable tuber yields were 334 and 266 cwt/acre, respectively. Potato tuber skin color was buff to white with a slightly netted to moderately smooth texture. Tuber flesh color was white. Tuber shape was rated as ‘round to oblong’ to ‘mostly oblong’ with an eye depth of intermediate to shallow. Overall external tuber appearance was noted as fair to good. Early plant vigor (size) was rated as 6 to 8 inches. Vine type at full flower was rated as spreading to upright with a fair canopy. Plant maturity at harvest was rated as yellow and dying to completely dead. Average specific gravity for AF2326-1 tubers was 1.071.

AF2329-1 (UM). AF2329-1 total and marketable tuber yields were 253 and 206 cwt/acre, respectively. Potato tuber skin color was buff to white with a slightly netted to moderately smooth texture. Tuber flesh color was white. Tuber shape was rated as ‘mostly round’ to ‘round to oblong’ with an eye depth of intermediate to shallow. Overall external tuber appearance was noted as poor to fair. Early plant vigor (size) was rated as less than 2 inches. Vine type at full flower was rated as upright with a poor to fair canopy. Plant maturity at harvest was rated as moderately mature to yellow and dying. Average specific gravity for AF2329-1 tubers was 1.048.

AF2339-3 (UM). AF2339-3 total and marketable tuber yields were 212 and 174 cwt/acre, respectively. Potato tuber skin color was buff to white with a slightly netted to moderately smooth texture. Tuber flesh color was white. Tuber shape was rated as ‘round to oblong’ with an eye depth of intermediate to shallow. Overall external tuber appearance was noted as poor to fair. Early plant vigor (size) was rated as 6 to 8 inches. Vine type at full flower was rated as spreading to upright with a poor canopy. Plant maturity at harvest was rated as yellow and dying. Average specific gravity for AF2339-3 tubers was 1.072.

AF2351-6 (UM). AF2351-6 total and marketable tuber yields were 427 and 374 cwt/acre, respectively. Potato tuber skin color was buff to white with a moderately smooth texture. Tuber flesh color was white to cream. Tuber shape was rated as ‘mostly round’ with an eye depth of intermediate to shallow. Overall external tuber appearance was noted as poor to fair. Early plant vigor (size) was rated as 2 to 4 inches. Vine type at full flower was rated as spreading to upright with a good canopy. Plant maturity at harvest was rated as moderately mature to yellow and dying. Average specific gravity for AF2351-6 tubers was 1.068.

AF2353-1 (UM). AF2353-1 total and marketable tuber yields were 391 and 300 cwt/acre, respectively. Potato tuber skin color was buff to white with a slightly netted texture. Tuber flesh color was light to medium yellow. Tuber shape was rated as ‘mostly round’ with an eye depth of intermediate to shallow. Overall external tuber appearance was noted as poor to fair. Early plant vigor (size) was rated as 2 to 4 inches. Vine type at full flower was rated as upright with a fair to good canopy. Plant maturity at harvest was rated as starting to mature to moderately mature. Average specific gravity for AF2353-1 tubers was 1.065.

AF2360-2 (UM). AF2360-2 total and marketable tuber yields were 441 and 339 cwt/acre, respectively. Potato tuber skin color was white with a slightly netted to moderately smooth texture. Tuber flesh color was white. Tuber shape was rated as ‘mostly round’ to ‘round to oblong’ with an eye depth of intermediate to shallow. Overall external tuber appearance was noted as fair to good. Early plant vigor (size) was rated as 6 to 8 inches. Vine type at full flower was rated as spreading to upright with a good canopy. Plant maturity at harvest was rated as moderately mature to yellow and dying. Average specific gravity for AF2360-2 tubers was 1.066.

AF2363-9 (UM). AF2363-9 total and marketable tuber yields were 236 and 177 cwt/acre, respectively. Potato tuber skin color was buff to white with a slightly netted to moderately smooth texture. Tuber flesh color was white to cream. Tuber shape was rated as ‘mostly round’ to ‘round to oblong’ with an eye depth of intermediate to shallow. Overall external tuber appearance was noted as fair. Early plant vigor (size) was rated as 2 to 4 inches. Vine type at full flower was rated as spreading to upright with a fair canopy. Plant maturity at harvest was rated as moderately mature to yellow and dying. Average specific gravity for AF2363-9 tubers was 1.076.

B1806-8 (USDA). B1806-8 total and marketable tuber yields were 380 and 330 cwt/acre, respectively. Potato tuber skin color was white with a slightly netted to moderately smooth texture. Tuber flesh color was cream to light yellow. Tuber shape was rated as ‘round to oblong’ with an eye depth of shallow. Overall external tuber appearance was noted as fair to good. Early plant vigor (size) was rated as 6 to 8 inches. Vine type at full flower was rated as spreading to upright with a good canopy. Plant maturity at harvest was rated as yellow and dying. Average specific gravity for B1806-8 tubers was 1.073.

B2024-10 (USDA). B2024-10 total and marketable tuber yields were 445 and 401 cwt/acre, respectively. Potato tuber skin color was buff to white with a slightly netted texture. Tuber flesh color was light yellow. Tuber shape was rated as ‘round to oblong’ to ‘mostly oblong’ with an eye depth of shallow to very shallow. Overall external tuber appearance was noted as fair to good. Early plant vigor (size) was rated as 6 to 8 inches. Vine type at full flower was rated as spreading to upright with a good canopy. Plant maturity at harvest was rated as moderately mature to yellow and dying. Average specific gravity for B2024-10 tubers was 1.070.

B2024-26 (USDA). B2024-26 total and marketable tuber yields were 411 and 370 cwt/acre, respectively. Potato tuber skin color was buff with a netted to slightly netted texture. Tuber flesh color was cream to light yellow. Tuber shape was rated as ‘mostly round’ to ‘round to oblong’ with an eye depth of shallow to very shallow. Overall external tuber appearance was noted as fair to good. Early plant vigor (size) was rated as 4 to 6 inches. Vine type at full flower was rated as upright with a good canopy. Plant maturity at harvest was rated as moderately mature to yellow and dying. Average specific gravity for B2024-26 tubers was 1.073.

B2066-3 (USDA). B2066-3 total and marketable tuber yields were 214 and 189 cwt/acre, respectively. Potato tuber skin color was red with a moderately smooth to smooth texture. Tuber flesh color was light yellow. Tuber shape was rated as ‘mostly round’ to ‘round to oblong’ with an eye depth of intermediate to shallow. Overall external tuber appearance was noted as fair to good. Early plant vigor (size) was rated as 2 to 4 inches. Vine type at full flower was rated as spreading to upright with a poor canopy. Plant maturity at harvest was rated as yellow and dying to completely dead. Average specific gravity for B2066-3 tubers was 1.072.

B2078-1 (USDA). B2078-1 total and marketable tuber yields were 263 and 235 cwt/acre, respectively. Potato tuber skin color was red with a slightly netted to moderately smooth texture. Tuber flesh color was white to cream. Tuber shape was rated as ‘mostly round’ to ‘round to oblong’ with an eye depth of intermediate. Overall external tuber appearance was noted as fair to good. Early plant vigor (size) was rated as 6 to 8 inches. Vine type at full flower was rated as upright with a poor to fair canopy. Plant maturity at harvest was rated as yellow and dying to completely dead. Average specific gravity for B2078-1 tubers was 1.069.

B2078-5 (USDA). B2078-5 total and marketable tuber yields were 307 and 242 cwt/acre, respectively. Potato tuber skin color was red with a moderately smooth to smooth texture. Tuber flesh color was white to cream. Tuber shape was rated as ‘mostly round’ to ‘round to oblong’ with an eye depth of intermediate to shallow. Overall external tuber appearance was noted as fair to good. Early plant vigor (size) was rated as 4 to 6 inches. Vine type at full flower was rated as upright with a poor to fair canopy. Plant maturity at harvest was rated as yellow and dying to completely dead. Average specific gravity for B2078-5 tubers was 1.067.

B2078-13 (USDA). B2078-13 total and marketable tuber yields were 193 and 169 cwt/acre, respectively. Potato tuber skin color was red with a slightly netted to moderately smooth texture. Tuber flesh color was white. Tuber shape was rated as ‘mostly round’ to ‘round to oblong’ with an eye depth of intermediate to shallow. Overall external tuber appearance was noted as fair to good. Early plant vigor (size) was rated as 2 to 4 inches. Vine type at full flower was rated as upright with a poor to fair canopy. Plant maturity at harvest was rated as yellow and dying to completely dead. Average specific gravity for B2078-13 tubers was 1.074.

B2079-6 (USDA). B2079-6 total and marketable tuber yields were 135 and 96 cwt/acre, respectively. Potato tuber skin color was red with a moderately smooth texture. Tuber flesh color was white to cream. Tuber shape was rated as ‘round’ to ‘mostly round’ with an eye depth of intermediate to shallow. Overall external tuber appearance was noted as fair to good. Early plant vigor (size) was rated as 10 to 12 inches. Vine type at full flower was rated as upright with a poor to fair canopy. Plant maturity at harvest was rated as completely dead. Average specific gravity for B2079-6 tubers was 1.061.

B2079-7 (USDA). B2079-7 total and marketable tuber yields were 17 and 8 cwt/acre, respectively. Production information is not available. B0279-7 was severely sensitive to metribuzin and died prior to harvest.

B2095-1 (USDA). B2095-1 total and marketable tuber yields were 165 and 149 cwt/acre, respectively. Potato tuber skin color was buff to white with a moderately smooth to smooth texture. Tuber flesh color was light yellow. Tuber shape was rated as ‘round’ to ‘mostly round’ with an eye depth of intermediate to shallow. Overall external tuber appearance was noted as fair to good. Early plant vigor (size) was rated as 6 to 8 inches.

Vine type at full flower was rated as spreading to upright with a poor canopy. Plant maturity at harvest was rated as yellow and dying to completely dead. Average specific gravity for B2095-1 tubers was 1.070.

B2098-1 (USDA). B2098-1 total and marketable tuber yields were 376 and 327 cwt/acre, respectively. Potato tuber skin color was red with a netted to slightly netted texture. Tuber flesh color was white. Tuber shape was rated as ‘mostly round’ to ‘round to oblong’ with an eye depth of intermediate to shallow. Overall external tuber appearance was noted as poor to fair. Early plant vigor (size) was rated as 6 to 8 inches. Vine type at full flower was rated as spreading to upright with a good canopy. Plant maturity at harvest was rated as moderately mature to yellow and dying. Average specific gravity for B2098-1 tubers was 1.060.

B2098-8 (USDA). B2098-8 total and marketable tuber yields were 257 and 222 cwt/acre, respectively. Potato tuber skin color was red with a moderately smooth to smooth texture. Tuber flesh color was white to cream. Tuber shape was rated as ‘round to oblong’ to ‘mostly oblong’ with an eye depth of intermediate to shallow. Overall external tuber appearance was noted as poor to fair. Early plant vigor (size) was rated as 8 to 10 inches. Vine type at full flower was rated as upright with a poor to fair canopy. Plant maturity at harvest was rated as yellow and dying. Average specific gravity for B2098-8 tubers was 1.068.

B2098-11 (USDA). B2098-11 total and marketable tuber yields were 263 and 222 cwt/acre, respectively. Potato tuber skin color was red with a slightly netted to moderately smooth texture. Tuber flesh color was white. Tuber shape was rated as ‘mostly round’ to ‘round to oblong’ with an eye depth of intermediate to shallow. Overall external tuber appearance was noted as poor to fair. Early plant vigor (size) was rated as 8 to 10 inches. Vine type at full flower was rated as spreading to upright with a fair canopy. Plant maturity at harvest was rated as yellow and dying to completely dead. Average specific gravity for B2098-11 tubers was 1.065.

B2100-2 (USDA). B2100-2 total and marketable tuber yields were 294 and 245 cwt/acre, respectively. Potato tuber skin color was red to pink with a slightly netted to moderately smooth texture. Tuber flesh color was white to cream. Tuber shape was rated as ‘round to oblong’ with an eye depth of intermediate to shallow. Overall external tuber appearance was noted as fair. Early plant vigor (size) was rated as 4 to 6 inches. Vine type at full flower was rated as spreading to upright with a poor canopy. Plant maturity at harvest was rated as yellow and dying to completely dead. Average specific gravity for B2100-2 tubers was 1.064.

B2100-8 (USDA). B2100-8 total and marketable tuber yields were 322 and 290 cwt/acre, respectively. Potato tuber skin color was red with a slightly netted to moderately smooth texture. Tuber flesh color was cream to light yellow. Tuber shape was rated as ‘mostly round’ with an eye depth of intermediate to shallow. Overall external tuber appearance was noted as fair to good. Early plant vigor (size) was rated as 8 to 10 inches. Vine type at full flower was rated as spreading to upright with a fair canopy. Plant maturity at harvest was rated as yellow and dying to completely dead. Average specific gravity for B2100-8 tubers was 1.064.

B2125-156 (USDA). B2125-156 total and marketable tuber yields were 137 and 62 cwt/acre, respectively. External and internal tuber quality rating are not available. Early plant vigor (size) was rated as 4 to 6 inches. Vine type at full flower was rated as spreading to upright with a fair canopy. Plant maturity at harvest was rated as moderately mature to yellow and dying. Average specific gravity for B2125-156 tubers was 1.076.

B2125-163 (USDA). B2125-163 total and marketable tuber yields were 257 and 209 cwt/acre, respectively. Potato tuber skin color was tan to buff with a slightly netted texture. Tuber flesh color was white. Tuber shape was rated as ‘mostly round’ to ‘round to oblong’ with an eye depth of intermediate to shallow. Overall external tuber appearance was noted as fair to good. Early plant vigor (size) was rated as 6 to 8 inches. Vine type at full flower was rated as spreading to upright with a fair canopy. Plant maturity at harvest was rated as moderately mature to yellow and dying. Average specific gravity for B2125-163 tubers was 1.068.

W1355-1 (UW). W1355-1 total and marketable tuber yields were 114 and 94 cwt/acre, respectively. Potato tuber skin color was tan to buff with a netted to slightly netted texture. Tuber flesh color was white. Tuber shape was rated as ‘mostly round’ to ‘round to oblong’ with an eye depth of intermediate to shallow. Overall external tuber appearance was noted as poor to fair. Early plant vigor (size) was rated as 6 to 8 inches. Vine

type at full flower was rated as spreading to upright with a fair canopy. Plant maturity at harvest was rated as moderately mature to yellow and dying. Average specific gravity for W1355-1 tubers was 1.067.

Table 3. Production statistics for Early-Line Fresh Market potato selections.

Clone	Total Yield (cwt/A)	Marketable Yield ¹		Size					Size Class		Specific Gravity
		(cwt/A)	% of standard	Distribution by Class (%) ²					Range (%)		
				1	2	3	4	5	2 to 4	3 to 4	
LaChipper	383	363	100	2	39	55	4	0	98	58	1.072
Chieftain	301	272	75	4	61	35	1	0	96	35	1.057
LaRouge	397	344	95	4	43	50	4	0	96	54	1.063
Michigan Purple	414	386	106	2	34	47	17	0	98	65	1.065
Pontiac	480	414	114	1	23	52	24	0	99	76	1.059
Red Companion	242	210	58	11	80	9	0	0	89	8	1.063
Red LaSoda	401	363	100	2	40	51	5	1	96	56	1.062
Sebago	392	329	91	4	31	48	18	0	96	66	1.059
Snowden	383	352	97	2	56	38	4	0	98	44	1.074
Yukon Gold	358	315	87	2	28	60	10	0	98	70	1.072
AF2280-5	322	203	56	32	68	0	0	0	71	0	1.068
AF2285-5	290	207	57	15	85	0	0	0	84	0	1.065
AF2290-8	496	402	111	8	40	38	14	0	92	52	1.056
AF2305-1	216	150	41	13	86	2	0	0	87	2	1.069
AF2314-1	245	181	50	14	86	0	0	0	87	0	1.067
AF2314-2	310	260	72	6	88	6	0	0	94	6	1.069
AF2321-3	246	220	60	3	57	37	4	0	97	41	1.066
AF2321-4	166	145	40	6	70	22	2	0	94	24	1.065
AF2321-5	248	235	65	2	38	44	15	0	98	64	1.064
AF2321-6	238	212	58	2	32	45	22	0	99	66	1.068

Table 3 (cont'd). Production statistics for Early-Line Fresh Market potato selections.

Clone	Total Yield (cwt/A)	Marketable Yield ¹		Size					Size Class		Specific Gravity
		(cwt/A)	% of standard	Distribution by Class (%) ²					Range (%)		
				1	2	3	4	5	2 to 4	3 to 4	
AF2322-1	321	265	73	18	53	28	2	0	84	30	1.062
AF2322-4	267	198	55	19	78	3	0	0	81	3	1.063
AF2322-5	370	273	75	2	30	55	13	0	99	69	1.056
AF2326-1	334	266	73	4	64	31	2	0	96	33	1.071
AF2329-1	253	206	57	3	32	47	18	0	97	65	1.048
AF2339-3	212	174	48	10	85	5	0	0	90	4	1.072
AF2351-6	427	374	103	3	25	44	28	0	97	72	1.068
AF2353-1	391	300	82	3	22	44	29	3	95	73	1.065
AF2360-2	441	339	93	2	13	44	41	0	99	85	1.066
AF2363-9	236	177	49	2	38	41	19	0	98	61	1.076
B1806-8	380	330	91	6	50	38	6	0	94	45	1.073
B2024-10	445	401	110	2	41	46	11	0	98	56	1.070
B2024-26	411	370	102	2	42	50	6	0	98	56	1.073
B2066-3	214	189	52	10	88	2	0	0	90	2	1.072
B2078-1	263	235	65	7	73	19	1	0	93	21	1.069
B2078-5	307	242	66	15	80	5	0	0	86	5	1.067
B2078-13	193	169	47	8	71	20	0	0	93	21	1.074
B2079-6	135	96	26	28	72	1	0	0	74	1	1.061
B2079-7	17	8	2	48	52	0	0	0	48	0	1.058
B2095-1	165	149	41	8	68	21	3	0	92	25	1.070

Table 3 (cont'd). Production statistics for Early-Line Fresh Market potato selections.

Clone	Total Yield (cwt/A)	Marketable Yield ¹		Size					Size Class		Specific Gravity
		(cwt/A)	% of standard	Distribution by Class (%) ²					Range (%)		
				1	2	3	4	5	2 to 4	3 to 4	
B2098-1	376	327	90	5	56	38	2	0	95	40	1.060
B2098-8	257	222	61	9	60	24	9	0	92	31	1.068
B2098-11	263	222	61	6	78	16	0	0	94	16	1.065
B2100-2	294	245	67	6	67	27	0	0	94	27	1.064
B2100-8	322	290	80	8	83	10	0	0	92	10	1.064
B2125-156	137	62	17	54	46	0	0	0	46	0	1.076
B2135-163	257	209	57	3	33	47	17	0	97	66	1.068
W1355-1	114	94	26	14	81	4	1	0	86	13	1.067
<i>LSD</i> ³	63	63		8.5	15.2	13.7	12.6	1.0	8.6	14.5	0.005
<i>P Value</i>	0.0001	0.0001		0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001

¹Marketable Yield: size classes 2 to 4

²Size classes: 1 = <1 7/8", 2 = 1 7/8 to 2.5", 3 = 2.5 to 3.25", 4 = 3.25 to 4", 5 = >4"

³Means separated within columns by Waller-Duncans k - ratio t test.

Table 4. Plant growth and tuber characteristics of Early-Line Fresh Market potato selections.

Clone	Plant Growth Characteristics ¹				Tuber Characteristics ¹					
	% Stand	Early Vigor	Vine Type	Vine Maturity	IFC	SC	ST	TS	ED	APP
LaChipper	100	6.0	6-9	2.5	1.7	8.0	7.3	2.3	5.7	7.0
Chieftain	100	5.0	7-8	3.5	1.0	2.7	6.7	2.3	5.7	5.3
LaRouge	100	6.3	6-9	3.0	1.0	2.3	7.3	3.0	4.3	5.3
Michigan Purple	97	5.3	8-5	3.5	1.0	1.0	7.3	3.7	4.7	6.0
Pontiac	100	6.5	9-6	3.0	1.0	2.7	6.7	3.0	4.0	5.0
Red Companion	100	6.0	7-8	2.5	1.0	2.3	7.3	2.7	6.0	6.0
Red LaSoda	100	6.0	9-6	2.8	1.0	2.7	7.3	2.7	3.7	5.0
Sebago	94	6.8	9-6	4.0	1.7	5.7	6.7	3.7	6.7	5.7
Snowden	97	5.5	9-6	3.5	1.0	6.3	5.7	2.0	6.0	5.0
Yukon Gold	97	4.8	8-7	2.8	3.7	7.7	7.0	3.0	6.7	6.0
AF2280-5	94	5.5	9-6	2.8	1.3	5.0	2.7	5.3	7.3	5.7
AF2285-5	100	5.3	7-9	2.3	1.0	5.0	2.7	5.7	7.7	6.0
AF2290-8	100	5.8	6-9	3.8	1.0	7.7	7.0	4.3	6.7	6.0
AF2305-1	97	6.0	7-8	2.3	1.0	7.3	7.0	5.3	7.3	4.3
AF2314-1	94	6.3	5-7	3.0	1.0	5.3	3.0	6.3	7.3	5.3
AF2314-2	100	5.3	9-6	3.3	1.0	6.7	5.3	6.3	7.3	6.0
AF2321-3	91	5.5	5-8	3.5	1.0	7.3	6.3	3.0	7.0	5.3
AF2321-4	75	2.8	7	3.8	1.0	7.3	6.3	2.7	6.3	5.0
AF2321-5	94	4.8	7-8	3.3	1.0	7.3	6.3	2.3	6.7	4.3
AF2321-6	72	3.8	7-8	3.8	1.0	7.7	6.7	2.7	6.0	5.0

Table 4 (cont'd). Plant growth and tuber characteristics of Early-Line Fresh Market potato selections.

Clone	Plant Growth Characteristics ¹				Tuber Characteristics ¹					
	% Stand	Early Vigor	Vine Type	Vine Maturity	IFC	SC	ST	TS	ED	APP
AF2322-1	97	6.0	8-5	2.8	1.0	8.0	7.7	2.3	7.0	6.7
AF2322-4	97	5.0	4-7	2.5	1.0	7.3	7.7	3.0	7.3	5.7
AF2322-5	94	5.8	8-5	3.0	1.3	7.3	6.3	3.0	6.0	4.3
AF2326-1	100	5.8	8-5	2.8	1.0	7.3	6.7	3.7	6.0	5.3
AF2329-1	63	2.5	7-8	4.0	1.0	7.3	6.7	3.0	5.3	4.7
AF2339-3	100	5.8	7-4	3.0	1.0	7.3	6.3	2.7	5.7	3.7
AF2351-6	75	4.0	9-6	3.7	1.3	7.3	7.0	2.0	6.0	4.7
AF2353-1	78	4.0	7-8	5.8	3.3	7.3	6.0	2.0	6.3	4.7
AF2360-2	97	5.5	9-6	4.0	1.0	8.0	6.7	2.3	5.3	6.0
AF2363-9	97	4.3	8-5	3.5	1.7	7.3	6.3	2.7	6.3	5.0
B1806-8	100	5.8	9-6	3.0	2.7	8.0	6.7	3.0	7.0	5.3
B2024-10	100	5.8	9-6	3.3	3.0	7.7	6.0	3.7	7.3	5.7
B2024-26	97	5.3	9	4.0	2.7	7.0	5.3	2.3	7.3	5.7
B2066-3	75	3.5	7-4	2.7	3.0	2.0	7.3	2.7	6.7	6.0
B2078-1	100	6.3	8-7	2.0	1.3	2.0	6.7	2.3	5.0	6.7
B2078-5	100	5.5	7-8	1.8	1.3	2.0	7.3	2.3	5.3	5.7
B2078-13	75	4.3	7-8	2.0	1.0	2.0	6.7	2.3	5.7	5.7
B2079-6	100	7.5	7-8	1.0	1.3	2.0	7.0	1.7	6.0	6.0
B2079-7	75	5.0	na	1.0	na	na	na	na	na	na
B2095-1	100	6.3	7-4	1.8	3.0	7.7	7.3	1.7	6.0	6.0

Table 4 (cont'd). Plant growth and tuber characteristics of Early-Line Fresh Market potato selections.

Clone	Plant Growth Characteristics ¹				Tuber Characteristics ¹					
	% Stand	Early Vigor	Vine Type	Vine Maturity	IFC	SC	ST	TS	ED	APP
B2098-1	100	6.0	9-6	3.5	1.0	2.0	5.7	2.7	6.3	4.7
B2098-8	100	6.5	7-8	3.0	1.7	2.0	7.3	3.7	5.7	4.3
B2098-11	100	6.8	8-5	2.8	1.0	2.0	6.7	2.7	6.3	4.3
B2100-2	75	5.0	7-4	2.3	1.3	2.3	6.7	3.0	6.3	5.0
B2100-8	100	6.8	8-5	2.0	2.3	2.0	6.7	2.0	6.3	5.3
B2125-156	75	5.0	5-8	2.0	<i>na</i>	<i>na</i>	<i>na</i>	<i>na</i>	<i>na</i>	<i>na</i>
B2135-163	97	6.0	8-5	3.3	1.0	7.0	6.0	2.7	6.0	5.7
W1355-1	100	5.8	8-5	3.5	1.0	6.3	5.7	2.3	6.3	4.7

¹See rating system outlined in Tables 1 and 2.

Table 5. External and internal defects of Early-Line Fresh Market potato selections.

Clone	External Tuber Defects (cwt/A)					% Internal Tuber Defects ²			
	Growth Cracks	Mis-shapen	Sun-burned	Rotten & misc.	Total Culls ¹	HH	BR	CRS	IHN
LaChipper	0	0	2	9	11	0	0	6	1
Chieftain	8	1	4	6	19	0	0	5	5
LaRouge	9	0	22	9	40	0	0	1	6
Michigan Purple	7	2	2	9	20	0	1	20	4
Pontiac	7	0	26	29	62	0	0	0	0
Red Companion	0	0	2	5	7	0	1	0	8
Red LaSoda	4	0	10	11	25	0	0	4	4
Sebago	4	6	32	9	51	1	0	0	8
Snowden	0	0	24	0	24	0	0	1	4
Yukon Gold	0	0	20	16	36	0	1	0	8
AF2280-5	18	0	15	3	36	0	1	0	0
AF2285-5	1	4	25	15	45	0	0	0	0
AF2290-8	2	13	40	5	60	0	0	1	33
AF2305-1	0	0	28	15	43	0	0	0	0
AF2314-1	0	3	23	10	36	0	3	0	0
AF2314-2	3	0	13	16	32	0	0	6	3
AF2321-3	2	0	15	3	20	0	1	0	1
AF2321-4	0	0	8	3	11	0	0	1	0
AF2321-5	2	0	3	4	9	0	0	4	0
AF2321-6	3	0	8	12	23	0	1	10	1

Table 5 (cont'd). External and internal defects of Early-Line Fresh Market potato selections.

Clone	External Tuber Defects (cwt/A)					% Internal Tuber Defects ²			
	Growth Cracks	Mis-shapen	Sun-burned	Rotten & misc.	Total Culls ¹	HH	BR	CRS	IHN
AF2322-1	0	0	2	3	5	0	0	0	3
AF2322-4	0	0	16	7	23	0	0	0	0
AF2322-5	27	1	61	4	93	1	0	0	1
AF2326-1	0	4	44	9	57	0	0	0	0
AF2329-1	0	4	36	0	40	0	0	0	0
AF2339-3	0	0	16	3	19	0	0	0	0
AF2351-6	0	0	20	19	39	2	0	0	10
AF2353-1	12	17	35	10	74	0	0	0	1
AF2360-2	9	0	51	37	97	4	3	0	0
AF2363-9	37	2	7	12	58	1	0	0	1
B1806-8	1	0	16	13	30	0	0	1	0
B2024-10	4	0	12	19	35	0	1	9	4
B2024-26	1	0	26	5	32	0	1	1	5
B2066-3	0	0	3	1	4	0	0	3	0
B2078-1	6	1	3	1	11	1	0	4	6
B2078-5	3	3	16	3	25	0	0	0	0
B2078-13	1	2	6	1	10	0	0	8	0
B2079-6	0	0	0	4	4	0	0	3	8
B2079-7	0	0	0	0	0	0	0	0	0
B2095-1	0	0	1	2	3	0	0	0	1

Table 5 (cont'd). External and internal defects of Early-Line Fresh Market potato selections.

Clone	External Tuber Defects (cwt/A)					% Internal Tuber Defects ²			
	Growth Cracks	Mis-shapen	Sun-burned	Rotten & misc.	Total Culls ¹	HH	BR	CRS	IHN
B2098-1	0	15	7	10	32	0	0	0	0
B2098-8	0	10	2	2	14	0	1	0	0
B2098-11	16	6	1	3	26	0	0	0	0
B2100-2	10	4	7	13	34	0	0	0	2
B2100-8	0	0	2	6	8	0	0	0	0
B2125-156	0	0	2	0	2	0	0	0	0
B2135-163	0	0	41	1	42	0	0	0	1
W1355-1	1	0	3	0	4	0	0	0	5
<i>LSD</i> ³	11	8	19	22	26	ns	ns	ns	7.4
<i>P Value</i>	0.0001	0.0001	0.0001	0.0064	0.0001	0.0509	0.6842	0.1502	0.0001

¹Total culls include the sum of growth cracks, mishapen, sunburned and rotten/misc.

²Percent tubers: HH, hollow heart; BR, brown rot; CRS, corky ringspot; IHN, internal heat necrosis.

³Means separated within columns by Waller-Duncans k - ratio t test.

