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| Table 7. Maturity class of potato varieties evaluated across the experimental trials. | | |
| **Variety** | **Maturity Class** | **Reference** |
| Shepody | Early to Medium-early | OSU (2021); Stark et al. (2020) |
| Innovator | Early to Medium | Giletto and Echeverría (2015); OSU (2021) |
| Charlotte | Medium | AHDB (2015); OSU (2021) |
| Clearwater | Medium-late | OSU (2021); Stark et al. (2020) |
| Dakota Russet | Medium-late | OSU (2021); Thompson (2013) |
| Gem Russet | Medium to Late | Giletto and Echeverría (2015); OSU (2021) |
| Umatilla Russet | Medium-late to Late | Giletto and Echeverría (2015); OSU (2021); Stark et al. (2020) |
| Easton | Late | OSU (2021); Porter (2014) |
| Bintje | Late | CFIA (2013); OSU (2021) |
| Russet Burbank | Late to Very late | OSU (2021); Stark et al. (2020) |
| Bannock Russet | Late to Very late | Giletto and Echeverría (2015); OSU (2021) |
| Markies Russet | Late to Very late | Giletto and Echeverría (2015); OSU (2021) |

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| Table 8. Planting density for the locations and varieties evaluated across the experimental trials. | | |
| **Location** | **Variety** | **Planting Density**  [plants ha-1] |
| Argentina | Bannock Russet | 59000 |
| Gem Russet | 59000 |
| Innovator | 59000 |
| Markies Russet | 59000 |
| Umatilla Russet | 59000 |
| Belgium | Bintje | – |
| Charlotte | – |
| Canada | Russet Burbank | 28986 |
| Shepody | 44444 |
| Minnesota | Clearwater | 35880 |
| Dakota Russet | 35880 |
| Easton | 35880 |
| Russet Burbank | 35880, 43056 |
| Umatilla Russet | 35880 |

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| Table 9. Summary of growing season climatic conditions based on historical climate reconstruction for the period of 1980-2016 (Gelaro et al., 2017). Days represents the length of the typical growing season period (i.e., between planting and harvest dates) summarized for each location. Growing degree days [GDD] were calculated using a base temperature of 7 ºC and maximum temperature of 30ºC and summed over the evaluated period. Mean temperature [TMean], precipitation [Precip.], and incident shortwave solar radiation [Solar Rad.] were calculated as either the sum (i.e., Precip.) or mean (i.e., TMean, Solar Rad.) of daily values over the evaluated period. Diurnal temperature differences [∆TDiurnal] was calculated as the mean of the daily difference between maximum and minimum temperatures. | | | | | | | | |
| **Location** | **Typical Growing Season** | | | **GDD** | **TMean** | **Precip.** | **Solar Rad.** | **∆TDiurnal** |
|  | Planting | Harvest | Days | ºC d | ºC | mm | MJ m-2 d-1 | ºC |
| Argentina | 10 Oct. | 10 Mar. | 152 | 1739 | 18.4 | 428 | 25.5 | 13.6 |
| Belgium | 20 Apr. | 20 Sept. | 154 | 1313 | 15.5 | 244 | 20.0 | 8.3 |
| Canada | 1 June | 10 Oct. | 132 | 1150 | 15.7 | 371 | 19.1 | 10.0 |
| Minnesota | 1 May | 15 Sept. | 138 | 1638 | 18.9 | 383 | 22.7 | 11.6 |