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*"To Rot Or Not" Potato Susceptibility To Pink Rot, Phytophthora erythroseptica*

The purpose of this project was to compare two early-maturing russet potato varieties, Russet Norkotah and CO95086-8RU for their susceptibility to the soil-borne fungus, *Phytophthora erythroseptica*, commonly known as pink rot. Over half of the potato acreage planted in the San Luis Valley is Russet Norkotah and known to be quite susceptible to this pathogen which in turn can cause a significant economic loss to the farmer. The CO95086-8RU has been exclusively released by Colorado State University to a private grower in the San Luis Valley for evaluation. A trial setting in a field known to have a high inoculum level of pink rot was a prime location for this experiment. Four replications of each variety were planted, observed throughout the growing season, harvested, stored and evaluated for the damage caused by pink rot. Although both varieties exhibited symptoms and each potato with pink rot was rated at the highest level on a severity index chart, the CO85086-8RU overall outperformed the Norkotah with an average of .12 percent decay compared to the latter of .62 percent decay. In conclusion, the results of this particular trial were clear cut. The CO95086-8RU compared with the Norkotah sustained less damage and the economic loss was far less. Though this study is one on many that is being conducted comparing these two early-maturing russet varieties by the grower, with further evaluation the CO95086-8RU could be a significant choice for San Luis Valley Potato Growers.