Ranger Russet potatoes, the result of a 1977 cross made by Dr. J. J. Pavek, were released in 1991 by the ARS/USDA and Agricultural Experiment Stations of Idaho, Oregon, Washington, and Colorado. This cultivar has traits that make it an excellent choice for frozen processing. These traits include high yield, high product recovery rate, high specific gravity, uniform tuber shape, and good resistance to internal defects. Along with its positive attributes, Ranger Russet has characteristics that can lead to inferior product quality. Some of the quality concerns, following both short and long-term storage, are high glucose content, fry color darkening, and fried-product mottling.

Processors seek potatoes with low concentrations of reducing sugars. Glucose—a reducing sugar—reacts with amino acids when exposed to high cooking tement-9ura9.7(esito ide)5.8(e)l nopdarkefry color dhat cs cundsisrabl co ioncsumes.kfent0.14%glucose c(yesihweeduthe ]TJT*(tupnt- limitfor flucose) oncentrat-TjT*[(hionsin 1)11.9(usset hB11.9(usrbanktuber) tissu)]TJT*[(cor facceptabl)

[redacted]

Issued in furtherance of cooperative extension work in agriculture and home economics, Acts of May 8 and June 30, 1914, in cooperation with