Dakota Dawn: A unique and flavorful specialty fresh market cultivar

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Dakota Dawn, a medium maturing fresh market cultivar, was released by the North Dakota Agricultural Experiment Station in 2022. Evaluated as ATND99331-2PintoY, Dakota Dawn has buff skin with purple splashes, medium yellow flesh, and round to oval tuber type. Dakota Dawn originated from the cross of Inka Gold x COA94019-5R by the USDA-ARS potato breeding program at Aberdeen, ID, in 1999. Seedling tubers were produced by the Texas A and M potato breeding program, and unselected seedling tubers shared with the NDSU program. The singlehill was selected at Langdon, ND, in 2001. Yield potential is similar to All Blue and Yukon Gold, with marketable yield and percent marketable tubers similar to Red Norland and Yukon Gold. Across years, the mean specific gravity is lower than for All Blue and Yukon Gold, but statistically similar to Red Norland, with a mean of 1.076 across irrigated and non-irrigated sites. Advantages of Dakota Dawn, in addition to attractive appearance, include low incidence of internal disorders, similar blackspot and shatter bruise potential as standard fresh market cultivars, and low total glycoalkaloid levels (2.83 mg/100g fw) compared to Lenape (21.48 mg/100g fw). It has moderate resistance to *Phytophthora nicotianae*, but is susceptible to both pink rot and *Pythium* leak; it is positive for the Ry_{sto} marker for PVY resistance. Dakota Dawn is very flavorful with excellent culinary quality, making it well suited for urban agriculturalists and culinary artisans.

Oral, breeding and genetics section