White Pearl A Chipping Potato Variety with High Level of Resistance to Cold Sweetening

H. I. Groza 1,2, B. D. Bowen 2, W. R. Stevenson 3, J. R. Sowokinos 4, M. T. Glynn ~, C. Thill 4,

S. J. Peloquin 1, A. J. Bussan 1, and J. Jiang 1.

ABSTRACT

White Pearl is a chipping cultivar with high level of resistance to cold sweetening. The cold-chipping capacity of White Pearl is better than the current chipping cultivars, including Atlantic, Snowden and NorValley. White Pearl has low glucose content and good chip color when processed directly after a 7-month storage period at 3.3 to 5.5 C. White Pearl tubers are similar to Snowden with a round oval shape, light netting, shallow eyes, white flesh, small to medium size, uniform shape, and are practically free of external and internal defects. The yield and specific gravity of White Pearl are medium. White Pearl is similar to Snowden in susceptibility to early blight, pink rot and soft rot, but it is slightly more resistant to common scab. White Pearl vines axe susceptible to late blight, but can be managed effectively with fungicides. White Pearl is more sensitive to blackspot bruise than Atlantic or Snowden at 7.2 C, but is more resistant at higher temperatures. White Pearl is sensitive to metribuzin (Sencor), but not rimsulfuron (Matrix) or sulfentrazone (Spartan).