
Variation in Pinto Seed Coat Darkening

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Abstract

Darkening of the seed coat is a significant economic problem in pinto bean production. Beans that have darkened are considered old, more difficult to cook, and prices are discounted. Some varieties darken much more quickly than others and, as a result, are more often downgraded than those that retain their bright background colour. On a Pulse Canada marketing mission to Mexico in April 2002, all pinto bean buyers consistently identified the sample with the brightest background as their preference. They complained about the quality of pintos coming out of the Midwest USA and the eastern Prairies, primarily due to the darkened seed coats. We grew 10 different pinto varieties in four different environments and subjected the harvested beans to aging to determine the level of variability for seed coat darkening in the varieties. Varieties that maintain their bright background will be used in future breeding efforts to develop non-darkening pinto varieties.