

Samarah, N. H., R. R. Mullen, A. S. Goggi, and A. Gaul. 2009. Effect of drying methods and temperature on seed quality of soybean during maturation. **Seed Science and Technology Journal 37: 469-473.**

Abstract

The effect of drying seeds inside intact pods and drying temperatures on seed vigour of soybean during maturation has not been documented in the literature. The objective of this experiment was to study the effect of drying temperatures, seed maturity, and pod integrity on soybean seed germination and vigour as estimated by accelerated aging test (AA). Pods were harvested at four maturity stages: 1) Full-size green pods, FS; 2) Greenish-yellow pods, GY; 3) Yellow pods, Y; 4) Brown pods, B. Podded and depodded seeds were dried in a stacked tray drier at ambient air (25°C) or with heated air (29°C). Drying the seeds inside intact pods preserved the germination from seeds harvested at the FS and GY stages and the germination after AA at the FS, GY, and Y stages relative to depodded seeds. Podded and depodded seeds dried with ambient air had higher germination than those dried with heated air for seeds harvested at the FS and GY stages. In conclusion, seed producers can harvest soybean seeds at greenish-yellow pod stage without lowering seed germination and vigour if seeds are dried in their intact pods under either ambient or heated air.

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