

Studies on the Processing Treatments for Mechanical Drying of Soybean Seeds

M. T. Lee, M. M. Wang, and T. L. Hsieh¹

ABSTRACT

Small-size and container-type Dryers were always used for drying soybean seeds when the weather conditions was not good during harvesting. Hence, the studies on the processing methods can provide information for mechanical drying of soybean seeds.

Results showed that germination of seeds with various seed maturity can be affected by heat air treatments in the dryer. When treated with higher heat, the green and yellow pods were easy to loss its germination abilities. Brown pods when treated with 80°C heat air for one hour and followed by lower heat temperature could result in zero germination. Shelled seeds was dried fast and the germination percentage was higher than that of in-shelled seeds. Seeds from green and yellow pods harvested from spring crop season when treated with 40°C heat air will lost their germination. Cleaning the dryer before using was needed because the soybean pods were easy to shatter when treated with heat air during the drying process.

1. Former Assistant Agricultural Machinist, Assistant Agricultural Machinist, and former Assistant, Kaohsiung District Agricultural Improvement Station, respectively.