

Studies on the Storage Technology of Soybean Seeds

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ABSTRACT

Seeds of Kaohsiung 8 and Kaohsiung Sel. 10 harvested in spring, summer, and fall crop seasons were used for storage and yield trials studies. Two packing methods and three levels of seed moisture contents were applied for studying the effects of storage techniques and duration on the seed quality.

Results showed that seeds obtained from fall crop season had highest quality while seeds obtained from spring crop season had lowest quality. Larger seed size and less deteriorious seeds rates were found for seeds harvested from fall crop season. When the seed moisture content 10% and packed tightly, the storage duration which still maintaining good germination ability for spring, summer, and fall seeds were six, ten and fourteen months, respectively. This results of the optimum storing duration for seeds has been further proved through the yield trial in the following years. Seeds of Kaohsiung Sel. 10 had better storing ability than Kaohsiung 8 in each crop season.

Also, storing duration can be longer when seed moisture was lower. Storing duration of 4 and 5 to 6 months could be reached and maintained good germination ability for seeds with moisture contents of 13 to 14 and below 11%, under untighted packing conditions, respectively. Storage duration could be shorten when seeds with high moisture contents of 13 to 14% were tightly packed. 12 and 18 months of storing duration could be reached when seed moisture contents were 10–11% and 7–8% under tightly packed condition, respectively.

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