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# **Quality of wheat seed as affected by some treatments during storage**

*By*

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## ABSTRACT

**Title of Thesis :** Quality of wheat seed as affected by some treatments during storage.

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Three separately experiments were conducted at the Laboratory of Seed Technology at Sakha Agricultural Research Station, Kafr EL-Sheikh, Egypt during the period from May,(2018) to November,(2019). The laboratory experiments were carried to evaluate the effect of some treatments and packaging materials on wheat seed after different storage periods (0, 6 and 18 months).

Three separately experiments were designed in factorial experiment in completely randomized design with four replicates. The first factor was ten (10) treatments :Treating seeds with the recommended dose of malathion (8%), recommended rate of phosphine (3 tablets / $m^3$ ), ficus powder (0.25%), ficus extract (4575.8 ppm), camphor powder(0.28%), camphor extract (141.9 ppm), clove powder(1.2%), clove extract (39.93 ppm), copper nano particles powder (0.215%), and untreated seed as a control treatment. The second factor was three types of Jute, Plastic, and Polyethylene packages.

This study was conducted in three time phases, which are:-

1- Zero time period. 2- 6 months period. 3- 18 months period.

The study recommends treating wheat seed (Giza 171) before storage with copper nano particles powder as an alternative way of use chemicals insecticides (malathion or fumigation with phosphine) and storing in polyethylene packages to increase storage efficacy, prevent insect infestation, preserve the vitality and quality of wheat seed, reduce environmental pollution and preservation of human health.

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