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# Impact of synthetic polymer coating and seed treatment chemicals on seed longevity of cotton seed (*Gossypium hirsutum* L.)

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**ABSTRACT :** An experiment was carried out to know the influence of polymers and seed treatment chemicals on longevity of cotton seeds. The results revealed that in all treatments germination decreased as storage period progressed. The seed coated with synthetic polymer and chemical treatment polykote @ 3 ml/kg + vitavax 200 @ 2ml/kg of seeds and stored in the polythene bag (400 gauge) maintained higher seed quality attributes such as germination (73.67%), vigour index –I (2038), vigour index –II (2156), and lower electrical conductivity (0.259 ms/ppt), after ten months of storage compared to control in cloth bag germination (60.00%), vigour index –I (1108), vigour index –II (1220), and higher electrical conductivity (0.430 mS/ppt). Hence, cotton seed coating with polykote @ 3 ml/kg + vitavax 200 @ 2ml/kg of seeds and stored in the polythene bag (400 gauge) is better to maintain germination and other seed quality parameters for ten months of storage.

**Key Words :** Polykote, Synthetic polymer, Longevity, Germination

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