STORAGE LIFE OF SOYBEAN (Glycine max L.Merril)SEEDS AFTER SEED DRESSING

ADEBISI, M.A, I.O. *DANIEL AND M.O. AJALA

Department of Plant Breeding and Seed Technology University of Agriculture, P.M.B. 2240, Abeokuta, Ogun State, Nigeria.

*To whom all correspondence should be addressed: e-mail: <Daniel@unaab.edu.ng

ABSTRACT

The longevity of seeds of three soybean varieties treated with four seed dressing chemical was estimated using probit modelling to evaluate possible enhancement of seed physiological quality under ambient tropical storage condition. Seeds were treated with fungicides and/or insecticides including Apron Plus, Fermazan D, Almithio and Aldrex T at recommended dosages. An untreated seed lot of each variety was maintained as control. The seeds were stored for 180 days (6months) under laboratory ambient conditions (32°C, 50%RH) with initial seed moisture content of about 10% seed germination was in storage and seed survival was evaluated by probit analysis of the serial germination data. Results showed that seed dressing with fungicides and /or insecticides reduced seed deterioration for two months of storage in M-351 and three months in Samsoy 1 and TGX 1740-3F. Probit analysis showed negative slope $(1/\sigma)$ values for all the seed lots indicating certain degree of deterioration irrespective of seed lot or seed dressing treatment, that is, none of the dressing chemical was able to totally arrest soybean seed deterioration. Except for M-351 seeds treated with Apron Plus, Almithio and Aldrex T, all treated seed lots showed significantly longer storage life than untreated seeds.

Keywords: Soybean, seed storage life, probit modeling.