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Studies on the effect of storage on viability of wettable powder (WP) formulations of the entomopathogenic fungi *Metarhizium anisopliae* (Metschinikoff) Sorokin

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ABSTRACT

Studies on the effect of storage of developed *Metarhizium anisopliae* (Metschnikoff) Sorokin 5 per cent WP formulation A1($M_{30}S_{1/1}C_{1/2}$) and B1($M_{30}S_{1/1}H_{1/1}$) (comprising adjuvants, fungus and kaolinite) and *M.anisopliae* alone in kaolinite (control) on viability of the fungus are undertaken.At 10 DAI, surface coverage by the fungus varied from 100 to 45.0, 100 to 46.67 and 100 to 0.0 per cent in formulation A1, B1 and control, respectively, when stored for 0 to 300 days. The samples stored upto 150 days showed cent per cent surface coverage in formulation A1 and B1 except control. Significantly higher biomass (9.10 to10.03 g/40ml medium) was produced in samples of formulation A1 and B1 (8.77 to 10.07g) stored upto 210 days as compared to that (3.40g) in formulation A1 and B1 (3.70g) stored for 300 days. The biomass in control was 6.27g in fresh sample against no biomass in sample stored for 300 days. The viability varied from 31.33 to $5.33x10^8$, 30.67 to $6.33x10^8$ and 30.67 to $0.0x10^8$ cfu/ml in formulation A1, B1 and control, respectively, from 0 to 300 days storage. Considering surface coverage (%), biomass produced and viability (cfu/g) the *M. anisopliae* 5 pe cent WP formulation A1, B1 and control could be stored upto 10, 10 and 6 months, respectively for the minimum cfu count of $1x10^8$/g for WP formulations as per norms.

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