EFFECT OF DIFFERENT OPTICAL BRIGHTENERS ON SURVIVAL AND MULTIPLICATION OF ENTOMOPATHOGENIC NEMATODES, STEINERNEMA ABBASI AND HETERORHABDITIS INDICA

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ABSTRACT: Effect of UV protectants/ optical brighteners for entomopathogenic nematodes was tested in the laboratory. Infective juveniles of indigenous isolates of Steinernema abbas and Heterorhabditis indica were subjected to irradiation in different concentration aqueous suspension of Para amino benzoic acid (PABA) and congored powder (CRP). Survival rate of IJs before and 10, 20, 30 and 60 minutes after exposure to uv light were evaluated. Addition of PABA and CRP enhanced the tolerance of IJs of both the EPNS. All the four concentration (0.5, 0.1, 0.25 and 0.05%) of UV protectants offered excellent protection. The results indicated that survival rate decreased as the period of exposure increased. Highest survival was observed in H. indica as compared to S. abbas and para amino benzoic acid (PABA) provided excellent protection as compared to congored powder (CRP). These results showed that H. indica is more tolerant to UV light than S. abbas.

Key Words: Optical Brighteners, PABA, CRP, Entomopathogenic Nematodes, Steinernema abbas. Heterorhabditis indica.