

BIOLOGICAL CONTROL OF PLANT PATHOGENIC FUNGI WITH HOMEOPATHIC PREPARATIONS

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INTRODUCTION

Agrohomeopathy is a new and modern method for pest management based on the principles of homeopathy. Homeopathy is system alternative medicine found by the German physician, Samuel Hahnemann in 1796 and based on law of similar. Homeopathic remedies are obtained from nature. Potentization is the process raising the power of homeopathic remedies by dilutions and succussions of mother tincture. Using potentised preparations in agriculture is recent. It is occurred in 1920s with Lilly Kolisko. Lili Kolisko was homeopathic agriculture pioneers who worked with Rudolf Steiner. Benefit of this method is that it is nontoxic and preserve of the natural ecology. In this study homeopathic dilutions were used on phytopathogens fungi related to bean seeds. These products are effective on replacing pesticides and be suitable for organic agriculture.

MATERIAL AND METHODS: To study the effect of homeopathic remedies on control of phytopathogenic fungi associated to bean seeds *Vigna unguiculata* (L.) Walp, an experiment was carried out in completely randomized design with three replications in the plant pathology Laboratory of Islamic azad university, Mashhad Iran, during spring 2013. Treatment was homeopathic remedy, *Silica* in 3 potencies in hahnemannian centesimal scale (12cH, 30cH, 200cH) and distilled water used as control treatment. Homeopathic remedies were prepared from alternative medicine department of Islamic azad university of pharmaceutical science, Tehran, Iran, made according to Haneman Pharmacopoeie. Seeds were infected artificially with pure cultures of *Fusarium graminearum*, [2]. A solution was prepared and seeds were soaked in this solution [1]. After that seeds mounted in plates by the wet chamber method (ISTA). The seeds tested to know the level of infection. Data were analyzed with Mstatc. Dunckan Multiple Range Test (DMRT) was used for comparison of means at 5 % probability.

RESULTS AND DISCUSSION: Analysis of variance showed that all main effects on percentage infection were significant (at 1%). Comparison of means showed that maximum percentage infection belonged to control treatment (93.3%) and minimum belonged to *Silica* 12cH (33.3%). *Gonzales et al.* (2005) observed *Sulphur* 200cH can be effective to control *Fusarium Sp.* in French bean and Indian carob bean. The overall results suggest that potentised substances has great potential in controlling fungal disease.

KEYWORDS: Agrohomeopathy, Biological control, Plant pathogens.

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