

Research Article

Management of Soybean Wilt (*Fusarium oxysporum* f.sp. *glycines*) Through Application of Plant Extracts and Fungicides

Ravit Sahu, Sanjeev Kumar, Balkishan Chaudhary and Sanjay

Department of Plant Pathology, College of Agriculture, Jawaharlal Nehru Krishi Vishwavidyalaya-Jabalpur-482 007, Madhya Pradesh, India. Email: sanjeevcoa@gmail.com

Abstract

In the present work, plant extracts and fungicides were evaluated for an effective management of wilt of soybean caused by *F. oxysporum* f. sp. *glycines* under *in vitro* and *in vivo* condition. Garlic clove extract @15 per cent was found best as it produced 73.00, per cent growth inhibition of *Fusarium oxysporum* f.sp. *glycines*. The effect of two soil drenching of *Allium sativum* extracts at 15.0 per cent was found the best for managing Fusarium wilt of soybean in field condition as minimum disease incidence (7.11%) and highest yield (11.34 q ha⁻¹) was recorded. The broad spectrum combination of Carbendazim + Mancozeb was found best fungicide which completely inhibited the growth of fungus followed by Carbendazim (88.74%). Two soil drenching of Carbendazim + Mancozeb @ 0.25 per cent was also found the best for managing the disease as minimum disease incidence (5.56%) and highest yield (12.6 q ha⁻¹).

Key words: Fungicide, *Fusarium oxysporum* f.sp. *glycines*, plant extract, soybean and wilt

Citation: Sahu R, Kumar S, Chaudhary B and Sanjay. 2020. Management of soybean wilt (*Fusarium oxysporum* f.sp. *glycines*) through application of plant extracts and fungicides. *J Mycol Pl Pathol* 50(4): 417-424