Growth inhibition % of the fungal colony was recorded and calculated by the following formula.

$$I = \frac{(C-T)}{C} \times 100$$

Where, I = % inhibition, C = growth in control and T = growth in treatment.

Carbendazim 25 DS, carbendazim 50 WP + thuram 80 WP, carboxin 75 WP and topsin -M 50 WP completely inhibited the growth of *R. bataticola* and were found as the most effective (Table 1). The remaining fungitoxicants inhibited the growth of the fungus to varying degrees, but failed to exhibit complete inhibition. Among partially effective chemicals, thiram 80 WP, captan 50 WP, mancozeb 80 WP, thiobendazole 60 WP and non-target pesticides, monocrotophos 40 EC caused the highest inhibition of the growth and were statistically superior to the remaining ones. The efficacy of the rest chemicals were found in discending order. Taya *et al.* (1990); Singh *et al.* (1992) and Peshney *et al.* (1992) also reported the effectiveness of these fungitoxicants against dry root rot and other root diseases. Hence, these chemicals can be further tested at field levels for the management of dry root rot of chickpea.

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Influence of Additives on the Infectivity of Urdbean Leaf Crinkle Virus

Satish Malik* and Y.P.S. Rathi

Department of Plant Pathology, G.B. Pant Univ. of Agri. & Tech., Pantnagar 263 145
**Plant Protection Officer, Beribagh, Saharanpur, U.P. India*

Urdbean leaf crinkle virus is a serious disease of urdbean and is seed as well as mechanically transmissible (Nene, 1973). Therefore an effort was made to find out the effect of additives on the infectivity of urdbean leaf crinkle virus. Additives *viz.*, sucrose (5%) mercaptoethanol (0.5%) sucrose + mercaptoethanol (5% + 0.5%), di-sodium-ethylene-di thiocarbamate (1.5%) thioglycollic acid (0.15%), DIECA+thioglycollic acid (1.5%+0.15%), ethylene-di-amine-tetraacetate (1.5%), and the combination of DIECA + EDTA (1.5% + 1.5% were used separately in potassium phosphate buffer and used for mechanical inoculation. In each treatment, 45 plants were inoculated and the experiment was repeated twice.

Transmission was increased significantly in all the additives used, baring DIECA alone which was less effective. When added, DIECA + thioglycollic acid gave the highest % transmission (73.3) followed by sucrose + mercaptoethanol (71.1%), DIECA + EDTA (60%), thioglycollic acid (55.5%),

mercaptoethanol and EDTA (51.1% each) and sucrose (46.6%). When DIECA alone was added, the transmission decreased to 17.6% (Table 1). It is evident from the present findings that sucrose, mercaptoethanol and sucrose + mercaptoethanol when added in inoculum increased the % mechanical transmission over control. These observations are in agreement with that of Yarwood (1971) and Bhaktavatsalam *et al.*, (1983) who also observed that sucrose, mercaptoethanol was sucrose + mercaptoethanol when added in the inoculum, increased the infectivity of ULCV. However, EDTA when added in inoculum increased the virus infectivity during the course of present study whereas Bhaktavatsalam *et al.* (1983) found EDTA completely inhibitory to virus infectivity. It is noteworthy that thioglycollic acid, DIECA + thioglycollic acid and DIECA + EDTA proved to be the new additives in increasing the infectivity of urdbean leaf crinkle virus.

Table 1. Influence of additives on the infectivity of urdbean leaf crinkle virus

Treatments	Amount added (%)	No. of plants Infected/ No. of Plants inoculated	Plants infection (%)	Increase over control (%)
Control (buffer)*	0.0	17/45 (37.85)	37.7	0.0
Sucrose	5.0	21/45 (43.05)	46.6	23.5
Sucrose + Mercaptoethanol	5+0.05	32/45 (45.61)	71.1	88.2
DIECA**	1.5	14/45 (33.85)	31.1	-17.6
Thioglycollic acid	0.15	25/45 (48.16)	55.5	47.1
DIECA + Thioglycollic acid	1.5+0.15	33/45 (58.98)	73.3	94.1
EDTA***	1.5	23/45 (45.61)	51.1	35.5
DIECA+EDTA	1.5+1.5	27/45 (50.75)	60.0	58.8
	gm	= 46.81		
	CD (P=0.05)	= 5.120		

* Buffer=Potassium phosphate 0.1M pH 7.6
** Di-sodium ethylene dithio carbamate
*** Ethylene diamine tetraacetate,

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Effect of Soil Types on the Incidence of Wilt in Chickpea

Rachana Srivastava and K.P. Kamthan

Department of Botany, D.A.V. College, Kanpur 208 001, India

Wilt caused by *Fusarium oxysporum* Schlecht, emend Snyd. & Hans f.sp. *ciceri* (Padwick) Snyd. & Hans is a major biotic stress which limits chickpea production in India. It has been observed that the same cultivar exhibits different reactions against wilt at different locations. The reason for this situation has often been attributed to the variation in the wilt pathogen. The factor such as soil type has not been taken into consideration. While the effect of soil types on the saprophytic activity of soil borne pathogens in chickpea has been reported (Chattopadhyay, *et al.*, 2001). Therefore, it was thought worthwhile to study the effect of different soil types on the incidence of wilt in chickpea and the results are reported herein.

Fusarium oxysporum f. sp. *ciceri* was isolated on P.D.A. medium from wilted plant of chickpea collected from the wilt sick plot of C.S.A.U.A & T., Kanpur. The pathogenicity of the culture was