



Effect on chickpea cultivars (*Cicer arietinum* L.)

1. The net impact of individual and combined stress on plant growth

Crop: Chickpea (*Cicer arietinum* cv. Annigiri)
 Stress 1: *Meloidogyne javanica*
 Stress 2: *Fusarium oxysporum* f. sp. *ciceris*
 Stage of plant: Sowing

The table shows the impact of nematode and fungus alone and in combination on dry shoot weight chickpea plants.

	Treatment	Plant response to stress (reduction over control %)
		Type A parameters* Dry shoot weight
Annigiri	<i>Fusarium oxysporum</i> (50g/pot)	11.5 ↓
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)	-5.8 ↑
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)+ <i>Fusarium oxysporum</i> (50g/pot) simultaneous stress	17.3 ↓
11316	<i>Fusarium oxysporum</i> (50g/pot)	0.0
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)	12.5 ↓
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)+ <i>Fusarium oxysporum</i> (50g/pot) simultaneous stress	10.0 ↓
11318	<i>Fusarium oxysporum</i> (50g/pot)	7.9 ↓
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)	26.3 ↓
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)+ <i>Fusarium oxysporum</i> (50g/pot) simultaneous stress	15.8 ↓
11319	<i>Fusarium oxysporum</i> (50g/pot)	2.6 ↓
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)	43.6 ↓
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)+ <i>Fusarium oxysporum</i> (50g/pot) simultaneous stress	17.9 ↓
11320	<i>Fusarium oxysporum</i> (50g/pot)	51.4 ↓
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)	8.6 ↓

	<i>Meloidogyne javanica</i> (2500 J2/pot soil)+ <i>Fusarium oxysporum</i> (50g/pot) simultaneous stress	57.1↓
12234	<i>Fusarium oxysporum</i> (50g/pot)	-9.8↑
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)	19.5↓
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)+ <i>Fusarium oxysporum</i> (50g/pot) simultaneous stress	7.3↓
12235	<i>Fusarium oxysporum</i> (50g/pot)	-12.8↑
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)	7.7↓
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)+ <i>Fusarium oxysporum</i> (50g/pot) simultaneous stress	0.0
12237	<i>Fusarium oxysporum</i> (50g/pot)	-9.5↑
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)	16.7↓
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)+ <i>Fusarium oxysporum</i> (50g/pot) simultaneous stress	2.4↓
12240	<i>Fusarium oxysporum</i> (50g/pot)	3.6↓
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)	-28.6↑
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)+ <i>Fusarium oxysporum</i> (50g/pot) simultaneous stress	-14.3↑
12242	<i>Fusarium oxysporum</i> (50g/pot)	2.6↓
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)	15.4↓
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)+ <i>Fusarium oxysporum</i> (50g/pot) simultaneous stress	10.3↓
12246	<i>Fusarium oxysporum</i> (50g/pot)	5.3↓
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)	15.8↓
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)+ <i>Fusarium oxysporum</i> (50g/pot) simultaneous stress	15.8↓
12249	<i>Fusarium oxysporum</i> (50g/pot)	-12.1↑
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)	51.5↓
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)+ <i>Fusarium oxysporum</i> (50g/pot) simultaneous stress	21.2↓

12250	<i>Fusarium oxysporum</i> (50g/pot)	-15.2↑
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)	24.2↓
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)+ <i>Fusarium oxysporum</i> (50g/pot) simultaneous stress	15.2↓
12251	<i>Fusarium oxysporum</i> (50g/pot)	-39.4↑
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)	36.4↓
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)+ <i>Fusarium oxysporum</i> (50g/pot) simultaneous stress	12.1↓
12252	<i>Fusarium oxysporum</i> (50g/pot)	-5.4↑
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)	51.4↓
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)+ <i>Fusarium oxysporum</i> (50g/pot) simultaneous stress	24.3↓
12253	<i>Fusarium oxysporum</i> (50g/pot)	11.1↓
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)	26.7↓
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)+ <i>Fusarium oxysporum</i> (50g/pot) simultaneous stress	40.0↓
12254	<i>Fusarium oxysporum</i> (50g/pot)	20.4↓
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)	16.3↓
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)+ <i>Fusarium oxysporum</i> (50g/pot) simultaneous stress	55.1↓
12255	<i>Fusarium oxysporum</i> (50g/pot)	2.7↓
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)	10.8↓
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)+ <i>Fusarium oxysporum</i> (50g/pot) simultaneous stress	35.1↓
12256	<i>Fusarium oxysporum</i> (50g/pot)	0.0
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)	20.9↓
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)+ <i>Fusarium oxysporum</i> (50g/pot) simultaneous stress	25.6↓

12258	<i>Fusarium oxysporum</i> (50g/pot)	-6.2↑
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)	21.9↓
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)+ <i>Fusarium oxysporum</i> (50g/pot) simultaneous stress	12.5↓
12259	<i>Fusarium oxysporum</i> (50g/pot)	-8.3↑
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)	22.2↓
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)+ <i>Fusarium oxysporum</i> (50g/pot) simultaneous stress	22.2↓
12267	<i>Fusarium oxysporum</i> (50g/pot)	10.3↓
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)	38.5↓
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)+ <i>Fusarium oxysporum</i> (50g/pot) simultaneous stress	20.5↓
12275	<i>Fusarium oxysporum</i> (50g/pot)	-41.4↑
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)	10.3↓
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)+ <i>Fusarium oxysporum</i> (50g/pot) simultaneous stress	24.1↓
12430	<i>Fusarium oxysporum</i> (50g/pot)	-9.1↑
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)	48.5↓
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)+ <i>Fusarium oxysporum</i> (50g/pot) simultaneous stress	21.2↓
12432	<i>Fusarium oxysporum</i> (50g/pot)	0.0
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)	57.6↓
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)+ <i>Fusarium oxysporum</i> (50g/pot) simultaneous stress	45.5↓
12433	<i>Fusarium oxysporum</i> (50g/pot)	-27.6↑
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)	41.4↓
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)+ <i>Fusarium oxysporum</i> (50g/pot) simultaneous stress	27.6↓
12434	<i>Fusarium oxysporum</i> (50g/pot)	0.0
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)	10.0↓

	<i>Meloidogyne javanica</i> (2500 J2/pot soil)+ <i>Fusarium oxysporum</i> (50g/pot) simultaneous stress	14.0↓
12464	<i>Fusarium oxysporum</i> (50g/pot)	-14.3↑
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)	8.9↓
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)+ <i>Fusarium oxysporum</i> (50g/pot) simultaneous stress	7.1↓
12466	<i>Fusarium oxysporum</i> (50g/pot)	40.0↓
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)	9.1↓
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)+ <i>Fusarium oxysporum</i> (50g/pot) simultaneous stress	10.9↓
12468	<i>Fusarium oxysporum</i> (50g/pot)	48.3↓
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)	-9.0↑
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)+ <i>Fusarium oxysporum</i> (50g/pot) simultaneous stress	46.1↓
BDN-9-3	<i>Fusarium oxysporum</i> (50g/pot)	-3.4↑
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)	16.9↓
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)+ <i>Fusarium oxysporum</i> (50g/pot) simultaneous stress	6.8↓
11311	<i>Meloidogyne javanica</i> (2500 J2/pot soil)	N/A
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)+ <i>Fusarium oxysporum</i> (50g/pot) simultaneous stress	N/A
11317	<i>Meloidogyne javanica</i> (2500 J2/pot soil)	N/A
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)+ <i>Fusarium oxysporum</i> (50g/pot) simultaneous stress	N/A
11324	<i>Meloidogyne javanica</i> (2500 J2/pot soil)	N/A
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)+ <i>Fusarium oxysporum</i> (50g/pot) simultaneous stress	N/A
12245	<i>Meloidogyne javanica</i> (2500 J2/pot soil)	N/A
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)+ <i>Fusarium oxysporum</i> (50g/pot) simultaneous stress	N/A

12253	<i>Meloidogyne javanica</i> (2500 J2/pot soil)	N/A
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)+ <i>Fusarium oxysporum</i> (50g/pot) simultaneous stress	N/A
12464	<i>Meloidogyne javanica</i> (2500 J2/pot soil)	N/A
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)+ <i>Fusarium oxysporum</i> (50g/pot) simultaneous stress	N/A
12466	<i>Meloidogyne javanica</i> (2500 J2/pot soil)	N/A
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)+ <i>Fusarium oxysporum</i> (50g/pot) simultaneous stress	N/A
12468	<i>Meloidogyne javanica</i> (2500 J2/pot soil)	N/A
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)+ <i>Fusarium oxysporum</i> (50g/pot) simultaneous stress	N/A
Radhey	<i>Meloidogyne javanica</i> (2500 J2/pot soil)	N/A
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)+ <i>Fusarium oxysporum</i> (50g/pot) simultaneous stress	N/A
ICCC 4	<i>Meloidogyne javanica</i> (2500 J2/pot soil)	N/A
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)+ <i>Fusarium oxysporum</i> (50g/pot) simultaneous stress	N/A

Note: Values presented in the table were calculated using the formula described below.

$$\text{Reduction over control (\%)} = \frac{(\text{Value Control} - \text{Value Stress})}{\text{Value Control}} \times 100$$

1) ↓ '- indicates plant parameters affected by stress that lead to high susceptibility (higher the value more the damage).

2) ↑ '- indicates plant parameters less/not affected by stress leading to improved resistance (higher the value lesser the damage).

'*' - For more information on parameters classification, please refer to 'methodology' tab.

2. The interaction between nematode and fungal pathogen under combined stress at plant interface

The table shows the effect of the fungal pathogen on nematode induced gall index and % galled area under combined stress treatment

	Treatment	Response to combined stress** Type B parameters*	
		Gall Index	% Galled area
Annigiri	<i>Fusarium oxysporum</i> (50g/pot)	9	8
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)	N/A	N/A
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)+ <i>Fusarium oxysporum</i> (50g/pot) simultaneous stress	7.5	7.2
11316	<i>Fusarium oxysporum</i> (50g/pot)	N/A	N/A
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)	N/A	N/A
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)+ <i>Fusarium oxysporum</i> (50g/pot) simultaneous stress	N/A	N/A
11318	<i>Fusarium oxysporum</i> (50g/pot)	N/A	N/A
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)	N/A	N/A
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)+ <i>Fusarium oxysporum</i> (50g/pot) simultaneous stress	N/A	N/A
11319	<i>Fusarium oxysporum</i> (50g/pot)	N/A	N/A
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)	N/A	N/A
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)+ <i>Fusarium oxysporum</i> (50g/pot) simultaneous stress	N/A	N/A
11320	<i>Fusarium oxysporum</i> (50g/pot)	N/A	N/A
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)	N/A	N/A
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)+ <i>Fusarium oxysporum</i> (50g/pot) simultaneous stress	N/A	N/A
12234	<i>Fusarium oxysporum</i> (50g/pot)	N/A	N/A
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)	N/A	N/A
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)+ <i>Fusarium oxysporum</i> (50g/pot) simultaneous stress	N/A	N/A
12235	<i>Fusarium oxysporum</i> (50g/pot)	N/A	N/A
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)	N/A	N/A

	<i>Meloidogyne javanica</i> (2500 J2/pot soil)+ <i>Fusarium oxysporum</i> (50g/pot) simultaneous stress	N/A	N/A
12237	<i>Fusarium oxysporum</i> (50g/pot)	N/A	N/A
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)	N/A	N/A
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)+ <i>Fusarium oxysporum</i> (50g/pot) simultaneous stress	N/A	N/A
12240	<i>Fusarium oxysporum</i> (50g/pot)	N/A	N/A
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)	N/A	N/A
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)+ <i>Fusarium oxysporum</i> (50g/pot) simultaneous stress	N/A	N/A
12242	<i>Fusarium oxysporum</i> (50g/pot)	N/A	N/A
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)	N/A	N/A
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)+ <i>Fusarium oxysporum</i> (50g/pot) simultaneous stress	N/A	N/A
12246	<i>Fusarium oxysporum</i> (50g/pot)	N/A	N/A
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)	N/A	N/A
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)+ <i>Fusarium oxysporum</i> (50g/pot) simultaneous stress	N/A	N/A
12249	<i>Fusarium oxysporum</i> (50g/pot)	N/A	N/A
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)	N/A	N/A
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)+ <i>Fusarium oxysporum</i> (50g/pot) simultaneous stress	N/A	N/A
12250	<i>Fusarium oxysporum</i> (50g/pot)	N/A	N/A
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)	N/A	N/A
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)+ <i>Fusarium oxysporum</i> (50g/pot) simultaneous stress	N/A	N/A
12251	<i>Fusarium oxysporum</i> (50g/pot)	N/A	N/A
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)	N/A	N/A
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)+ <i>Fusarium oxysporum</i> (50g/pot) simultaneous stress	N/A	N/A

12252	<i>Fusarium oxysporum</i> (50g/pot)	N/A	N/A
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)	N/A	N/A
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)+ <i>Fusarium oxysporum</i> (50g/pot) simultaneous stress	N/A	N/A
12253	<i>Fusarium oxysporum</i> (50g/pot)	N/A	N/A
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)	N/A	N/A
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)+ <i>Fusarium oxysporum</i> (50g/pot) simultaneous stress	N/A	N/A
12254	<i>Fusarium oxysporum</i> (50g/pot)	N/A	N/A
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)	N/A	N/A
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)+ <i>Fusarium oxysporum</i> (50g/pot) simultaneous stress	N/A	N/A
12255	<i>Fusarium oxysporum</i> (50g/pot)	N/A	N/A
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)	N/A	N/A
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)+ <i>Fusarium oxysporum</i> (50g/pot) simultaneous stress	N/A	N/A
12256	<i>Fusarium oxysporum</i> (50g/pot)	N/A	N/A
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)	N/A	N/A
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)+ <i>Fusarium oxysporum</i> (50g/pot) simultaneous stress	N/A	N/A
12258	<i>Fusarium oxysporum</i> (50g/pot)	N/A	N/A
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)	N/A	N/A
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)+ <i>Fusarium oxysporum</i> (50g/pot) simultaneous stress	N/A	N/A
12259	<i>Fusarium oxysporum</i> (50g/pot)	N/A	N/A
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)	N/A	N/A
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)+ <i>Fusarium oxysporum</i> (50g/pot) simultaneous stress	N/A	N/A
12267	<i>Fusarium oxysporum</i> (50g/pot)	N/A	N/A
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)	N/A	N/A

	<i>Meloidogyne javanica</i> (2500 J2/pot soil)+ <i>Fusarium oxysporum</i> (50g/pot) simultaneous stress	N/A	N/A
12275	<i>Fusarium oxysporum</i> (50g/pot)	N/A	N/A
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)	N/A	N/A
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)+ <i>Fusarium oxysporum</i> (50g/pot) simultaneous stress	N/A	N/A
12430	<i>Fusarium oxysporum</i> (50g/pot)	N/A	N/A
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)	N/A	N/A
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)+ <i>Fusarium oxysporum</i> (50g/pot) simultaneous stress	N/A	N/A
12432	<i>Fusarium oxysporum</i> (50g/pot)	N/A	N/A
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)	N/A	N/A
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)+ <i>Fusarium oxysporum</i> (50g/pot) simultaneous stress	N/A	N/A
12433	<i>Fusarium oxysporum</i> (50g/pot)	N/A	N/A
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)	N/A	N/A
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)+ <i>Fusarium oxysporum</i> (50g/pot) simultaneous stress	N/A	N/A
12434	<i>Fusarium oxysporum</i> (50g/pot)	N/A	N/A
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)	N/A	N/A
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)+ <i>Fusarium oxysporum</i> (50g/pot) simultaneous stress	N/A	N/A
12464	<i>Fusarium oxysporum</i> (50g/pot)	N/A	N/A
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)	N/A	N/A
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)+ <i>Fusarium oxysporum</i> (50g/pot) simultaneous stress	N/A	N/A
12466	<i>Fusarium oxysporum</i> (50g/pot)	N/A	N/A
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)	N/A	N/A
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)+ <i>Fusarium oxysporum</i> (50g/pot) simultaneous stress	N/A	N/A

12468	<i>Fusarium oxysporum</i> (50g/pot)	N/A	N/A
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)	N/A	N/A
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)+ <i>Fusarium oxysporum</i> (50g/pot) simultaneous stress	N/A	N/A
BDN-9-3	<i>Fusarium oxysporum</i> (50g/pot)	N/A	N/A
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)	8.8	8.2
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)+ <i>Fusarium oxysporum</i> (50g/pot) simultaneous stress	7.5	8.6
11311	<i>Meloidogyne javanica</i> (2500 J2/pot soil)	4.4	1.2
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)+ <i>Fusarium oxysporum</i> (50g/pot) simultaneous stress	5.1	2.7
11317	<i>Meloidogyne javanica</i> (2500 J2/pot soil)	9.0	9.0
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)+ <i>Fusarium oxysporum</i> (50g/pot) simultaneous stress	7.8	6.4
11324	<i>Meloidogyne javanica</i> (2500 J2/pot soil)	8.0	9.0
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)+ <i>Fusarium oxysporum</i> (50g/pot) simultaneous stress	6.6	8.2
12245	<i>Meloidogyne javanica</i> (2500 J2/pot soil)	8.9	7.7
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)+ <i>Fusarium oxysporum</i> (50g/pot) simultaneous stress	8.5	6.2
12253	<i>Meloidogyne javanica</i> (2500 J2/pot soil)	8.0	7.8
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)+ <i>Fusarium oxysporum</i> (50g/pot) simultaneous stress	8.9	9.0
12464	<i>Meloidogyne javanica</i> (2500 J2/pot soil)	8.0	7.6
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)+ <i>Fusarium oxysporum</i> (50g/pot) simultaneous stress	7.2	7.0
12466	<i>Meloidogyne javanica</i> (2500 J2/pot soil)	8.8	8.4
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)+ <i>Fusarium oxysporum</i> (50g/pot) simultaneous stress	8.9	8.9

12468	<i>Meloidogyne javanica</i> (2500 J2/pot soil)	8.6	8.5
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)+ <i>Fusarium oxysporum</i> (50g/pot) simultaneous stress	7.2	7.8
Radhey	<i>Meloidogyne javanica</i> (2500 J2/pot soil)	8.7	9.0
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)+ <i>Fusarium oxysporum</i> (50g/pot) simultaneous stress	7.4	9.0
ICCC 4	<i>Meloidogyne javanica</i> (2500 J2/pot soil)	9.0	8.8
	<i>Meloidogyne javanica</i> (2500 J2/pot soil)+ <i>Fusarium oxysporum</i> (50g/pot) simultaneous stress	7.8	8.4

Gall index: 1 = 0 galls, 3 = 1-10 galls, 5 = 11-50 galls, 7 = 51-50 galls, 9 = >50 galls.

Percentage galled area of root: 1 = 0-10% galled area, B = 11-20%, 5 = 21-30%, 7 = 51-50%, 9 = >50% galled area.

For raw data – Click here (.xlsx file)

Reference - Maheshwari TU, Sharma SB, Reddy DDR, Haware MP (1995) Co-infection of Wilt-Resistant Chickpeas by *Fusarium oxysporum* f. sp. *ciceri* and *Meloidogyne javanica*. Journal of Nematology 27(4S):649-653

Note:

‘***’ - Values are presented as it is from the source article without subjecting to the calculation.

‘*’ - For more information on parameters classification, please refer to ‘methodology’ tab.

Inference From the study: Maheshwari TU (1995) studied interaction of *Meloidogyne javanica* with *Fusarium oxysporum* in chickpea cultivars annigiri-1 and more. Pathogens were inoculated singly and simultaneously. An additive reduction in dry shoot weight was observed under simultaneous stress. However gall index and percent gall area was reduced under combined stress treatment. **Thus, this pathogen combination acts synergistically and reduces growth parameters in several chickpea cultivars.**