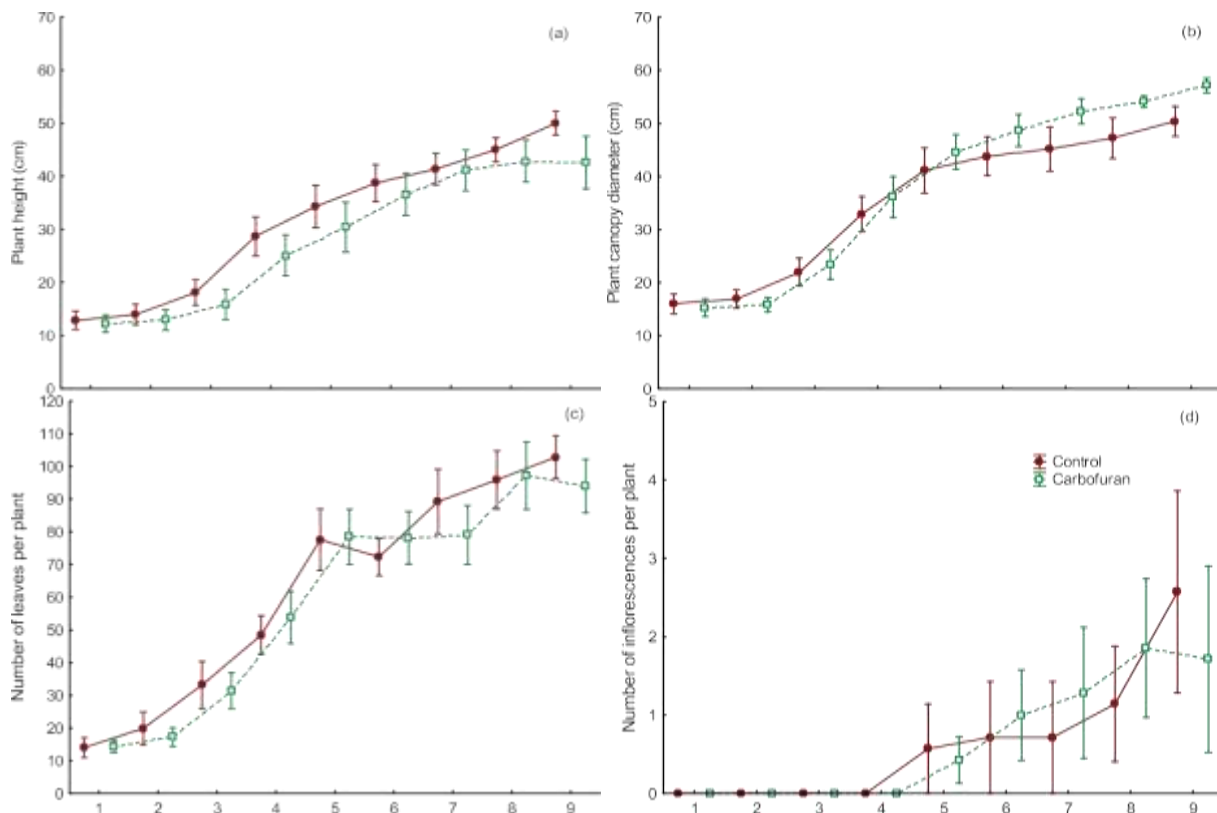


## NUMERICAL DATA

### Effects of Carbofuran on *Lantana camara* and its biocontrol agent, *Teleonemia scrupulosa* (2019)

Comparisons of plant height (a), canopy diameter (b), number of leaves (c) and inflorescences (d) between control and carbofuran-treated plants (mean  $\pm$  SE). No significant differences were noted between treatments ( $P < 0.05$ )

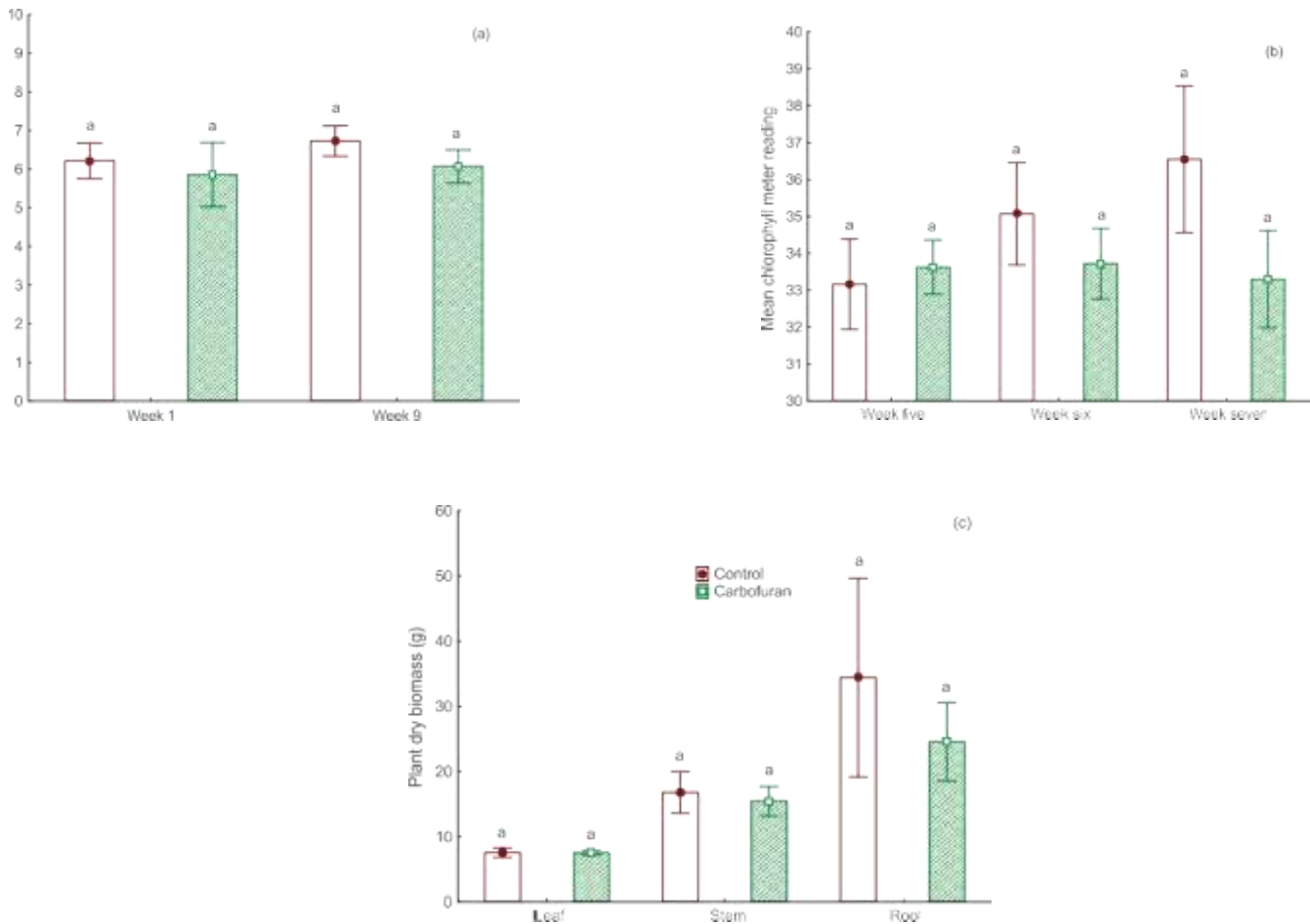


There were no significant differences in plant height ( $F(1, 12) = 0.42$ ;  $P = 0.52$ ), canopy diameter ( $F(1, 12) = 1.35$ ;  $P = 0.26$ ), number of leaves ( $F(1, 12) = 0.01$ ;  $P = 0.89$ ) and number of inflorescences ( $F(1, 12) = 0.01$ ;  $P = 0.90$ ) between control and carbofuran-treated plants.

**Source:** <https://sci-hub.tw/https://doi.org/10.1080/09583157.2019.1597332>

## Effects of Carbofuran on *Lantana camara* and its biocontrol agent, *Teleonemia scrupulosa* (2019)

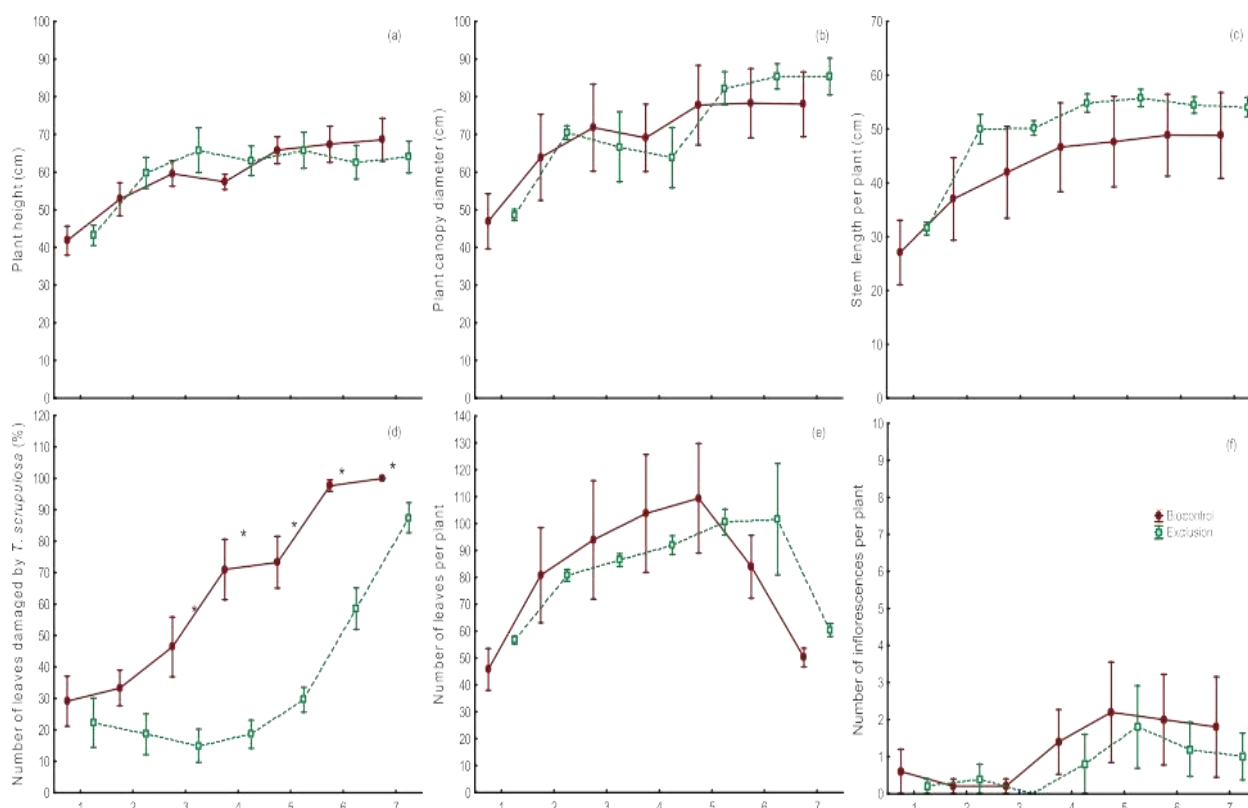
Comparisons of stem diameter (a), chlorophyll content (b), and plant biomass between control and carbofuran-treated plants (mean  $\pm$  SE). Means with different letters within same week and plant parts are significantly different using a student's t-test ( $P < 0.05$ ;  $n = 7$ ).



There were no significant differences in stem diameter in week one at the beginning of the experiment ( $t_{12} = 0.37$ ;  $P = 0.71$ ), and week nine at the end of the experiment ( $t_{12} = 1.13$ ;  $P = 0.28$ ) (Fig. a); leaf chlorophyll content in week five ( $t_{12} = 0.32$ ;  $P = 0.75$ ), six ( $t_{12} = 0.80$ ;  $P = 0.43$ ) and seven ( $t_{12} = 1.36$ ;  $P = 0.19$ ) (Fig. 2b); and leaf ( $t_{12} = 0.02$ ;  $P = 0.97$ ), stem ( $t_{12} = 0.34$ ;  $P = 0.73$ ) and root biomass ( $t_{12} = 0.60$ ;  $P = 0.55$ ) between control and carbofuran-treated plants (Fig. 2c); indicated that carbofuran inhibited *L. camara*'s root biomass growth (Fig. 2c), chlorophyll content (Fig. 2b), and stem diameter growth (Fig. 2a).

**Source:** <https://sci-hub.tw/https://doi.org/10.1080/09583157.2019.1597332>

Comparisons of plant height (a), canopy diameter (b), stem length (c), leaves damaged by *Teleonemia scrupulosa* (d), number of leaves (e), and number of inflorescences (f) between biocontrol and exclusion plants (mean ± SE). Biocontrol/Exclusion pairs with an asterisk are significantly different using Fisher LSD post-hoc tests ( $P < 0.05$ ) ( $n = 5$ )



There were no significant differences in plant height ( $F(1, 8) = 0.09$ ;  $P = 0.76$ ), canopy diameter ( $F(1, 8) = 0.06$ ;  $P = 0.80$ ), stem length ( $F(1, 8) = 0.93$ ;  $P = 0.36$ ), number of leaves ( $F(1, 8) = 0.01$ ;  $P = 0.92$ ) and number of inflorescences ( $F(1, 8) = 0.36$ ;  $P = 0.56$ ) between biocontrol and exclusion plants from week one to week seven. However, the number of leaves damaged by *T. scrupulosa* was significantly greater in biocontrol plants compared to exclusion plants ( $F(1, 8) = 18.26$ ;  $P < 0.01$ ) (Fig. 3d). There was also an indication that the effect of carbofuran on *T. scrupulosa* lasted only for about three weeks (Fig. 3d)

**Source:** <https://sci-hub.tw/https://doi.org/10.1080/09583157.2019.1597332>

## Production and characterization of extracellular polymeric substances (EPS) generated by a carbofuran degrading strain *Cupriavidus* sp. ISTL7 (2019)

Identification of catabolic metabolites generated on degradation of carbofuran by GC-MS

R.T.	0h	12 h	24 h	48 h	96 h	Identified metabolites
22.153	-	+	+	+	+	2-hydroxy-3-(3-methylpropan-2-ol) benzene Nmethylcarbamate
17.177	-	+	+	+	+	Carbamic acid
15.177	-	+	+	+	+	Carbofuran-7- phenol
13.170	-	+	+	-	-	p-Nitro-m-methylphenyl benzenesulfonate
13.107	-	+	+	+	-	Methylamine
12.730	+	+	+	+	-	2,6-Ditert-butyl-4-methylphenyl phenylcarbamate
12.727	-	+	+	+	-	2,6-Di-t-butyl-4-methylphenol acetate
12.120	-	+	+	-	-	Nitrophenol
12.003	-	-	+	+	-	tert-Butyl 2-amino-1-benzyl-2-oxoethylcarbamate
11.997	-	+	+	+	-	Phenethylamine
11.710	-	+	+	-	-	1,2-Dihydro-4-(4-methylphenyl) naphthalene
8.913	+	+	+	+	+	Phenol, 2-methoxy-4-(2-propenyl)
8.843	-	+	+	+	-	7- Benzofuranol

Source: <https://sci-hub.tw/https://doi.org/10.1016/j.biortech.2019.03.054>

## Influence of phorate and carbofuran insecticides on nitrogen availability and their residues in soil and rice (2018)

Table 1: Effect of different treatments on pesticides content in grain and straw of rice

Pesticides content	$\mu\text{g kg}^{-1}$							
	Lateritic		Medium black		Coastal saline		SEm+ C.D.	
	PI	PII	PI	PII	PI	PII		
Grain	20.5 6	17.40	29.13	23.56	16.76	14.80	0.66	2.05
Straw	12.5 3	10.50	16.53	13.76	9.73	7.86	0.35	1.10

PI: Carbofuron, PII: Phorate

Source: [www.chemijournal.com/archives/2018/vol6issue1/PartA/5-6-194-985.pdf](http://www.chemijournal.com/archives/2018/vol6issue1/PartA/5-6-194-985.pdf)

## Removal of Pesticide Carbofuran Using Wetland Plants (2017)

Table 1: Changes in weight after treatment with Carbofuran

<b><i>Acorus gramineus</i></b>				
Treatment of <i>Acorus gramineus</i>	Initial weight in grams		Final weight in grams	Increase in weight (g)
Control-no carbofuran	14.49	17.6	2.75	
1.5 ppm of carbofuran	10.53	17.15	5.33	
2 ppm of carbofuran	19.23	28.85	5.67	
<b><i>Scirpus cyperinus</i></b>				
Treatment of <i>Scirpus cyperinus</i>	Initial weight in grams		Final weight in grams	Increase in weight (g)
Control-no carbofuran	23.67	36.87	12.39	
1.5 ppm of carbofuran	24.01	42.94	13.26	
2 ppm of carbofuran	32.11	49.36	11.43	
<b><i>Chrysopogon zizanioides</i></b>				
Treatment of <i>Chrysopogon zizanioides</i>	Initial weight in grams		Final weight in grams	Increase in weight (g)
Control-no carbofuran	17.51	29.02	10.86	
1.5 ppm of carbofuran	12.83	23.55	9.38	
2 ppm of carbofuran	18.28	29.27	11.13	

Source:

[https://www.researchgate.net/publication/315383523\\_REMOVAL\\_OF\\_PESTICIDE\\_CARBOFURAN\\_USING\\_WETLAND\\_PLANTS\\_a](https://www.researchgate.net/publication/315383523_REMOVAL_OF_PESTICIDE_CARBOFURAN_USING_WETLAND_PLANTS_a)

**Compatibility of *P. chlamydosporia* with other biocontrol agents and carbofuran on plant growth and yield under pot culture conditions. (2016)**

Treatment	Plant height (cm)	Plant height (cm)	Tuber weight/ plant (g)
<i>P. chlamydosporia</i> @ 10 kg/ha – T1	32.07 <sup>b</sup>	9.41 <sup>e</sup>	<b>130.38<sup>d</sup></b>
<i>P. fluorescens</i> @ 10 kg/ha – T2	30.23 <sup>c</sup>	9.35 <sup>t</sup>	<b>128.38<sup>e</sup></b>
<i>T. viride</i> @ 10 kg/ha – T	30.21 <sup>c</sup>	9.01 <sup>f</sup>	<b>128.26<sup>e</sup></b>
T1 + <i>P. fluorescens</i> @ 10 kg/ha – T4	30.03 <sup>b</sup>	11.34 <sup>c</sup>	<b>140.48<sup>c</sup></b>
T2 + <i>T. viride</i> @ 10 kg/ha – T5	32.10 <sup>b</sup>	10.64 <sup>d</sup>	<b>130.37<sup>de</sup></b>
T2 +Carbofuran 3G @ 2kg.a.i./ha –T6	33.02 <sup>b</sup>	11.32 <sup>c</sup>	<b>134.35<sup>d</sup></b>
T2+ T3+ <i>T. viride</i> @ 10 kg/ha – T7	34.53 <sup>a</sup>	12.12 <sup>b</sup>	<b>146.32<sup>b</sup></b>
T1+ T2 + T3 + Carbofuran 3G @ 2kg a.i./ha – T8	34.76 <sup>a</sup>	12.86 <sup>a</sup>	<b>152.81<sup>a</sup></b>
Carbofuran 3G @ 2 kg a.i./ha–T9	30.14 <sup>c</sup>	9.33 <sup>et</sup>	<b>127.35<sup>e</sup></b>
Control – T10	26.06 <sup>d</sup>	7.55 <sup>g</sup>	<b>89.59<sup>f</sup></b>
SEd CD (P=0.05)	<b>0.5155</b> <b>1.0754</b>	<b>0.1709</b> <b>0.3566</b>	<b>2.1544</b> <b>4.4940</b>

Values are mean of three replications. Column figures followed by different alphabets are significant from each other at 5 percent level by DMRT

**Source:** [http://www.jbiopest.com/users/lw8/efiles/vol\\_5\\_0\\_243\\_245f.pdf](http://www.jbiopest.com/users/lw8/efiles/vol_5_0_243_245f.pdf)

**Effect of *P. chlamydosporia* alone and along with other biocontrol agents and carbofuran on cyst nematodes in potato infested with PCN under pot culture conditions. (2016)**

Treatments	Soil Population		Number of females/2.5 cm root
<i>P. chlamydosporia</i> @ 10 kg/ha–T1	73.92 <sup>d</sup>	69.23 <sup>d</sup>	6.46 <sup>e</sup>
<i>P. fluorescens</i> @ 10 kg/ha – T2	86.52 <sup>e</sup>	76. 12 <sup>e</sup>	7.29 <sup>f</sup>
<i>T. viride</i> @ 10 kg/ha – T3	89.93 <sup>f</sup>	82.46 <sup>f</sup>	8. 74 <sup>g</sup>
T1+ <i>P. fluorescens</i> @ 10 kg/ha–T4	62.78 <sup>c</sup>	58. 62 <sup>c</sup>	4.42 <sup>c</sup>
T2 + <i>T. viride</i> @ 10 kg/ha – T5	<b>61.53<sup>c</sup></b>	<b>60. 95<sup>c</sup></b>	5. 37 <sup>d</sup>
T2 +Carbofuran 3G @ 2kg a.i./ha–T6	73.14 <sup>d</sup>	68.47 <sup>d</sup>	5. 58 <sup>d</sup>
T2+T3+ <i>T. viride</i> @ 10 kg/ha–T7	55.80 <sup>b</sup>	43.68 <sup>b</sup>	3. 78 <sup>b</sup>
T1+ T2 + T3 + Carbofuran 3G @ 2 kg a.i./haT8	50.12 <sup>a</sup>	38. 26 <sup>a</sup>	2.91 <sup>a</sup>
Carbofuran 3G @ 2 kg a.i./ha–T9	102.56 <sup>g</sup>	87.61 <sup>g</sup>	8. 86 <sup>g</sup>
Control – T10	178.56 <sup>h</sup>	105.56 <sup>h</sup>	12.03 <sup>h</sup>
SED	1.4800	1.1701	0. 1156
CD (P=0.05)	3.0873	2.4407	0. 2412

Values are mean of three replications. Column figures followed by different letters are significant from each other at 5 percent level by DMRT

**Source:** M. Muthulakshmi at al. (2016), Compatibility of *Pochonia chlamydosporia* with other biocontrol agents and carbofuran, Compatibility of entomopathogenic nematodes