

Table 4. Relative abundance of phytophagous and predatory mite fauna in north zone of Tamil Nadu

Sl. No	North zone						
	Name of the crops	Mite species	Salem		Namakkal		
Cumulative No./10 plants*			RA (%)	Cumulative No./10 plants*	RA (%)		
A. Phytophagous mites							
1	Tapioca	Two spotted spider mite	<i>Tetranychus urticae</i> Koch	1110	27.61	360	12.12
2	Castor	Carmin spider mite	<i>Tetranychus cinnabarinus</i> (Boisduval)	480	11.94	0	0
3	Rice	Rice leaf mite	<i>Oligonychus oryzae</i> (Hirst)	1170	29.10	1080	36.36
4	Papaya	Carmin spider mite	<i>T. cinnabarinus</i>	390	9.70	360	12.12
5	Cotton	Carmin spider mite	<i>T. cinnabarinus</i>	240	5.97	330	11.11
6	Mango	Eriophyid mite	<i>Aceria mangiferae</i> Sayed	180	4.48	300	10.10
			Total	3570	88.81	2430	81.82
B. Predatory mites							
7	Tapioca		<i>Amblyseius sp.</i>	120	2.99	90	3.03
8	Castor		<i>Neoseiulus longispinosus</i> Evans	60	1.49	0	0.00
9	Rice		<i>Amblyseius sp.</i>	90	2.24	210	7.07
10	Papaya		<i>Amblyseius sp.</i>	90	2.24	90	3.03
11	Cotton		<i>Amblyseius sp.</i>	60	1.49	60	2.02
12	Mango		<i>N. longispinosus</i>	30	0.75	90	3.03
			Total	450	11.19	540	18.18
			Grand Total	4020	100	2970	100.00

* Three observations/ crop /year (90 plants/area); RA- Relative abundance

Table 6. Relative abundance of phytophagous and predatory mite fauna in west zone of Tamil Nadu

Sl. No	West zone						
	Name of the crops	Mite species	Erode		Coimbatore		
			Cumulative No./10 plants*	RA (%)	Cumulative No./10 plants*	RA (%)	
A. Phytophagous mites							
1	Bhendi	Two spotted spider mite	<i>T. urticae</i>	630	8.57	780	10.4
2	Brinjal	Two spotted spider mite	<i>T. urticae</i>	780	10.61	570	7.6
3	Papaya	Carmine spider mite	<i>T. cinnabarinus</i>	570	7.76	420	5.6
4	Grapes	Two spotted spider mite	<i>T. urticae</i>	750	10.20	540	7.2
5	Rice	Rice leaf mite	<i>O. oryzae</i>	990	13.47	1560	20.8
6	Mango	Eriophyid mite	<i>A. mangiferae</i>	720	9.80	570	7.6
7	Tapioca	Two spotted spider mite	<i>T. urticae</i>	510	6.94	0	0
8	Jasmine	Erineum mite	<i>Aceria jasmini</i> ChannaBasavanna	450	6.12	960	12.8
9	Rose	Two spotted spider mite	<i>T. urticae</i>	300	4.08	540	7.2
10	Cotton	Carmine spider mite	<i>T. cinnabarinus</i>	840	11.43	780	10.4
			Total	6540	88.98	6720	89.6
B. Predatory mites							
11	Bhendi		<i>Amblyseius sp.</i>	60	0.82	90	1.2
12	Brinjal		<i>Amblyseius sp.</i>	90	1.22	120	1.6
13	Papaya		<i>N. longispinosus</i>	60	0.82	90	1.2
14	Grapes		<i>N. longispinosus</i>	30	0.41	60	0.8
15	Rice		<i>Amblyseius sp.</i>	150	2.04	180	2.4
16	Mango		<i>N. longispinosus</i>	90	1.22	60	0.8
17	Tapioca		<i>Amblyseius sp.</i>	120	1.63	0	0
18	Jasmine		<i>Amblyseius sp.</i>	60	0.82	60	0.8
19	Rose		<i>Amblyseius sp.</i>	60	0.82	30	0.4
20	Cotton		<i>N. longispinosus</i>	90	1.22	90	1.2
			Total	810	11.02	780	10.4
			Grand Total	7350	100	7500	100

* Three observations/ crop / year (90 plants/area); RA- Relative abundance

Table 8. Relative abundance of phytophagous and predatory mite fauna in cauvery delta zone of Tamil Nadu

Sl. No	Cauvery delta zone								
	Name of the crops	Mite species	Trichy		Thanjavur		Aduthurai		
			Cumulative No./10 plants*	RA (%)	Cumulative No./10 plants*	RA (%)	Cumulative No./10 plants*	RA (%)	
A. Phytophagous mites									
1	Rice	Rice leaf mite	<i>O. oryzae</i>	1680	42.75	1350	50.00	1830	66.30
2	Banana	Leaf mite	<i>Oligonychus indicus</i> (Hirst)	840	21.37	0	0	0	0
3	Black gram	Carmin spider mite	<i>T. cinnabarinus</i>	570	14.50	630	23.33	660	23.91
4	Cowpea	Eriophyid mite	<i>Aceria cajani</i> ChannaBasavanna	360	9.16	510	18.89	0	0
			Total	3450	87.79	2490	92.22	2490	90.22
B. Predatory mites									
5	Rice		<i>Amblyseius sp.</i>	180	4.58	90	3.33	210	7.61
6	Banana		<i>Amblyseius sp.</i>	90	2.29	0	0	0	0
7	Black gram		<i>N. longispinosus</i>	120	3.05	60	2.22	60	2.17
8	Cowpea		<i>N. longispinosus</i>	90	2.29	60	2.22	0	0
			Total	480	12.21	210	7.78	270	9.78
			Grand Total	3930	100	2700	100	2760	100

* Three observations/ crop /year (90 plants/area); RA- Relative abundance

Table 10. Relative abundance of phytophagous and predatory mite fauna in south zone of Tamil Nadu

Sl. No	South zone								
	Name of the crops	Mite species	Madurai		Tirunelveli		Periyakulam		
			Cumulative No./10 plants*	RA (%)	Cumulative No./10 plants*	RA (%)	Cumulative No./10 plants*	RA (%)	
A. Phytophagous mites									
1	Rice	Rice leaf mite	<i>O. oryzae</i>	780	17.57	630	16.67	990	17.93
2	Maize	Leaf mite	<i>O. indicus</i>	270	6.08	300	7.94	600	10.87
3	Sorghum	Leaf mite	<i>O. indicus</i>	360	8.11	480	12.70	0	0
4	Brinjal	Two spotted spider mite	<i>T. urticae</i>	570	12.84	690	18.25	720	13.04
5	Bhendi	Two spotted spider mite	<i>T. urticae</i>	450	10.14	540	14.29	840	15.22
6	Chilli	Yellow mite	<i>Polyphagotarsonemus latus</i> Banks	240	5.41	300	7.94	0	0.00
7	Jasmine	Erineum mite	<i>A. jasmini</i>	540	12.16	420	11.11	780	14.13
8	Grapes	Two spotted spider mite	<i>T. urticae</i>	390	8.78	0	0	720	13.04
9	Mango	Eriophyid mite	<i>A. mangiferae</i>	240	5.41	0	0	390	7.07
			Total	3840	86.49	3360	88.89	5040	91.30
B. Predatory mites									
10	Rice		<i>Amblyseius sp.</i>	150	3.38	90	2.38	90	1.63
11	Maize		<i>Amblyseius sp.</i>	60	1.35	30	0.79	0	0.00
12	Sorghum		<i>Amblyseius sp.</i>	30	0.68	0	0	0	0.00
13	Brinjal		<i>Amblyseius sp.</i>	90	2.03	90	2.38	60	1.09
14	Bhendi		<i>N. longispinosus</i>	90	2.03	120	3.17	90	1.63
15	Chilli		<i>N. longispinosus</i>	30	0.68	0	0	0	0.00
16	Jasmine		<i>Amblyseius sp.</i>	60	1.35	90	2.38	90	1.63
17	Grapes		<i>N. longispinosus</i>	60	1.35	0	0	60	1.09
18	Mango		<i>Amblyseius sp.</i>	30	0.68	0	0	90	1.63
			Total	600	13.51	420	11.11	480	8.70
			Grand Total	4440	100	3780	100	5520	100

* Three observations/ crop /year (90 plants/area); RA- Relative abundance

Table 12. Relative abundance of phytophagous and predatory mite fauna in hilly zone of Tamil Nadu

Sl. No	Hilly zone								
	Name of the crops	Mite species	Ooty		Kothagiri		Valparai		
			Cumulative No./10 plants*	RA (%)	Cumulative No./10 plants*	RA (%)	Cumulative No./10 plants*	RA (%)	
A. Phytophagous mites									
1	Tea	Two spotted spider mite	<i>T. urticae</i>	840	61.05	660	64.83	930	72.66
		Yellow mite	<i>P. latus</i>	390	28.34	250	24.56	190	14.84
			Total	1230	89.39	910	89.39	1120	87.50
B. Predatory mites									
2	Tea		<i>Amblyseius sp.</i>	90	6.54	60	5.89	90	7.03
			<i>N. longispinosus</i>	56	4.07	48	4.72	70	5.47
			Total	146	10.61	108	10.61	160	12.50
			Grand Total	1376	100	1018	100	1280	100

* Three observations/ crop /year (90 plants/area); RA- Relative abundance

Table 5. Diversity indices of phytophagous and predatory mite fauna in north zone of Tamil Nadu

Index	North zone			
	Salem		Namakkal	
	Phytophagous mites	Predatory mites	Phytophagous mites	Predatory mites
No. of species	4	2	4	2
Margalef Index (R1)	0.61	0.82	0.51	0.64
Menhinick's Index (R2)	0.10	0.28	0.10	0.22
Species diversity indices				
Simpson's Index (λ)	0.76	0.81	0.72	0.75
Shannon's Index (H')	1.57	1.71	1.46	1.51
Evenness Index	0.80	0.93	0.86	0.90

Table 7. Diversity indices of phytophagous and predatory mite fauna in west zone of Tamil Nadu

Index	West zone			
	Erode		Coimbatore	
	Phytophagous mites	Predatory mites	Phytophagous mites	Predatory mites
No. of species	5	2	5	2
Margalef Index (R1)	1.02	1.34	0.91	1.20
Menhinick's Index (R2)	0.12	0.35	0.11	0.32
Species diversity indices				
Simpson's Index (λ)	0.89	0.88	0.87	0.86
Shannon's Index (H')	2.26	2.22	2.11	2.09
Evenness Index	0.96	0.92	0.92	0.90

Table 9. Diversity indices of phytophagous and predatory mite fauna in cauvery delta zone of Tamil Nadu

Index	Cauvery delta zone					
	Trichy		Thanjavur		Aduthurai	
	Phytophagous mites	Predatory mites	Phytophagous mites	Predatory mites	Phytophagous mites	Predatory mites
No. of species	4	2	3	2	2	2
Margalef Index (R1)	0.37	0.49	0.26	0.37	0.13	0.18
Menhinick's Index (R2)	0.07	0.18	0.06	0.21	0.04	0.12
Species diversity indices						
Simpson's Index (λ)	0.67	0.73	0.60	0.65	0.39	0.35
Shannon's Index (H')	1.23	1.34	1.00	1.08	0.58	0.53
Evenness Index	0.85	0.96	0.91	0.98	0.89	0.85

Table 11. Diversity indices of phytophagous and predatory mite fauna in south zone of Tamil Nadu

Index	South zone					
	Madurai		Thirunelveli		Periyakulam	
	Phytophagous mites	Predatory mites	Phytophagous mites	Predatory mites	Phytophagous mites	Predatory mites
No. of species	6	2	5	2	6	2
Margalef Index (R1)	0.97	1.25	0.74	0.66	0.70	0.81
Menhinick's Index (R2)	0.15	0.37	0.12	0.24	0.10	0.27
Species diversity indices						
Simpson's Index (λ)	0.87	0.86	0.84	0.78	0.85	0.83
Shannon's Index (H')	2.12	2.06	1.90	1.54	1.91	1.78
Evenness Index	0.93	0.87	0.96	0.93	0.97	0.98

Table 13. Diversity indices of phytophagous and predatory mite fauna in hilly zone of Tamil Nadu

Index	Hilly zone					
	Ooty		Kothagiri		Valparai	
	Phytophagous mites	Predatory mites	Phytophagous mites	Predatory mites	Phytophagous mites	Predatory mites
No. of species	2	2	2	2	2	2
Margalef Index (R1)	0.14	0.20	0.15	0.21	0.14	0.20
Menhinick's Index (R2)	0.06	0.17	0.07	0.19	0.06	0.16
Species diversity indices						
Simpson's Index (λ)	0.43	0.47	0.40	0.49	0.28	0.49
Shannon's Index (H')	0.62	0.67	0.59	0.69	0.46	0.69
Evenness Index	0.93	0.97	0.90	0.99	0.79	0.99