



MITE PREDATOR PROJECT



2015/17



Can we improve natural mite control?

SOME SUCCESS NOW

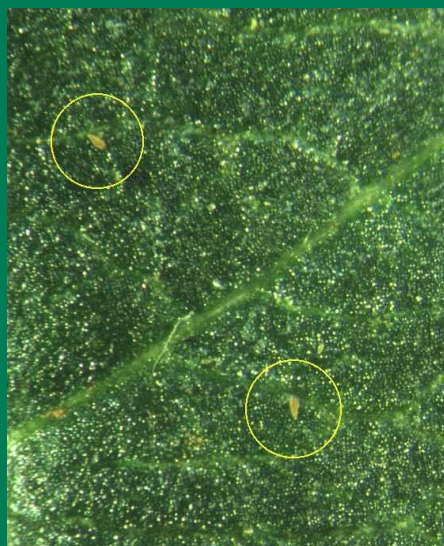


TSM

PREDATORY MITES



STETHORUS



ERIOPHYIDS - APPLES



THRIPS



Can we improve natural mite control with new species of predatory mites ?

T. pyri

to control

European red mite



From Victorian apple orchards

Reared on TSM on bean leaves – quarantine approved

New task for collaborator



Can we improve natural mite control with new species of predatory mites ?

N. californicus

to control

Eriophyids in stonefruit



From Biological Services South Australia
Predatory mites only – quarantine approved
Readily available



Can we improve natural mite control with new species of predatory mites ?

N. californicus

added benefits

other pest mites

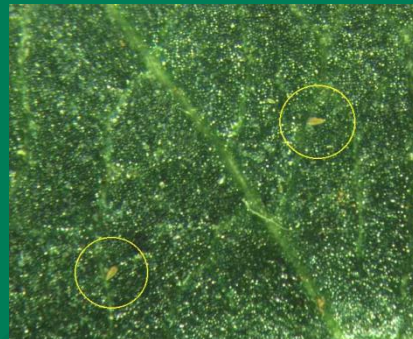


TSM ✓



BM?

ERIOPHYIDS - APPLES





OPERATIONS IN 2015/16

Sites selected – survey results 2014/15; talks in regions
– target pest mites species:

European Red Mite

Eriophyids in Stonefruit

Monitoring – two areas per block; Nov/Dec start

Releases – two species of predatory mites





OPERATIONS IN 2015/16

Sites selected & pest mites at "infestation" levels

	Mite "pest infestations" POME FRUIT			
	*TSM	#ERM	^Eriophyids	Bryobia
Perth Hills	0	0	0	0
Donnybrook	1 of 5	0 of 5	3 of 5	1 of 5
Manjimup/Pemberton	1 of 7	7 of 7	3 of 7	0 of 7
TOTAL	2 of 12	7 of 7	6 of 12	1 of 12
	*TSM = two-spotted mite			
	#ERM = European red mite			
	^Eriophyids: apple rust mite			



Sites selected & pest mites at "infestation" levels

	Mite "pest infestations" STONEFRUIT			
	*TSM	#ERM	^Eriophyids	Bryobia
Perth Hills	3 of 12	3 of 12	3 of 12	0 of 12
Donnybrook	2 of 7	0 of 7	4 of 7	3 of 7
Manjimup/Pemberton	0	0	0	0
TOTAL	5 of 19	3 of 19	7 of 19	3 of 19
	*TSM = two-spotted mite			
	#ERM = European red mite			
	^Eriophyids: plum rust mite			



Releases – two species of predatory mites twice per block

	Releases *Nc		Releases #Tp		
	POME	STONE	POME	STONE	
Perth Hills	0	4 blocks	0	0	
Donnybrook	2 blocks	6 blocks	0	0	
Manjimup/Pemberton	2 blocks	0	1 block	0	
TOTAL	4 blocks	10 blocks	1 block	0 blocks	
*Nc = <i>Neoseiulus californicus</i> ex South Australia					
#Tp = <i>Typhlodromus pyri</i> ex Victoria					



“ISSUES” IN 2015/16

Monitoring start time – October in Perth Hills

T. pyri numbers – with experience, more in 2016/17

Mite identifications – taxonomist very busy



OPERATIONS IN 2016/17

Monitoring – 2015/16 release sites the priority
– new blocks?

Selecting sites – talks in regions

Releases – consider other areas



Thank you

Questions / Comments?