## Crop & Food Research Plant-SyNZ recording sheet, student

Habitat being surveyed								
Lo	cality							
Na	mes of surve	yors						
Date of survey Podocarpus totara (277)					Plot number []			
			[tick i	f present	(Max search time)			
c	Curculionidae	Peristoreus flavitarsis	Sp code 314	[]	larvae mine young leaves, adults chew young leaves			
he	Aphididae	Neophyllaphis totarae	Sp code 532	[]	black aphids on young leaves, may cause downwards curl of leaves			
he	Diaspididae	Eulepidosaphes pyriformis	Sp code 388	[]	brown pear-shaped scale, chlorotic spots on leaf, often on upper side of leaf			
he	Diaspididae	Leucaspis podocarpi	Sp code 386	[]	white-capped scale, tear drop shape, brown tip at narrow end, on leaves			
he	Eriococcidae	Madarococcus totarae	Sp code 387	[]	white male sacs on underside of leaves; female scale, on stems and new leaf buds no sac, green in leaf axils			
1	Plutellidae	Chrysorthenches polita	Sp code 268	[]	larvae make mines in several leaves			
1	Plutellidae	Chrysorthenches porphyritis	Sp code 269	[]	later larval instars ectophytic, often gregarious, feeding under a frass-strewn silk web on current season's shoots			
Als	o may be pres	ent						
a	Eriophyidae	Eriophyes totarae	Sp code 250	[]	causes enlargement of bud, which fails to expand and produce leaves, associated with male cones branches			
a	Tenuipalpidae	Tenuipalpus arboreus	Sp code 900	[]	leaf feeding mite			
a	Tuckerellidae	Tuckerella flabellifera	Sp code 891	[]	bright red mite, distinct appearance, on young wood and branches			
c	Chrysomelidae	Podocarpus leaf chewing beetle totara (sensu Martin db 2000)	Sp code 851	[]	young leaves chewed part way through			
c	Belidae	Agathinus tridens	Sp code 1433	[]	larvae develop in dead wood			
c	Belidae	Pacyurinus sticticus	Sp code 1429	[]	larvae feed subcortically in dead branches of conifers and some angiosperms			
c	Belidae	Rhicnobelus rubicundus	Sp code 1430	[]	larvae feed subcortically in dead branches			
c	Belidae	Rhicnobelus metallicus	Sp code 1431	[]	larvae feed subcortically in dead branches			
c	Nemonychidae	Rhinorhynchus phyllocladi	Sp code 1322	[]	larvae associated with flowers of Phyllocladus. $? = sp$ in. det. May $1993$			
c	Nemonychidae	Rhinorhynchus rufulus	Sp code 1321	[]	larvae feed on pollen of Podocarpaceae			
d	Cecidomyiidae	Podocarpus bud/shoot damage totara (sensu Martin db 1999)	Sp code 557	[]	distortion and blackening of expanding leaves in buds and shoots			

## Abbreviations for major invertebrate groupings

Plant species herbivore list

a = Acari (mites)d = Diptera (flies)c = Coleoptera (beetles)

he = Hemiptera (sucking insects) l = Lepidoptera (moths & butterflies) th = Thysanoptera (thrips) Tuesday, 4 November 2003 Page 1 of 2

he	Coccidae	Aphenochiton pubens	Sp code 602	[]	oval, transparent scale insect with wax plates
he	Coccidae	Crystallotesta ornata	Sp code 608	[]	limpet like, scale insect, female on twigs
he	Coccidae	Poropeza dacrydii	Sp code 622	[]	scale insect, waxy plates, under bark
he	Coccidae	Umbonichiton adelus	Sp code 625	[]	oval scale insect with wax plates, on base of leaves
he	Coccidae	Umbonichiton pellaspis	Sp code 629	[]	elongated, mottled brown scale insect with waxy plates, on twigs
he	Coccidae	Umbonichiton bullatus	Sp code 626	[]	oval scale insect with waxy plates, on twigs
he	Margarodidae	Coelostomidia zealandica	Sp code 842	[]	white scale, long wax tubes for honey dew
he	Margarodidae	Coelostomidia pilosa	Sp code 841	[]	white scale with long wax tube for honey dew
he	Margarodidae	Coelostomidia deboerae	Sp code 838	[]	white scale with long wax tube for honey dew
he	Margarodidae	Margarodidae sp.	Sp code 848	[]	cysts
he	Margarodidae	Platycoelostoma compressa	Sp code 846	[]	scale insect found under bark of Libibocedrus bidwilli and possibly Podocarpus totara
he	Pseudococcidae	Asaphococcus amissus	Sp code 638	[]	mealybugs
he	Pseudococcidae	Paracoccus miro	Sp code 706	[]	live females purplish brown, thinly covered with powdery white wax.
he	Pseudococcidae	Paracoccus podocarpi	Sp code 710	[]	live females purplish red, covered with powdery white wax, under totara bark
he	Pseudococcidae	Paracoccus longicauda	Sp code 705	[]	under bark; live females reddish purple, covered with a heavy layer of fine white wax.
1	Geometridae	Tatosoma tipulata	Sp code 852	[]	edges of young leaves eaten
1	Geometridae	Tatosoma topia	Sp code 1374	[]	feeds on leaves
1	Tortricidae	Cnephasia auct. jactatana	Sp code 1296	[]	webs together dying plant parts
1	Tortricidae	Ctenopseustis obliquana	Sp code 1132	[]	leaves webbed together
1	Tortricidae	Pyrgotis chrysomela	Sp code 1071	[]	webs leaves together
1	Plutellidae	Chrysorthenches glypharcha	Sp code 265	[]	larva not known