

**Table S1.** Details on amount of soil (g) collected from shipping containers, flat rack containers and used machinery at Auckland and Christchurch sea ports per unit (individual freight or machinery item) and per sample.

<b>Sample source</b>	<b>Sample category</b>	<b>Count</b>	<b>Mean (g)</b>	<b>Median (g)</b>	<b>Minimum (g)</b>	<b>Maximum (g)</b>
Shipping container	Per unit	145	422.0	153.8	0.6	5353.3
	Per sample	168	364.2	150.0	0.6	4856.2
Flat rack	Per unit	7	2161.4	1647.4	197.3	4967.6
	Per sample	9	1666.1	1647.4	152.7	4967.6
Used machinery	Per unit	11	321.1	60.4	0.9	2166.4
	Per sample	14	252.3	57.2	0.9	2140.5

Note: Sample weights in across all samples were right skewed with a mean, median, maximum and 90 percentile weight values of 417.3 g, 152.7 g, 4967.6 g and 990.3 g, respectively.

**Table S2.** Number and weight of soil removed from sea container and flat rack containers sampled at Auckland and Lyttelton sea ports.

	Country of origin <sup>1</sup>							
	Australia	American Samoa	Fiji	Tonga	Vanuatu	Other Pacific Is. <sup>2</sup>	Asia <sup>3</sup>	USA
Count	36	12	8	59	21	6	6	2
Mean weight (g)	579	466	815	474	454	860	259	619
Median weight (g)	56	222	392	238	159	38	34	619
Maximum weight (g)	5353	3641	2684	3652	4639	4968	675	754
Minimum weight (g)	5	12	100	11	0.6	8	15	484
Total weight (g)	16792	5592	6519	27971	4639	5160	1293	1238

<sup>1</sup> Plus two samples from Spain (26.4g) and Panama (728g)

<sup>2</sup> Christmas Is. (n=1), Tahiti (n=1), Samoa (n=1), Wallis Is. (n=1), Unidentified Pacific locations (n=2)

<sup>3</sup> Japan (n=2), Korea (n=2), Malaysia (n=1), Thailand (n=1)

**Table S3.** Live insect taxa recovered directly from soil removed from shipping containers arriving at Auckland and Lyttelton sea ports.

Freight origin	Taxa identification	Reference/ Identification
Tonga	<i>Pelcinus marmoratus</i> Simon (Araneae: Oonopidae) *	C. Vink, AgResearch
Tonga	Ants (>30 specimens) ( <i>Pheidole megacephala</i> (F.)) (Hymenoptera: Formicidae)#; Immature mite (Aracina) #	D. Ward, Manaaki Whenua - Landcare Research
Tonga	Cricket ( <i>Gryllodes</i> sp.) (Orthoptera: Gryllidae) #	
Vanuatu	Ant (Hymenoptera: Formicidae) #	
Tonga	Mud dauber wasp nest containing a cadaver of <i>Delta esuriens</i> F. (Hymenoptera: Vespidae) and 11 live parasitoids tentatively identified as belonging to the genus <i>Melittobia</i> (Hymenoptera: Eulophidae) #	D. Ward, Manaaki Whenua - Landcare Research
Australia	Two pupae of <i>Lucilia sericata</i> (Meigen) (Diptera: Calliphoridae) #	T. Crosby, Manaaki Whenua - Landcare Research

\* Identified as being not recorded in New Zealand. # Not assessed or no record on the New Zealand Ministry for Primary Industry Pest Register (01 June 2023)

**Table S4.** *Pseudomonas* isolates from soil removed from sea freight arriving into Auckland and Lyttelton sea ports. Assigned to previously described *Pseudomonas* phylogroups and lineages (Mulet et al. 2010, Passarelli-Araujo et al. 2022, Peix et al. 2018).

<b>Isolate</b>	<b>Country of origin</b>	<b>Sea freight type</b>	<b>Sample Port</b>	<b>GenBank accession</b>	<b><i>Pseudomonas</i> phylogroup</b>	<b><i>Pseudomonas</i> lineage</b>
AUS7	Australia	Sea container	Auckland	KX670872	<i>P. acaligines</i>	<i>P. aeruginosa</i>
AUS22	Australia	Sea container	Auckland	KX670873	<i>P. stutzeri</i>	<i>P. aeruginosa</i>
AUS49	Australia	Used machinery	Auckland	KX670874	<i>P. oryzae</i>	<i>P. aeruginosa</i>
AUS50i	Australia	Used machinery	Auckland	KX670875	<i>P. fluorescens</i>	<i>P. fluorescens</i>
AUS50ii	Australia	Used machinery	Auckland	KX670876	<i>P. anguilliseptica</i>	<i>P. fluorescens</i>
AUS56	Australia	Sea container	Auckland	KX670877	<i>P. stutzeri</i>	<i>P. aeruginosa</i>
AUS57-1-3i	Australia	Sea container	Auckland	KX670878	<i>P. stutzeri</i>	<i>P. aeruginosa</i>
AUS57-2-3iii	Australia	Sea container	Auckland	KX670879	<i>P. stutzeri</i>	<i>P. aeruginosa</i>
AUS61	Australia	Sea container	Auckland	KX670880	<i>P. oryzae</i>	<i>P. aeruginosa</i>
AUS135a	Australia	Sea container	Auckland	KX670881	<i>P. stutzeri</i>	<i>P. aeruginosa</i>
AUS135b	Australia	Sea container	Auckland	KX670882	<i>P. stutzeri</i>	<i>P. aeruginosa</i>
AUS139b	Australia	Used machinery	Auckland	KX670883	<i>P. fluorescens</i>	<i>P. fluorescens</i>
AUS140a	Australia	Used machinery	Auckland	KX670884	<i>P. fluorescens</i>	<i>P. fluorescens</i>
CHR136b	Christmas Island	Sea container	Auckland	KX670885	<i>P. stutzeri</i>	<i>P. aeruginosa</i>
CHR136c	Christmas Island	Sea container	Auckland	KX670886	<i>P. stutzeri</i>	<i>P. aeruginosa</i>
FIJ92	Fiji	Sea container	Auckland	KX670887	<i>P. oleovorans</i>	<i>P. aeruginosa</i>
FIJ96	Fiji	Sea container	Auckland	KX670888	<i>P. putida</i>	<i>P. fluorescens</i>
FIJ113-1	Fiji	Flat rack	Auckland	KX670889	<i>P. stutzeri</i>	<i>P. aeruginosa</i>
FIJ114	Fiji	Flat rack	Auckland	KX670890	<i>P. stutzeri</i>	<i>P. aeruginosa</i>
FIJ120-3	Fiji	Sea container	Auckland	KX670891	<i>P. stutzeri</i>	<i>P. aeruginosa</i>
FIJ142a	Fiji	Sea container	Auckland	KX670892	<i>P. stutzeri</i>	<i>P. aeruginosa</i>
FIJ142b	Fiji	Sea container	Auckland	KX670893	<i>P. stutzeri</i>	<i>P. aeruginosa</i>
ITA154a	Italy	Used machinery	Lyttelton	KX670894	<i>P. putida</i>	<i>P. fluorescens</i>
ITA154c	Italy	Used machinery	Lyttelton	KX670895	<i>P. fluorescens</i>	<i>P. fluorescens</i>
MAL141a	Malaysia	Sea container	Auckland	KX670896	<i>P. stutzeri</i>	<i>P. aeruginosa</i>
MAL141b	Malaysia	Sea container	Auckland	KX670897	<i>P. stutzeri</i>	<i>P. aeruginosa</i>
SAM47	American Samoa	Sea container	Auckland	KX670898	<i>P. putida</i>	<i>P. fluorescens</i>
SAM69	American Samoa	Sea container	Auckland	KX670899	<i>P. stutzeri</i>	<i>P. aeruginosa</i>

SAM82am17	American Samoa	Sea container	Auckland	KX670900	<i>P. aeruginosa</i>	<i>P. aeruginosa</i>
SAM83	American Samoa	Sea container	Auckland	KX670901	<i>P. stutzeri</i>	<i>P. aeruginosa</i>
SAM89	American Samoa	Flat rack	Auckland	KX670902	<i>P. stutzeri</i>	<i>P. aeruginosa</i>
TAI130	Thailand	Sea container	Auckland	KX670903	<i>P. stutzeri</i>	<i>P. aeruginosa</i>
TGA27b	Tonga	Sea container	Auckland	KX670904	<i>P. stutzeri</i>	<i>P. aeruginosa</i>
TGA30b	Tonga	Sea container	Auckland	KX670905	<i>P. stutzeri</i>	<i>P. aeruginosa</i>
TGA33	Tonga	Sea container	Auckland	KX670906	<i>P. putida</i>	<i>P. fluorescens</i>
TGA34b	Tonga	Sea container	Auckland	KX670907	<i>P. putida</i>	<i>P. fluorescens</i>
TGA36	Tonga	Sea container	Auckland	KX670908	<i>P. stutzeri</i>	<i>P. aeruginosa</i>
TGA38	Tonga	Sea container	Auckland	KX670909	<i>P. oryzae</i>	<i>P. aeruginosa</i>
TGA39iii	Tonga	Sea container	Auckland	KX670910	<i>P. stutzeri</i>	<i>P. aeruginosa</i>
TGA41i	Tonga	Sea container	Auckland	KX670911	<i>P. stutzeri</i>	<i>P. aeruginosa</i>
TGA43ai	Tonga	Sea container	Auckland	KX670912	<i>P. stutzeri</i>	<i>P. aeruginosa</i>
TGA46	Tonga	Sea container	Auckland	KX670913	<i>P. putida</i>	<i>P. fluorescens</i>
TGA48a	Tonga	Sea container	Auckland	KX670914	<i>P. stutzeri</i>	<i>P. aeruginosa</i>
TGA64m4	Tonga	Sea container	Auckland	KX670915	<i>P. stutzeri</i>	<i>P. aeruginosa</i>
TGA71	Tonga	Sea container	Auckland	KX670916	<i>P. putida</i>	<i>P. fluorescens</i>
TGA72	Tonga	Sea container	Auckland	KX670917	<i>P. stutzeri</i>	<i>P. aeruginosa</i>
TGA76iim3	Tonga	Sea container	Auckland	KX670918	<i>P. putida</i>	<i>P. fluorescens</i>
TGA76im3	Tonga	Sea container	Auckland	KX670919	<i>P. putida</i>	<i>P. fluorescens</i>
TGA79	Tonga	Sea container	Auckland	KX670920	<i>P. stutzeri</i>	<i>P. aeruginosa</i>
TGA81a3	Tonga	Sea container	Auckland	KX670921	<i>P. aeruginosa</i>	<i>P. aeruginosa</i>
TGA81ai	Tonga	Sea container	Auckland	KX670922	<i>P. putida</i>	<i>P. fluorescens</i>
TGA84a	Tonga	Sea container	Auckland	KX670923	<i>P. putida</i>	<i>P. fluorescens</i>
TGA86m18	Tonga	Sea container	Auckland	KX670924	<i>P. stutzeri</i>	<i>P. aeruginosa</i>
TGA116	Tonga	Sea container	Auckland	KX670925	<i>P. putida</i>	<i>P. fluorescens</i>
TGA118	Tonga	Sea container	Auckland	KX670926	<i>P. stutzeri</i>	<i>P. aeruginosa</i>
TGA121-2	Tonga	Sea container	Auckland	KX670927	<i>P. oryzae</i>	<i>P. aeruginosa</i>
TGA123-171	Tonga	Sea container	Auckland	KX670928	<i>P. putida</i>	<i>P. fluorescens</i>
TGA123-172	Tonga	Sea container	Auckland	KX670929	<i>P. stutzeri</i>	<i>P. aeruginosa</i>
TGA124	Tonga	Sea container	Auckland	KX670930	<i>P. stutzeri</i>	<i>P. aeruginosa</i>
TGA125-1	Tonga	Sea container	Auckland	KX670931	<i>P. pertucinogena</i>	<i>P. pertucinogena</i>
TGA128-171	Tonga	Sea container	Auckland	KX670932	<i>P. putida</i>	<i>P. fluorescens</i>

TGA129-1	Tonga	Sea container	Auckland	KX670933	<i>P. stutzeri</i>	<i>P. aeruginosa</i>
UNK162a	United Kingdom	Used machinery	Auckland	KX670934	<i>P. fluorescens</i>	<i>P. fluorescens</i>
USA133	USA	Sea container	Auckland	KX670935	<i>P. stutzeri</i>	<i>P. aeruginosa</i>
VAN93	Vanuatu	Sea container	Auckland	KX670936	<i>P. stutzeri</i>	<i>P. aeruginosa</i>
VAN95-3	Vanuatu	Sea container	Auckland	KX670937	<i>P. putida</i>	<i>P. fluorescens</i>
VAN101	Vanuatu	Sea container	Auckland	KX670938	<i>P. anguilliseptica</i>	<i>P. fluorescens</i>
VAN102	Vanuatu	Sea container	Auckland	KX670939	<i>P. stutzeri</i>	<i>P. aeruginosa</i>
VAN104-2	Vanuatu	Sea container	Auckland	KX670940	<i>P. putida</i>	<i>P. fluorescens</i>
VAN106-1	Vanuatu	Sea container	Auckland	KX670941	<i>P. aeruginosa</i>	<i>P. aeruginosa</i>
VAN106-2	Vanuatu	Sea container	Auckland	KX670942	<i>P. stutzeri</i>	<i>P. aeruginosa</i>
VAN110-1-2i	Vanuatu	Sea container	Auckland	KX670943	<i>P. anguilliseptica</i>	<i>P. fluorescens</i>
VAN112-1	Vanuatu	Sea container	Auckland	KX670944	<i>P. putida</i>	<i>P. fluorescens</i>
VAN115-1	Vanuatu	Sea container	Auckland	KX670945	<i>P. putida</i>	<i>P. fluorescens</i>
VAN115-2	Vanuatu	Sea container	Auckland	KX670946	<i>P. acaligines</i>	<i>P. aeruginosa</i>
WFI119C-2	Wallis & Futuna Is.	Flat rack	Auckland	KX670947	<i>P. putida</i>	<i>P. fluorescens</i>
WFI119D-1	Wallis & Futuna Is.	Flat rack	Auckland	KX670948	<i>P. stutzeri</i>	<i>P. aeruginosa</i>

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**Table S5.** Twenty-one reference species of the genus *Pseudomonas*<sup>a</sup> used in the 16S rRNA gene nucleotide-based distance analysis. Isolated from soil recovered from sea containers arriving at Auckland and Lyttelton sea ports

<b>Species</b>	<b>GenBank accession</b>	<b><i>Pseudomonas</i> phylogroup</b>	<b><i>Pseudomonas</i> lineage</b>
<i>P. aeruginosa</i>	OP522351	<i>P. aeruginosa</i>	<i>P. aeruginosa</i>
<i>P. alcaligenes</i>	JQ659779	<i>P. alcaligenes</i>	<i>P. aeruginosa</i>
<i>P. baetica</i>	MK000636	<i>P. fluorescens</i>	<i>P. fluorescens</i>
<i>P. borbori</i>	MF077143	<i>P. anguilliseptica</i>	<i>P. fluorescens</i>
<i>P. fluorescens</i>	MG461471	<i>P. fluorescens</i>	<i>P. fluorescens</i>
<i>P. helmanticensis</i>	ON202871	<i>P. fluorescens</i>	<i>P. fluorescens</i>
<i>P. koreensis</i>	KJ812045	<i>P. fluorescens</i>	<i>P. fluorescens</i>
<i>P. monteilii</i>	CP013997	<i>P. putida</i>	<i>P. fluorescens</i>
<i>P. mosselii</i>	MT089928	<i>P. putida</i>	<i>P. fluorescens</i>
<i>P. oryzihabitans</i>	CP013987	<i>P. oryzihabitans</i>	<i>P. aeruginosa</i>
<i>P. oryzihabitans</i>	NR114041	<i>P. oryzihabitans</i>	<i>P. aeruginosa</i>
<i>P. pertucinogena</i>	AB021380	<i>P. pertucinogena</i>	<i>P. pertucinogena</i>
<i>P. plecoglossicidia</i>	MG674349	<i>P. putida</i>	<i>P. fluorescens</i>
<i>P. protegens</i>	NR074599	<i>P. fluorescens</i>	<i>P. fluorescens</i>
<i>P. pseudoacaligenes</i>	JF439302	<i>P. oleovorans</i>	<i>P. aeruginosa</i>
<i>P. putida</i>	AP022227	<i>P. putida</i>	<i>P. fluorescens</i>
<i>P. putida</i>	CP045551	<i>P. putida</i>	<i>P. fluorescens</i>
<i>P. stutzeri</i>	HQ848122	<i>P. stutzeri</i>	<i>P. aeruginosa</i>
<i>P. stutzeri</i>	LR134319	<i>P. stutzeri</i>	<i>P. aeruginosa</i>
<i>P. syringae</i> pv. <i>phaseolicola</i>	NR074598	<i>P. syringae</i>	<i>P. fluorescens</i>
<i>P. syringae</i> pv. tomato	NR074597	<i>P. syringae</i>	<i>P. fluorescens</i>

<sup>a</sup> Contains plant taxa regulated by New Zealand Ministry for Primary Industry (01 June 2023)

**Table S6.** Plant species identified by molecular analysis from soil collected from sea freight arriving at Auckland and Christchurch sea ports.

<b>Species</b>	<b>Container country of origin</b>	<b>GenBank accession</b>
<i>Ludwigia octovalvis</i> (Jacq.) Raven <sup>*,#</sup>	Tonga	Plant ID No. 618833
<i>Hyptis pectinata</i> (L.) Poit. <sup>*,#</sup>	Tonga	Plant ID No. 618834
<i>Euphorbia hyssopifolia</i> L. formerly <i>Chamaesyce hyssopifolia</i> (L.) Small	Tonga	Plant ID No. 618836
<i>Cyperus polystachyos</i> Rottb. (formerly <i>Pycneus polystachyos</i> (Rottb.))	Tonga	Plant ID No. 618839
<i>Eriochloa procera</i> (Retz.) C. E. Hubb. <sup>*,#</sup>	American Samoa	Plant ID No. 618840
<i>Fimbristylis cymosa</i> R. Br. var. <i>cymose</i> <sup>*,#</sup>	Tonga	Plant ID No. 618841
<i>Tribolium obliterum</i> (Hemsl.) Renvoize <sup>*,#</sup>	Australia	Plant ID No. 618842
<i>Euphorbia prostrata</i> Aiton (formerly <i>Chamaesyce prostrata</i> (Aiton) Small <sup>*,#</sup>	Vanuatu	Plant ID No. 618843
<i>Macroptilium atropurpureum</i> (DC.)Urb.	Tonga	Plant ID No. 618846
<i>Chamaesyce hypericifolia</i> (L.) Millsp.	Tonga	Plant ID No. 618847
<i>Cyperus iria</i> L. <sup>*,#</sup>	Vanuatu	Plant ID No. 618848

<sup>\*</sup> Identified as being not recorded in New Zealand. <sup>#</sup> Not assessed or no record on the New Zealand Ministry for Primary Industry Pest Register (01 June 2023)