

Supplementary Information

Variation in the prevalence and abundance of mites parasitising *Abrothrix olivacea* (Rodentia) in the native forest and *Pinus radiata* plantations in central Chile

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Table S1. Parameters of the logistic regression model “Presence of *Ornithonyssus* sp. = season + type of habitat”. The basal level of each variable is given in parenthesis, as well as the parameter (odds ratio) is given for each dummy variable.

Variable	Odds ratio	Standard error	P -value	Confidence interval 95%
Season (Summer)				
Autumn	2.52	0.80	<0.01	[1.36 - 4.69]
Winter	0.14	0.05	<0.01	[0.07 - 0.26]
Spring	6.8	0.53	0.21	[0.78 - 3.01]
Type of habitat* (NF)				
AP	2.88	2.09	0.15	[0.69 - 11.97]
YPWU	11.70	7.86	<0.01	[3.13 - 43.63]
YPNU	6.80	4.71	<0.01	[1.75 - 26.47]

*: NF: native forest, AP: adult pine plantation with abundant understory, YPWU: young pine plantation with abundant understory, and YPNU: young pine plantation with scarce understory.

Table S2. Parameters of the negative binomial regression “Abundance of *Ornithonyssus* sp. = season + type of habitat + sex”. The basal level of each variable is given in parenthesis, as well as the parameter (coefficient) is given for each dummy variable.

Variable	Coefficient	Standard error	P - value	Confidence interval 95%
Season (Summer)				
Autumn	0.48	0.14	0.01	[0.20 - 0.75]
Winter	-2.38	0.25	<0.01	[-2.87 - 1.90]
Spring	0.30	0.16	0.06	[-0.02 - 0.62]
Type of habitat* (NF)				
AP	1.19	0.54	0.03	[0.13 - 2.24]
YPWU	2.32	0.50	<0.01	[1.34 - 3.31]
YPNU	1.39	0.51	0.01	[0.38 - 2.39]
Sex (female)				
male	0.59	0.12	<0.01	[0.35 - 0.83]

*: NF: native forest, AP: adult pine plantation with abundant understory, YPWU: young pine plantation with abundant understory, and YPNU: young pine plantation with scarce understory.

Table S3. Parameters of the logistic regression model “Presence of *Androlaelaps* sp. = season”. The basal level is given in parenthesis, as well as the parameter (odds ratio) is given for each dummy variable.

Variable	Odds ratio	Standard error	P - value	Confidence interval 95%
Season (Summer)				
Autumn	0.76	0.32	0.50	[0.33 - 1.72]
Winter	3.66	1.39	<0.01	[1.73 - 7.72]
Spring	3.64	1.36	<0.01	[1.75 - 7.55]

Table S4. Parameters of the negative binomial regression “Abundance of *Androlaelaps* sp. = season + type of habitat”. The basal level of each variable is given in parenthesis, as well as the parameter (coefficient) is given for each dummy variable.

Variable	Coefficient	Standard error	P - value	Confidence interval 95%
Season (Summer)				
Autumn	-0.16	0.42	0.71	[-0.98 - 0.67]
Winter	1.19	0.44	<0.01	[0.34 - 2.04]
Spring	1.22	0.41	<0.01	[0.41 - 2.03]
Type of habitat* (NF)				
AP	1.47	0.98	0.13	[-0.45 - 3.38]
YPWU	0.47	0.89	0.60	[-1.28 - 2.22]
YPNU	1.48	0.92	0.11	[-0.31 - 3.28]

*: NF: native forest, AP: adult pine plantation with abundant understory, YPWU: young pine plantation with abundant understory, and YPNU: young pine plantation with scarce understory.

Table S5. Parameters of the logistic regression model “Presence of *Ornithonyssus* sp. = season + type of habitat”. The basal level of each variable is given in parenthesis, as well as the parameter (odds ratio) is given for each dummy variable.

Variable	Odds ratio	Standard error	P - value	Confidence interval 95%
Type of habitat*				
(YPNU)				
YPWU	1.85	0.51	0.03	[1.07 - 3.19]
Season				
(Summer)				
Autumn	2.81	0.98	<0.01	[1.42 - 5.57]
Winter	0.15	0.05	<0.01	[0.08 - 0.30]
Spring	1.50	0.52	0.24	[0.76 - 2.94]

*: YPNU: young pine plantation with scarce understory; YPWU: young pine plantation with abundant understory.

Table S6. Parameters of the negative binomial regression model “Abundance of *Ornithonyssus* sp. = season + type of habitat + sex”. The basal level of each variable is given in parenthesis, as well as the parameter (coefficient) is given for each dummy variable.

Variable	Coefficient	Standard error	P - value	Confidence interval 95%
Type of habitat				
(YPNU)				
YPWU	0.93	0.15	<0.01	[0.65 - 1.22]
Season (Summer)				
Autumn	0.52	0.15	<0.01	[0.23 - 0.81]
Winter	-2.26	0.26	<0.01	[-2.77 - 1.75]
Spring	0.34	0.17	0.04	[0.02 - 0.67]
Sex (Female)				
Male	0.61	0.13	<0.01	[0.36 - 0.86]

*: YPNU: young pine plantation with scarce understory; YPWU: young pine plantation with abundant understory.

Table S7. Parameters of the logistic regression model “Presence of *Androlaelaps* sp. = season + type of habitat”. The basal level of each variable is given in parenthesis, as well as the parameter (odds ratio) is given for each dummy variable.

Variable	Odds ratio	Standard error	P - value	Confidence interval 95%
Type of habitat				
(YPNU)				
YPWU	0.27	0.12	<0.01	[0.11 - 0.66]
Season (Summer)				
Autumn	0.81	0.4	0.68	[0.31 - 2.14]
Winter	11.53	7.3	<0.01	[3.33 - 39.87]
Spring	8.29	4.84	<0.01	[2.64 - 26.06]
Host density	1.02	0.01	0.05	[1.0005 - 1.05]

*: YPNU: young pine plantation with scarce understory; YPWU: young pine plantation with abundant understory

Table S8. Parameters of the negative binomial regression model “Abundance of *Androlaelaps* sp. = season + type of habitat”. The basal level of each variable is given in parenthesis as well as the parameter (coefficient) is given for each dummy variable.

Variable	Coefficient	Standard error	P - value	Confidence interval 95%
Type of habitat				
(YPNU)				
YPWU	-1.12	0.36	<0.01	[-1.82 - 0.42]
Season (Summer)				
Autumn	-0.48	0.44	0.27	[-1.34 - 0.38]
Winter	1.31	0.46	<0.01	[0.42 - 2.21]
Spring	1.14	0.41	<0.01	[0.33 - 1.94]

*: YPNU: young pine plantation with scarce understory; YPWU: young pine plantation with abundant understory.