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Appendix 3

**This appendix was part of the submitted manuscript and has been peer reviewed.
It is posted as supplied by the authors.**

Appendix to: Kam AW, Tong WWY, Christensen JM, et al. Microgeographic factors and patterns of aeroallergen sensitisation. *Med J Aust* 2016; 205: 310-315. doi: 10.5694/mja16.00264.

Appendix 3: Aeroallergen sensitisation in different coastal habitation areas

Allergen	<15km from the coastline			15-30km from the coastline			>30km from the coastline			p-value (χ^2)
	% sens.	n (total)	Group	% sens.	n (total)	Group	% sens.	n (total)	Group	
House dust mite	62.6	621	-	66.0	468	-	60.0	315	-	0.215
<i>D. farinae</i>	55.1	465	-	40.9	22	-	44.4	9	-	0.359
<i>D. pteronyssinus</i>	61.4	621	-	65.8	468	-	60.0	315	-	0.185
Animals	40.5	612	-	36.8	410	-	42.0	281	-	0.333
Cat	34.6	609	-	34.4	398	-	39.0	267	-	0.410
Dog	26.8	478	α	19.1	382	β	20.2	272	$\alpha\beta$	0.016*
Cockroach mix	15.1	391	α	40.0	355	β	39.7	237	β	<0.001*
Moulds	17.4	610	α	37.2	406	β	32.3	279	β	<0.001*
<i>Alternaria</i>	12.9	606	α	28.0	382	β	27.6	254	β	<0.001*
<i>Aspergillus</i>	8.0	602	α	16.9	360	β	17.9	251	β	<0.001*
<i>Cladosporium</i>	7.8	295	α	21.3	342	β	17.4	235	β	<0.001*
<i>Penicillium</i>	6.1	82		14.4	319		11.0	227		0.098
Weeds	23.2	611	α	36.9	355	β	47.3	241	γ	<0.001*
Plantain	16.3	608	α	36.3	355	β	46.5	241	γ	<0.001*
<i>Parietaria</i>	4.4	587	-	2.6	38	-	0.0	11	-	0.677
<i>Oleaceae</i> mix	11.1	585	-	2.6	38	-	18.2	11	-	0.189
Trees	24.8	613	α	39.2	380	β	50.0	256	γ	<0.001*
Plane tree	5.6	390	-	6.7	313	-	9.6	229	-	0.170
Pine mix	6.3	80	-	6.5	277	-	4.8	207	-	0.732
Birch tree	14.1	78	α	16.3	313	α	24.0	225	α	0.041*
Temperate grass	33.9	496	α	49.9	421	β	54.8	292	β	<0.001*
Five grass mix	34.4	154	-	58.3	12	-	0.0	2	-	0.142
Rye grass	32.6	405	α	48.9	409	β	54.7	289	β	<0.001*
Timothy grass	43.5	23	$\alpha\beta$	50.1	345	β	61.2	237	α	0.018*
Subtropical grass	20.4	491	α	46.1	384	β	57.3	262	γ	<0.001*
Bermuda grass	20.0	491	α	40.3	380	β	51.2	258	γ	<0.001*
Bahia grass	23.4	171	α	44.6	341	β	57.2	243	γ	<0.001*
Grasses	36.5	619	α	52.2	435	β	58.1	296	β	<0.001*

Note: Z-test with Bonferroni correction results are shown in Group columns. α , β and γ denote statistical significance ($p < 0.05$) in pairwise comparison of proportion of subjects sensitised to each allergen (% sensitised) in each coastal habitation area (i.e. <15km vs. 15-30km, 15-30km vs. >30km, and <15km vs. >30km). Significant differences are indicated when coastal habitation areas have been allocated different Greek letters (α areas are significantly different from β and γ areas, but not from other α areas. Areas with $\alpha\beta$ are considered both α and β areas.) e.g. For dog allergen, the % sensitised in areas <15km from the coastline (26.8%, α) is significantly different to those 15-30km from the coastline (19.1%, β). Neither <15km (α) nor 15-30km (β) zones however are significantly different from those >30km from the coastline (20.2%, $\alpha\beta$).