Transect 1 – Hybrid zone (H1) Flies Blue 1.0 UV Blue 0.5 0.0 -0.5 Purple Green -1.0 Green UV 0.0 0.5 -1.0 -0.5 1.0 UV Butterflies UV Beetles Green Blue

Green

**Transect 1 – Purple zone (L1)** Flies 1.0 Blue UV Blue 0.5 0.0 -0.5 Purple Green -1.0 Green UV 0.0 0.5 -1.0 -0.5 1.0 UV Butterflies UV Beetles Green Blue

Green

**Transect 1 – Yellow zone (M1)** Flies 1.0 Blue UV Blue 0.5 0.0 -0.5 Purple Green Green -1.0 UV 0.0 0.5 -1.0 -0.5 1.0 UV Butterflies UV Beetles Green Blue

Green

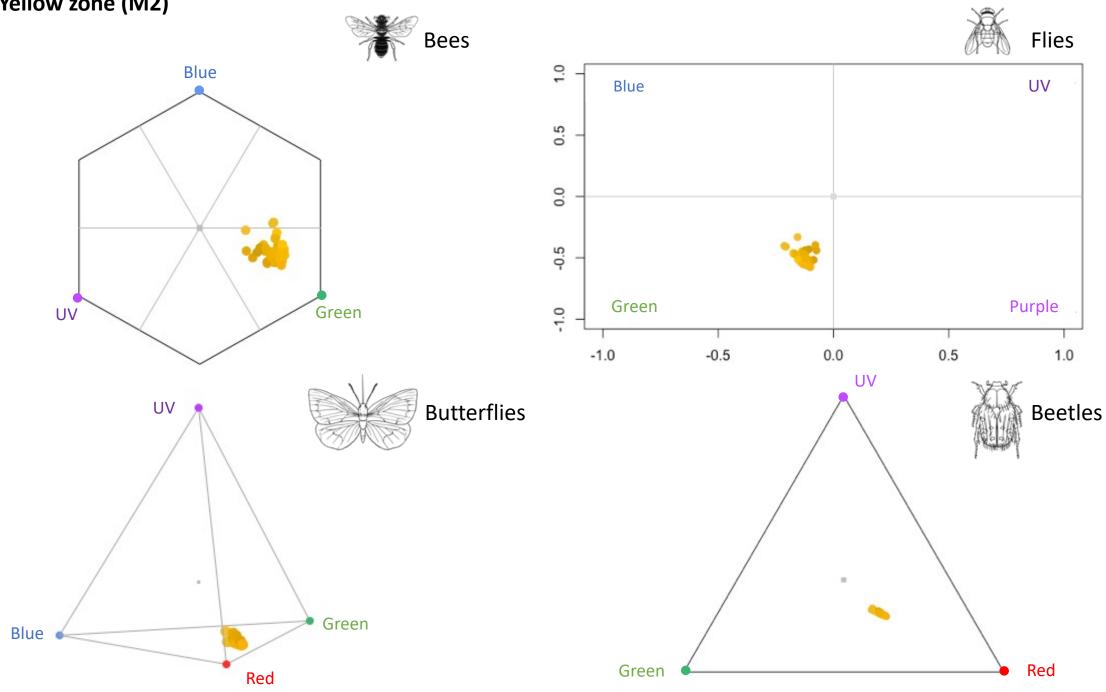
Transect 2 – Hybrid zone (H2) Flies Blue 1.0 UV Blue 0.5 0.0 -0.5 Purple Green Green -1.0 UV 0.0 0.5 -1.0 -0.5 1.0 UV Butterflies UV Beetles Green Blue

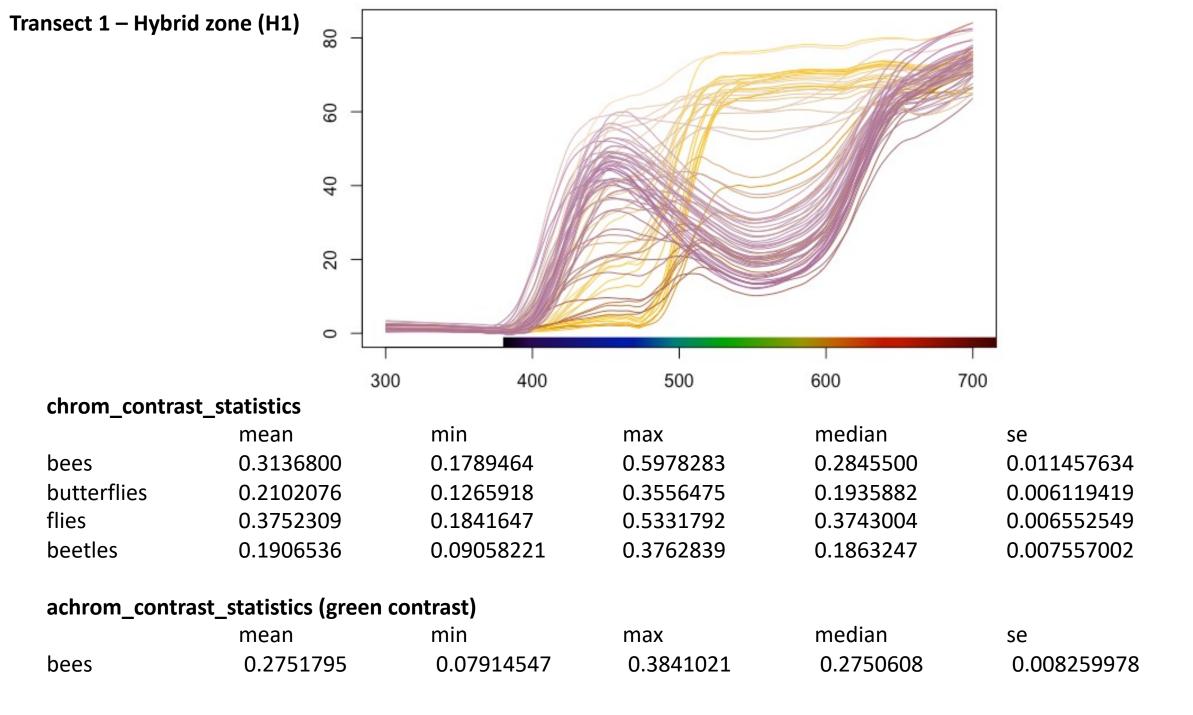
Green

**Transect 2 – Purple zone (L2)** Flies 1.0 Blue UV Blue 0.5 0.0 -0.5 Purple Green Green -1.0 UV 0.0 0.5 -1.0 -0.5 1.0 UV Butterflies UV Beetles Green Blue

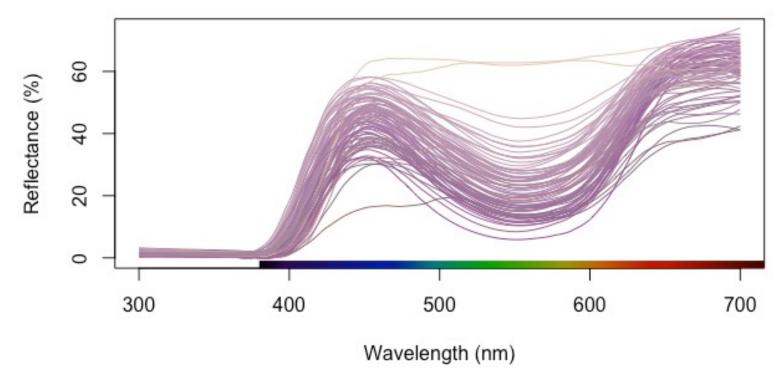
Green

Transect 2 – Yellow zone (M2)





**Transect 1 – Purple zone (L1)** 

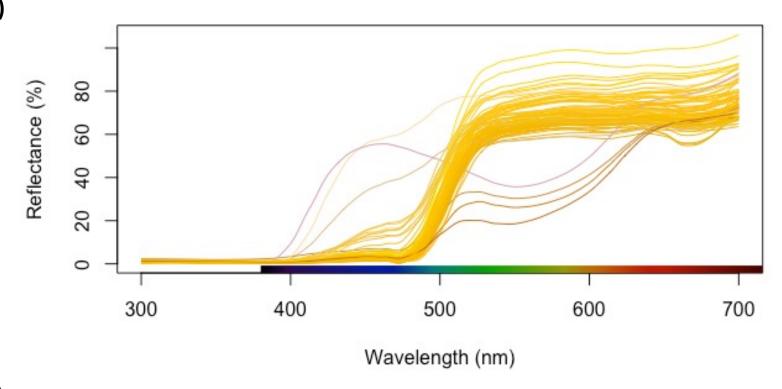


chrom contrast s	tatistics
------------------	-----------

_	mean	min	max	median	se
bees	0.2454843	0.1778786	0.3511787	0.2409120	0.004358770
butterflies	0.1769421	0.1405116	0.2207713	0.1770351	0.002160558
flies	0.3862537	0.3374962	0.4430155	0.3852299	0.002792081
beetles	0.1630992	0.08409076	0.2956702	0.1535540 0.004991669	

	mean	min	max	median	se
bees	0.2427705	0.06649248	0.3674362	0.251627	0.006375478

**Transect 1 – Yellow zone (M1)** 

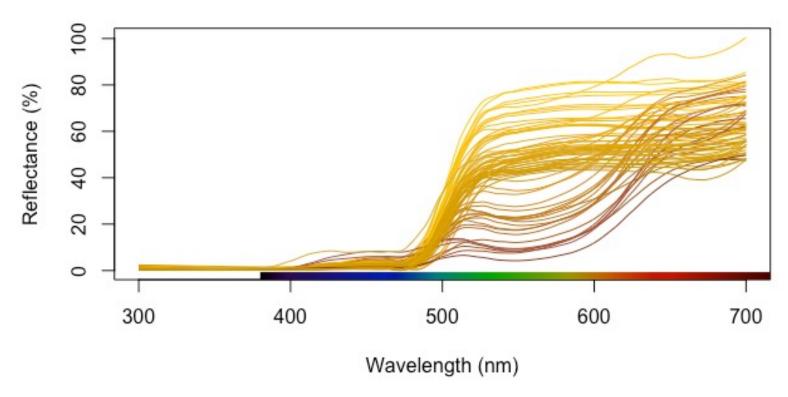


chrom	contrast	statistics

	mean	min	max	median	se
bees	0.5398116	0.2373915	0.6340233	0.5589192	0.008634015
butterflies	0.3316564	0.1703588	0.3743446	0.3443126	0.004267754
flies	0.4923201	0.2804055	0.5697114	0.5123872	0.006334688
beetles	0.2094978	0.1065254	0.3785800	0.2124889	0.004008362

	mean	min	max	median	se
bees	0.3341382	0.1535166	0.385752	0.3362134	0.003482124

**Transect 2 – Hybrid zone (H2)** 

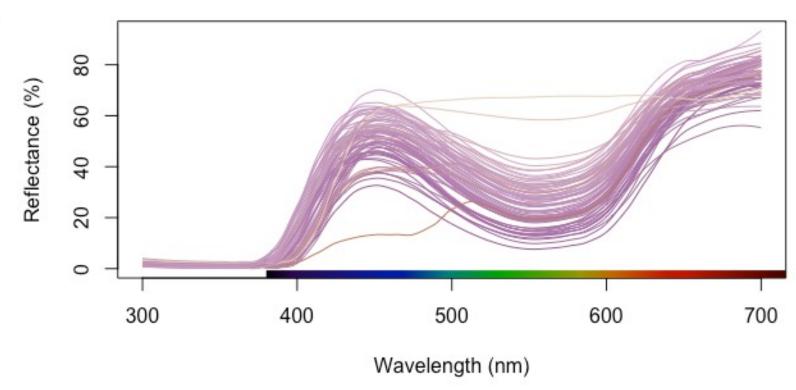


#### chrom\_contrast\_statistics

<del>-</del>	<del>-</del>				
	mean	min	max	median	se
bees	0.5265343	0.2315002	0.6412062	0.5638630	0.012410043
butterflies	0.3408953	0.2509208	0.3875475	0.3473723	0.003093788
flies	0.4666973	0.1877518	0.5826759	0.4934556	0.010642738
beetles	0.2637477	0.1567676	0.5096073	0.2251460	0.009677676

	mean	min	max	median	se
bees	0.2539445	0.008551132	0.357816	0.2813446	0.01075652

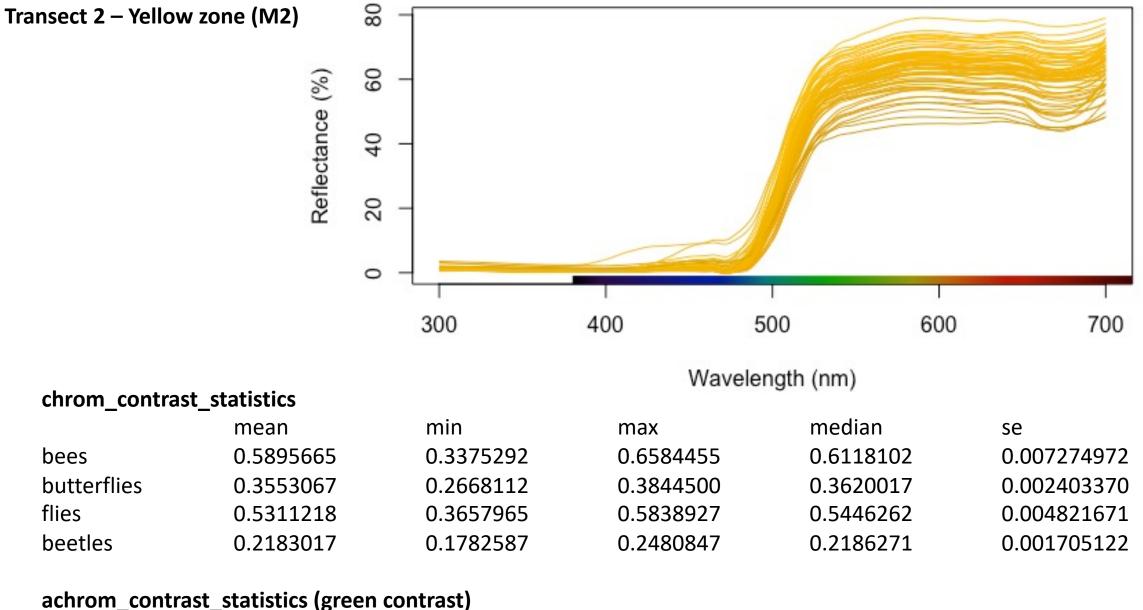
**Transect 2 – Purple zone (L2)** 



chrom contrast s	tatistics
------------------	-----------

_	mean	min	max	median	se
bees	0.2150154	0.1480230	0.3245983 0	.2107281	0.003875049
butterflies	0.1664668	0.1277144	0.2171096	0.1668965	0.002156007
flies	0.3832219	0.2954922	0.4262957	0.3860214	0.002784095
beetles	0.1683142	0.08348161	0.3006958	0.1638617	0.004624106

	mean	min	max	median	se
bees	0.2688288	0.1062535	0.3736638	0.2706339	0.005670457



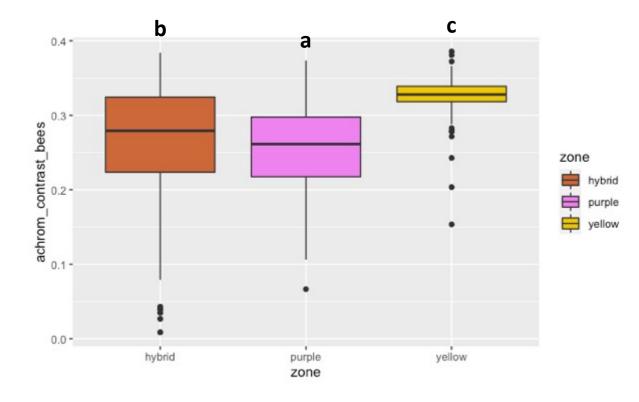
46							
	mean	min	max	median	se		
bees	0.3177443	0.2715757	0.3453163	0.319534	0.001959219		

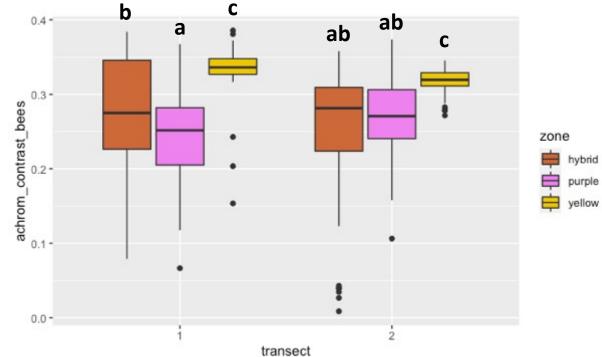
### <u>Achromatic</u> contrast (=green contrast) – just for bees!



aov\_achrom <- aov(achrom\_contrast\_bees ~ transect\*zone, data = achrom)
summary(aov\_achrom)</pre>

#	Df	Sum Sq	Mean Sq F valu	e Pr(>F)
# transect	1	0.0015	0.00147 0.449	0.5031
# zone	2	0.4529	0.22646 69.17	4 <2e-16 ***
# transect:zone	2	0.0521	0.02606 7.961	0.0004 ***
# Residuals	449	1.4699	0.00327	



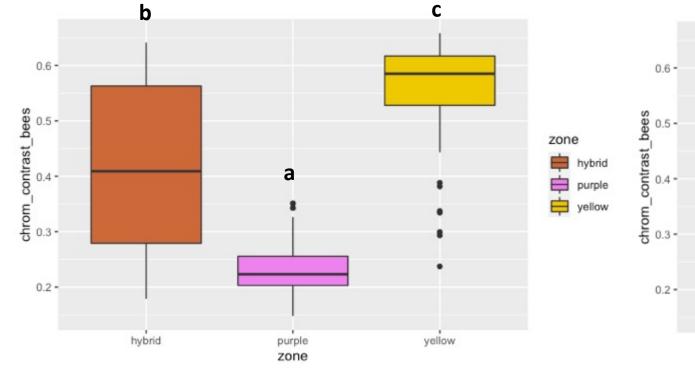


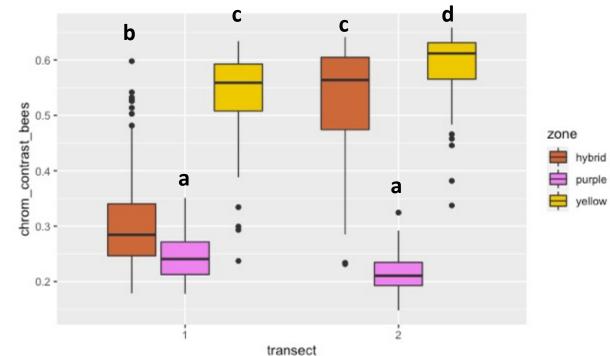
### **Chromatic contrast (= distancia al centro) – bees**



aov\_chrom\_bees <- aov(chrom\_contrast\_bees ~ transect\*zone, data = chrom)
summary(aov\_chrom\_bees)</pre>

#	Df	Sum Sq	Mean Sq	F value	Pr(>F)
# transect	1	0.574	0.574	106.9	<2e-16 ***
# zone	2	8.699	4.349	809.8	<2e-16 ***
# transect:zone	2	1.146	0.573	106.7	<2e-16 ***
# Residuals	449	2.411	0.005		



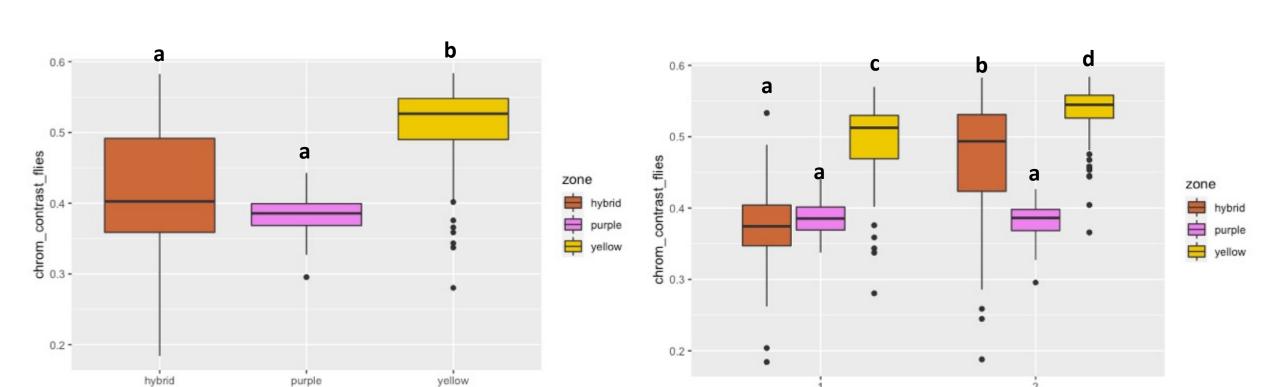


### **Chromatic contrast (= distancia al centro) – flies**

zone

aov\_chrom\_flies <- aov(chrom\_contrast\_flies ~ transect\*zone, data = chrom)
summary(aov\_chrom\_flies)</pre>

#	Df	Sum Sq	Mean Sq	F value	Pr(>F)
# transect	1	0.1828	0.1828	66.12	4.18e-15 ***
# zone	2	1.3183	0.6591	238.40	< 2e-16 ***
# transect:zone	2	0.1682	0.0841	30.43	4.06e-13 ***
# Residuals	449	1.2414	0.0028		



transect

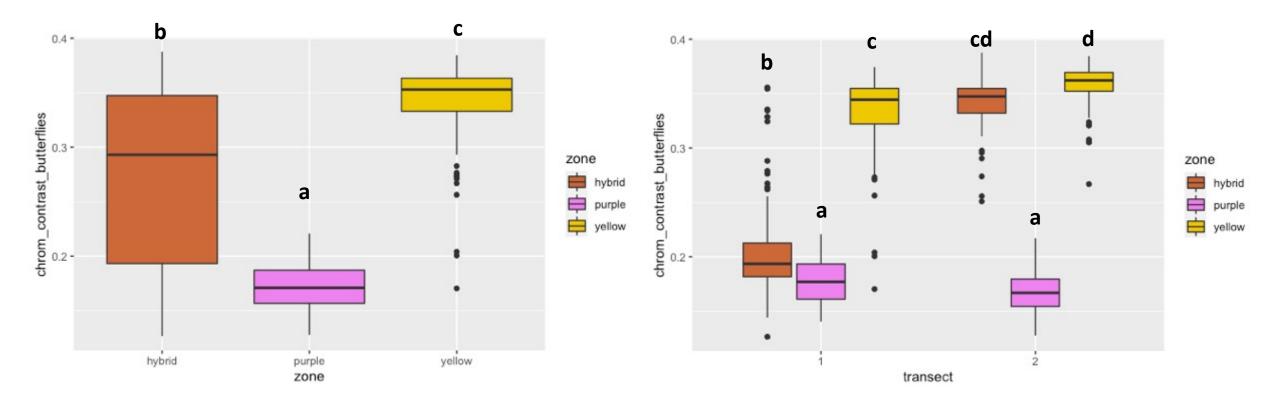


#### **Chromatic contrast (= distancia al centro) – butterflies**



aov\_chrom\_butterflies <- aov(chrom\_contrast\_butterflies ~ transect\*zone, data = chrom)
summary(aov\_chrom\_butterflies)</pre>

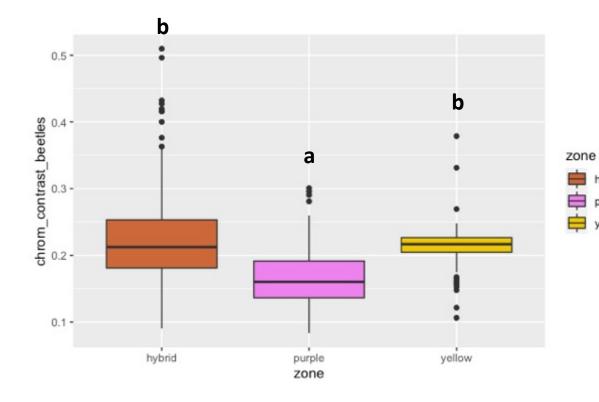
#	Df	Sum Sq	Mean Sq	F value	Pr(>F)
# transect	1	0.2240	0.2240	220.8	<2e-16 ***
# zone	2	2.3162	1.1581	1141.2	<2e-16 ***
# transect:zone	2	0.4027	0.2013	198.4	<2e-16 ***
# Residuals	449	0.4557	0.0010		

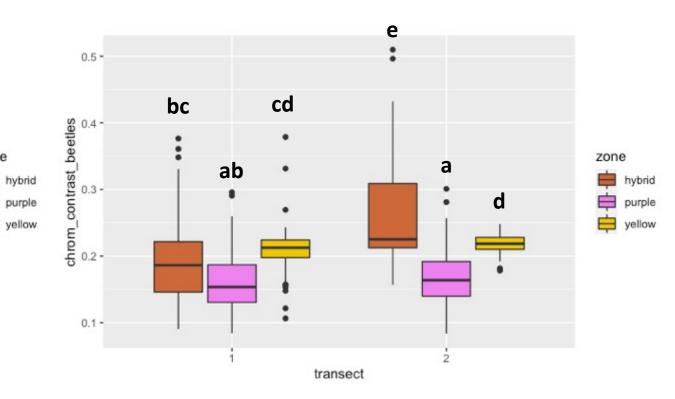


#### **Chromatic contrast (= distancia al centro) – beetles**

aov\_chrom\_beetles <- aov(chrom\_contrast\_beetles ~ transect\*zone, data = chrom)
summary(aov\_chrom\_ beetles)</pre>

#	Df	Sum Sq	Mean Sq F value	Pr(>F)
# transect	1	0.0857	0.08566 33.16	1.58e-08 ***
# zone	2	0.3126	0.15632 60.52	< 2e-16 ***
# transect:zone	2	0.1076	0.05382 20.84	2.22e-09 ***
# Residuals	449	1.1598	0.00258	



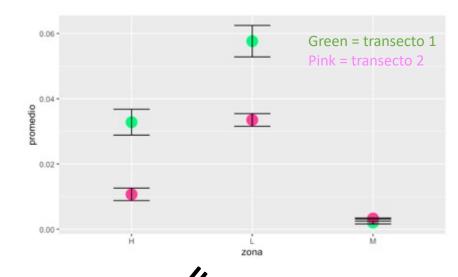


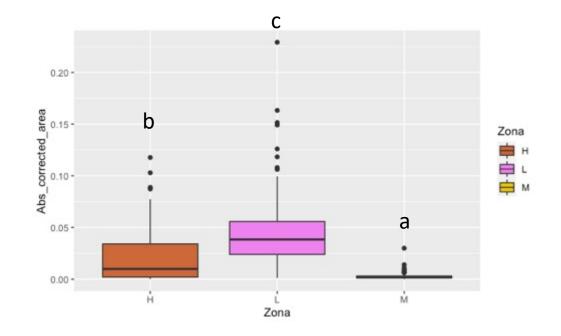


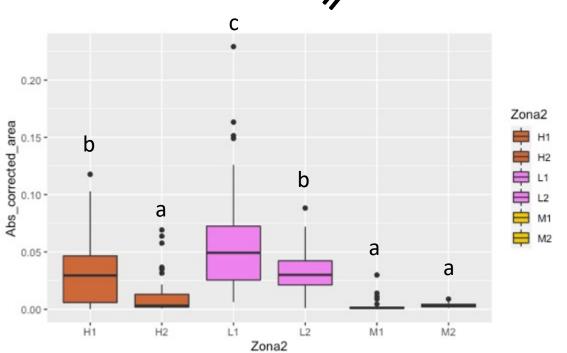
### **Absorbances** → **anthocyanins** (samples in methanol)

aov\_abs <- aov(Abs\_corrected\_area ~ Transecto\*Zona, data = absorbances)
summary(aov\_abs)</pre>

<i>,</i> \	,				
#	Df	Sum Sq	Mean Sq	F value	Pr(>F)
# Transecto	1	0.02017	0.02017	43.28	1.45e-10 ***
# Zona	2	0.13689	0.06845	146.91	< 2e-16 ***
# Transecto:Zona	2	0.01467	0.00734	15.74	2.58e-07 ***
# Residuals	410	0.19102	0.00047		







# **Absorbances** → carotenoids (samples in acetone)

aov_car <- aov(Abs	_corrected	d_area ~ T	ransecto*Zo	ona, data =	carot)
<pre>summary(aov_car)</pre>					
#	Df	Sum Sq	Mean Sq	F value	Pr(>F)

#	וט	Suili Sq	iviean 34	rvaiue	P1(/F)
# Transecto	1	0.0658	0.06582	50.41	5.56e-12 ***
# Zona	2	0.3015	0.15074	115.45	< 2e-16 ***
# Transecto:Zona	2	0.0383	0.01914	14.66	7.08e-07 ***

