

**Supplementary material**

**Geographic variation in the duets of the Rufous-naped  
Wrens complex (*Campylorhynchus rufinucha*)**

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**TABLE S1.** Correlation matrix obtained from the PCA using the 13 measured variables. Values calculated using Pearson product moment correlation.

	Delay	Song duration difference	Maximum frequency difference	Minimum frequency difference	Frequency bandwidth difference	Entropy difference	Peak frequency difference	Maximum frequency	Minimum frequency	Frequency bandwidth	Peak frequency	Entropy	Rate
Delay	1.00	0.67	0.05	0.08	0.08	0.01	0.06	0.04	0.24	0.23	0.09	0.24	0.17
Song duration difference	0.67	1.00	0.02	0.06	0.09	0.02	0.12	0.03	0.11	0.10	0.04	0.17	0.20
Maximum frequency difference	0.05	0.02	1.00	0.29	0.04	0.43	0.10	0.01	0.09	0.09	0.00	0.11	0.14
Minimum frequency difference	0.08	0.06	0.29	1.00	0.86	0.71	0.55	0.01	0.53	0.52	0.02	0.28	0.24
Frequency bandwidth difference	0.08	0.09	0.04	0.86	1.00	0.45	0.64	0.01	0.48	0.47	0.10	0.22	0.27
Entropy difference	0.06	0.12	0.10	0.55	0.64	0.28	1.00	0.19	0.25	0.21	0.16	0.15	0.46
Peak frequency difference	0.01	0.02	0.43	0.71	0.45	1.00	0.28	0.01	0.40	0.38	0.05	0.27	0.13
Maximum frequency	0.24	0.11	0.09	0.53	0.48	0.40	0.25	1.00	0.99	0.99	0.16	0.59	0.26
Minimum frequency	0.04	0.03	0.01	0.01	0.01	0.01	0.19	1.00	0.11	0.27	0.21	0.05	0.37
Frequency bandwidth	0.23	0.10	0.09	0.52	0.47	0.38	0.21	0.27	0.99	1.00	0.12	0.58	0.19
Peak frequency	0.09	0.04	0.00	0.02	0.10	0.05	0.16	0.21	0.16	0.12	1.00	0.24	0.37
Entropy	0.24	0.17	0.11	0.28	0.22	0.27	0.15	0.05	0.59	0.58	0.24	1.00	0.33
Rate	0.17	0.20	0.14	0.24	0.27	0.13	0.46	0.37	0.26	0.19	0.37	0.33	1.00

**TABLE S2.** Number of duets analyzed and average values of some fine structural characteristics of Rufous naped Wren duets. Values are presented as means  $\pm$  SD.

Group	N (pairs)	Average number of duets per bird	Maximum frequency in kHz	Minimum frequency in kHz	Frequency bandwidth in kHz
<i>capistratus</i>	25	3.8 $\pm$ 1.2	4.11 $\pm$ 0.68	0.60 $\pm$ 0.15	3.51 $\pm$ 0.72
<i>humilis</i>	35	4.7 $\pm$ 1.0	5.48 $\pm$ 0.70	0.65 $\pm$ 0.11	4.83 $\pm$ 0.72
<i>rufinucha</i>	41	4.3 $\pm$ 0.9	5.29 $\pm$ 0.89	0.82 $\pm$ 0.09	4.47 $\pm$ 0.93

**TABLE S3.** P values and Cohen's d scores for significantly different pairs within sites by groups. P values and Cohen's d scores are provided by each Principal component. All reported p values represent statistically significant comparisons. Cohen's d values were calculated based on the five principal components extracted.

Group	site	pair 1	pair 2	Principal Component	p value	Cohen's d
capistratus	El Castaño	CAS07	CAS15	PC 3	0.05	2.42
capistratus	El Castaño	CAS08	CAS15	PC 3	0.03	1.68
capistratus	La Ensenada	ENS04	ENS11	PC 1	0.04	-2.24
capistratus	La Ensenada	ENS05	ENS02	PC 2	0.03	3.45
capistratus	La Ensenada	ENS14	ENS05	PC 2	0.02	-2.10
capistratus	La Ensenada	ENS14	ENS06	PC 2	0.04	-1.49
capistratus	La Ensenada	ENS05	ENS06	PC 3	0.01	-1.29
capistratus	La Ensenada	ENS05	ENS10	PC 3	0.03	-1.38
capistratus	La Ensenada	ENS05	ENS11	PC 3	0.03	-1.16
capistratus	La Ensenada	ENS03	ENS06	PC 4	0.01	2.28
capistratus	La Ensenada	ENS03	ENS09	PC 4	0.01	2.69
capistratus	La Ensenada	ENS04	ENS06	PC 4	0.03	1.86
capistratus	La Ensenada	ENS04	ENS09	PC 4	0.02	2.26
capistratus	La Ensenada	ENS05	ENS06	PC 4	0.01	1.23
capistratus	La Ensenada	ENS05	ENS09	PC 4	0.01	1.42
capistratus	La Ensenada	ENS06	ENS10	PC 4	0.01	-2.49
capistratus	La Ensenada	ENS06	ENS13	PC 4	0.00	-3.01
capistratus	La Ensenada	ENS09	ENS10	PC 4	0.01	-2.94
capistratus	La Ensenada	ENS09	ENS13	PC 4	0.00	-3.52
capistratus	La Ensenada	ENS09	ENS07	PC 5	0.05	3.29
capistratus	Los Cocos	TWC04	TWC09	PC 1	0.05	-1.47
capistratus	Los Cocos	TWC04	TWC10	PC 1	0.01	-1.40
capistratus	Los Cocos	TWC05	TWC10	PC 1	0.05	-1.01
capistratus	Los Cocos	TWC06	TWC10	PC 1	0.01	-1.24
capistratus	Los Cocos	TWC07	TWC09	PC 1	0.04	-2.83
capistratus	Los Cocos	TWC07	TWC10	PC 1	0.01	-1.77
capistratus	Los Cocos	TWC02	TWC04	PC 2	0.05	1.15
capistratus	Los Cocos	TWC02	TWC05	PC 2	0.03	1.14
capistratus	Los Cocos	TWC02	TWC06	PC 2	0.00	1.65
capistratus	Los Cocos	TWC02	TWC07	PC 2	0.00	2.86
capistratus	Los Cocos	TWC03	TWC06	PC 2	0.01	1.30
capistratus	Los Cocos	TWC03	TWC07	PC 2	0.01	2.33
capistratus	Los Cocos	TWC04	TWC09	PC 2	0.00	-2.14
capistratus	Los Cocos	TWC05	TWC09	PC 2	0.00	-2.16
capistratus	Los Cocos	TWC06	TWC09	PC 2	0.00	-2.94
capistratus	Los Cocos	TWC06	TWC10	PC 2	0.02	-2.17
capistratus	Los Cocos	TWC07	TWC01	PC 2	0.02	-2.01
capistratus	Los Cocos	TWC07	TWC09	PC 2	0.00	-7.47
capistratus	Los Cocos	TWC07	TWC10	PC 2	0.01	-5.19
capistratus	Los Cocos	TWC02	TWC01	PC 3	0.02	-1.69
capistratus	Los Cocos	TWC03	TWC01	PC 3	0.01	-1.73
capistratus	Los Cocos	TWC04	TWC02	PC 3	0.01	-0.03
capistratus	Los Cocos	TWC04	TWC03	PC 3	0.01	0.00
capistratus	Los Cocos	TWC05	TWC02	PC 3	0.01	1.45
capistratus	Los Cocos	TWC05	TWC03	PC 3	0.00	1.48
capistratus	Los Cocos	TWC09	TWC03	PC 3	0.04	1.33
capistratus	Los Cocos	TWC02	TWC01	PC 4	0.03	1.46
capistratus	Los Cocos	TWC04	TWC01	PC 4	0.01	2.20
capistratus	Los Cocos	TWC04	TWC03	PC 4	0.03	1.60

capistratus	Los Cocos	TWC06	TWC01	PC 4	0.03	1.41
capistratus	Los Cocos	TWC09	TWC01	PC 4	0.02	1.49
humilis	Barra de la Cruz	TT02	TT08	PC 1	0.01	-1.54
humilis	Barra de la Cruz	TT02	TT12	PC 1	0.03	-1.43
humilis	Barra de la Cruz	TT16	TT03	PC 1	0.02	-1.98
humilis	Barra de la Cruz	TT16	TT05	PC 1	0.05	-1.70
humilis	Barra de la Cruz	TT16	TT08	PC 1	0.00	-1.87
humilis	Barra de la Cruz	TT16	TT12	PC 1	0.01	-1.79
humilis	Barra de la Cruz	TT01	TT16	PC 2	0.03	1.18
humilis	Barra de la Cruz	TT05	TT11	PC 2	0.02	-2.27
humilis	Barra de la Cruz	TT08	TT11	PC 2	0.02	-2.53
humilis	Barra de la Cruz	TT16	TT11	PC 2	0.00	-1.99
humilis	Barra de la Cruz	TT02	TT03	PC 3	0.02	1.82
humilis	Barra de la Cruz	TT03	TT05	PC 3	0.02	-2.47
humilis	Barra de la Cruz	TT03	TT10	PC 3	0.01	-2.11
humilis	Barra de la Cruz	TT03	TT15	PC 3	0.03	-1.76
humilis	Barra de la Cruz	TT03	TT16	PC 3	0.02	-1.96
humilis	Barra de la Cruz	TT10	TT12	PC 3	0.04	1.65
humilis	Barra de la Cruz	TT08	TT10	PC 4	0.01	1.92
humilis	Barra de la Cruz	TT11	TT10	PC 4	0.02	1.66
humilis	Cacaluta	TSMH13	TSMH01	PC 1	0.03	1.17
humilis	Cacaluta	TSMH13	TSMH02	PC 1	0.05	1.00
humilis	Cacaluta	TSMH01	TSMH02	PC 2	0.03	-1.16
humilis	Cacaluta	TSMH01	TSMH03	PC 2	0.03	-1.28
humilis	Cacaluta	TSMH01	TSMH04	PC 2	0.01	-1.36
humilis	Cacaluta	TSMH01	TSMH06	PC 2	0.02	-1.72
humilis	Cacaluta	TSMH01	TSMH08	PC 2	0.05	-1.16
humilis	Cacaluta	TSMH01	TSMH09	PC 2	0.03	-1.32
humilis	Cacaluta	TSMH01	TSMH12	PC 2	0.03	-1.26
humilis	Cacaluta	TSMH01	TSMH14	PC 2	0.01	-1.64
humilis	Cacaluta	TSMH01	TSMH19	PC 2	0.01	-1.64
humilis	Cacaluta	TSMH01	TSMH05	PC 3	0.02	1.23
humilis	Cacaluta	TSMH01	TSMH13	PC 3	0.00	1.58
humilis	Cacaluta	TSMH02	TSMH03	PC 3	0.03	-1.36
humilis	Cacaluta	TSMH03	TSMH13	PC 3	0.00	2.25
humilis	Cacaluta	TSMH03	TSMH14	PC 3	0.02	1.15
humilis	Cacaluta	TSMH03	TSMH19	PC 3	0.01	1.93
humilis	Cacaluta	TSMH05	TSMH03	PC 3	0.00	-1.83
humilis	Cacaluta	TSMH05	TSMH06	PC 3	0.04	-1.22
humilis	Cacaluta	TSMH05	TSMH07	PC 3	0.03	-1.62
humilis	Cacaluta	TSMH05	TSMH08	PC 3	0.03	-1.26
humilis	Cacaluta	TSMH05	TSMH09	PC 3	0.01	-2.00
humilis	Cacaluta	TSMH09	TSMH13	PC 3	0.00	2.64
humilis	Cacaluta	TSMH09	TSMH14	PC 3	0.04	1.14
humilis	Cacaluta	TSMH09	TSMH19	PC 3	0.02	2.42
humilis	Cacaluta	TSMH13	TSMH04	PC 3	0.04	-1.74
humilis	Cacaluta	TSMH13	TSMH06	PC 3	0.02	-1.49
humilis	Cacaluta	TSMH13	TSMH07	PC 3	0.01	-2.18
humilis	Cacaluta	TSMH13	TSMH08	PC 3	0.01	-1.57
humilis	Cacaluta	TSMH15	TSMH13	PC 3	0.04	1.72
humilis	Cacaluta	TSMH02	TSMH01	PC 4	0.04	0.76
humilis	Cacaluta	TSMH07	TSMH01	PC 4	0.03	0.81
humilis	Cacaluta	TSMH09	TSMH01	PC 4	0.00	1.67
humilis	Cacaluta	TSMH12	TSMH01	PC 4	0.03	1.71
humilis	Cacaluta	TSMH13	TSMH01	PC 4	0.00	2.18

humilis	Cacaluta	TSMH13	TSMH03	PC 4	0.01	1.36
humilis	Cacaluta	TSMH13	TSMH04	PC 4	0.01	1.96
humilis	Cacaluta	TSMH13	TSMH05	PC 4	0.01	1.67
humilis	Cacaluta	TSMH13	TSMH08	PC 4	0.02	1.72
humilis	Cacaluta	TSMH13	TSMH10	PC 4	0.02	1.22
humilis	Cacaluta	TSMH14	TSMH01	PC 4	0.00	3.36
humilis	Cacaluta	TSMH14	TSMH02	PC 4	0.04	0.83
humilis	Cacaluta	TSMH14	TSMH03	PC 4	0.00	1.97
humilis	Cacaluta	TSMH14	TSMH04	PC 4	0.00	3.40
humilis	Cacaluta	TSMH14	TSMH05	PC 4	0.00	2.63
humilis	Cacaluta	TSMH14	TSMH07	PC 4	0.02	1.01
humilis	Cacaluta	TSMH14	TSMH08	PC 4	0.00	2.99
humilis	Cacaluta	TSMH14	TSMH10	PC 4	0.00	1.85
humilis	Cacaluta	TSMH14	TSMH12	PC 4	0.04	1.83
humilis	Cacaluta	TSMH15	TSMH01	PC 4	0.00	1.85
humilis	Cacaluta	TSMH15	TSMH03	PC 4	0.03	1.11
humilis	Cacaluta	TSMH15	TSMH04	PC 4	0.03	1.58
humilis	Cacaluta	TSMH15	TSMH05	PC 4	0.04	1.35
humilis	Cacaluta	TSMH19	TSMH01	PC 4	0.00	2.55
humilis	Cacaluta	TSMH19	TSMH03	PC 4	0.01	1.54
humilis	Cacaluta	TSMH19	TSMH04	PC 4	0.00	2.39
humilis	Cacaluta	TSMH19	TSMH05	PC 4	0.01	1.96
humilis	Cacaluta	TSMH19	TSMH08	PC 4	0.01	2.10
humilis	Cacaluta	TSMH19	TSMH10	PC 4	0.01	1.41
humilis	Cacaluta	TSMH10	TSMH01	PC 5	0.00	-2.15
humilis	Cacaluta	TSMH10	TSMH07	PC 5	0.01	-1.71
humilis	Cacaluta	TSMH10	TSMH08	PC 5	0.01	-1.41
humilis	Cacaluta	TSMH14	TSMH10	PC 5	0.03	2.49
humilis	Cacaluta	TSMH19	TSMH01	PC 5	0.01	-1.58
humilis	Cacaluta	TSMH19	TSMH07	PC 5	0.02	-1.34
humilis	Cacaluta	TSMH19	TSMH08	PC 5	0.03	-1.12
humilis	El Chical	TCHI11	TCHI7	PC 2	0.03	1.08
humilis	El Chical	TCHI11	TCHI8	PC 2	0.04	1.63
humilis	El Chical	TCHI4	TCHI13	PC 2	0.04	2.25
humilis	El Chical	TCHI4	TCHI7	PC 2	0.00	1.60
humilis	El Chical	TCHI4	TCHI8	PC 2	0.01	2.35
humilis	El Chical	TCHI5	TCHI7	PC 2	0.02	1.11
humilis	El Chical	TCHI5	TCHI8	PC 2	0.03	1.65
humilis	El Chical	TCHI7	TCHI9	PC 2	0.03	-1.04
humilis	El Chical	TCHI8	TCHI9	PC 2	0.04	-1.56
humilis	El Chical	TCHI4	TCHI13	PC 3	0.01	2.76
humilis	El Chical	TCHI8	TCHI4	PC 3	0.03	-2.93
humilis	El Chical	TCHI13	TCHI11	PC 4	0.02	-1.56
humilis	El Chical	TCHI2	TCHI11	PC 4	0.01	-1.41
humilis	El Chical	TCHI3	TCHI11	PC 4	0.02	-1.56
humilis	El Chical	TCHI4	TCHI11	PC 4	0.00	-2.34
humilis	El Chical	TCHI5	TCHI11	PC 4	0.04	-1.05
humilis	El Chical	TCHI7	TCHI11	PC 4	0.02	-1.54
humilis	El Chical	TCHI9	TCHI2	PC 4	0.03	1.65
humilis	El Chical	TCHI9	TCHI4	PC 4	0.01	6.08
humilis	El Chical	TCHI4	TCHI11	PC 5	0.01	1.91
humilis	El Chical	TCHI5	TCHI11	PC 5	0.03	1.09
rufinucha	Chavarrillo	TC01	TC04	PC 1	0.04	1.22
rufinucha	Chavarrillo	TC01	TC05	PC 1	0.03	1.43
rufinucha	Chavarrillo	TC01	TC06	PC 1	0.04	1.01

rufinucha	Chavarrillo	TC01	TC08	PC 1	0.01	1.53
rufinucha	Chavarrillo	TC01	TC06	PC 3	0.00	-2.50
rufinucha	Chavarrillo	TC03	TC06	PC 3	0.02	-1.86
rufinucha	Chavarrillo	TC04	TC06	PC 3	0.01	-1.55
rufinucha	Chavarrillo	TC06	TC10	PC 3	0.02	3.12
rufinucha	Chavarrillo	TC06	TC13	PC 3	0.03	1.78
rufinucha	Chavarrillo	TC04	TC03	PC 4	0.04	-1.72
rufinucha	Chavarrillo	TC05	TC01	PC 4	0.04	-1.59
rufinucha	Chavarrillo	TC05	TC03	PC 4	0.01	-2.27
rufinucha	Chavarrillo	TC06	TC03	PC 4	0.01	-2.17
rufinucha	Chavarrillo	TC07	TC03	PC 4	0.03	-2.33
rufinucha	Chavarrillo	TC08	TC05	PC 4	0.04	1.50
rufinucha	Chavarrillo	TC01	TC06	PC 5	0.00	2.01
rufinucha	Chavarrillo	TC01	TC09	PC 5	0.03	1.13
rufinucha	Chavarrillo	TC01	TC10	PC 5	0.04	1.05
rufinucha	Chavarrillo	TC04	TC06	PC 5	0.01	2.62
rufinucha	Chavarrillo	TC05	TC06	PC 5	0.01	1.27
rufinucha	Chavarrillo	TC06	TC13	PC 5	0.00	-2.96
rufinucha	Chavarrillo	TC07	TC06	PC 5	0.01	3.19
rufinucha	Chavarrillo	TC09	TC13	PC 5	0.04	-1.39
rufinucha	Paso de Ovejas	CR01	CR30	PC 1	0.02	-0.98
rufinucha	Paso de Ovejas	CR21	CR25	PC 1	0.03	1.60
rufinucha	Paso de Ovejas	CR25	CR28	PC 1	0.02	-3.17
rufinucha	Paso de Ovejas	CR25	CR29	PC 1	0.02	-2.50
rufinucha	Paso de Ovejas	CR25	CR30	PC 1	0.01	-1.73
rufinucha	Paso de Ovejas	CR25	CR36	PC 1	0.02	-3.69
rufinucha	Paso de Ovejas	CR01	CR36	PC 2	0.01	-2.52
rufinucha	Paso de Ovejas	CR20	CR24	PC 2	0.04	1.28
rufinucha	Paso de Ovejas	CR20	CR28	PC 2	0.04	1.84
rufinucha	Paso de Ovejas	CR24	CR30	PC 2	0.05	-1.07
rufinucha	Paso de Ovejas	CR24	CR36	PC 2	0.00	-2.20
rufinucha	Paso de Ovejas	CR26	CR36	PC 2	0.01	-2.49
rufinucha	Paso de Ovejas	CR28	CR30	PC 2	0.04	-1.38
rufinucha	Paso de Ovejas	CR28	CR36	PC 2	0.00	-3.28
rufinucha	Paso de Ovejas	CR31	CR36	PC 2	0.02	-2.46
rufinucha	Paso de Ovejas	CR01	CR21	PC 3	0.01	2.65
rufinucha	Paso de Ovejas	CR01	CR23	PC 3	0.00	2.81
rufinucha	Paso de Ovejas	CR01	CR26	PC 3	0.00	1.09
rufinucha	Paso de Ovejas	CR01	CR30	PC 3	0.04	1.50
rufinucha	Paso de Ovejas	CR01	CR36	PC 3	0.00	3.00
rufinucha	Paso de Ovejas	CR29	CR23	PC 3	0.03	0.89
rufinucha	Paso de Ovejas	CR36	CR20	PC 3	0.04	-2.34
rufinucha	Paso de Ovejas	CR36	CR29	PC 3	0.02	-1.08
rufinucha	Paso de Ovejas	CR21	CR01	PC 4	0.03	-1.56
rufinucha	Paso de Ovejas	CR26	CR21	PC 4	0.03	1.70
rufinucha	Paso de Ovejas	CR30	CR29	PC 5	0.03	1.69
rufinucha	Paso de Ovejas	CR31	CR30	PC 5	0.04	-1.57
rufinucha	Playa Salinas	TA01	TA02	PC 1	0.01	-2.80
rufinucha	Playa Salinas	TA01	TA03	PC 1	0.00	-3.92
rufinucha	Playa Salinas	TA01	TA04	PC 1	0.00	-5.12
rufinucha	Playa Salinas	TA01	TA05	PC 1	0.02	-1.32
rufinucha	Playa Salinas	TA01	TA06	PC 1	0.00	-3.88
rufinucha	Playa Salinas	TA01	TA08	PC 1	0.00	-2.48
rufinucha	Playa Salinas	TA01	TA12	PC 1	0.02	-2.88
rufinucha	Playa Salinas	TA01	TA14	PC 1	0.01	-1.76

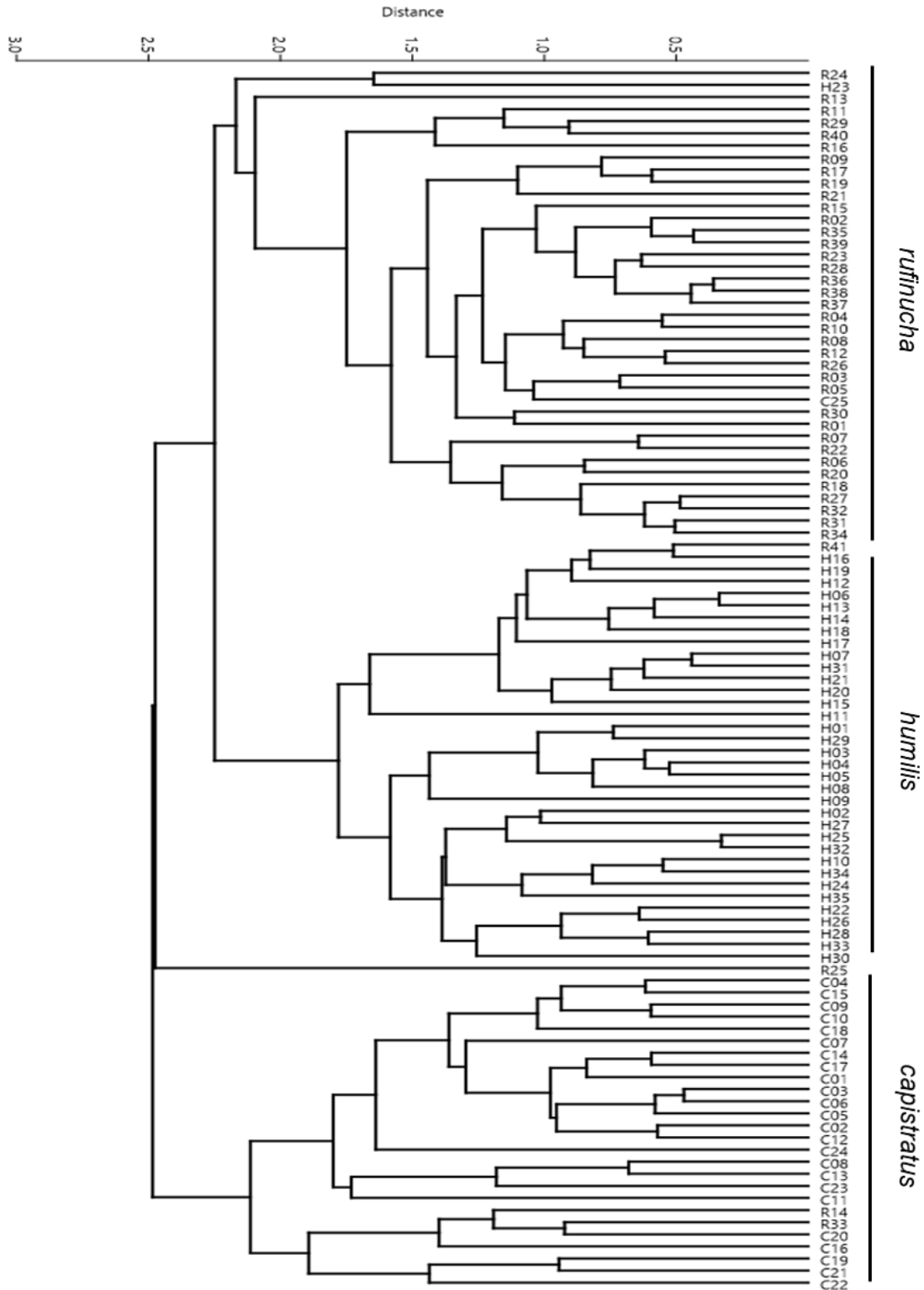
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rufinucha	Playa Salinas	TA03	TA07	PC 1	0.02	1.54
rufinucha	Playa Salinas	TA03	TA09	PC 1	0.00	2.47
rufinucha	Playa Salinas	TA03	TA11	PC 1	0.00	1.59
rufinucha	Playa Salinas	TA03	TA16	PC 1	0.01	1.57
rufinucha	Playa Salinas	TA04	TA09	PC 1	0.01	2.22
rufinucha	Playa Salinas	TA04	TA11	PC 1	0.04	1.23
rufinucha	Playa Salinas	TA05	TA08	PC 1	0.03	-0.92
rufinucha	Playa Salinas	TA06	TA09	PC 1	0.01	2.10
rufinucha	Playa Salinas	TA06	TA11	PC 1	0.03	1.24
rufinucha	Playa Salinas	TA07	TA08	PC 1	0.00	-1.33
rufinucha	Playa Salinas	TA08	TA09	PC 1	0.00	1.96
rufinucha	Playa Salinas	TA08	TA10	PC 1	0.02	1.20
rufinucha	Playa Salinas	TA08	TA11	PC 1	0.00	1.46
rufinucha	Playa Salinas	TA08	TA16	PC 1	0.00	1.37
rufinucha	Playa Salinas	TA08	TA17	PC 1	0.01	1.00
rufinucha	Playa Salinas	TA09	TA02	PC 1	0.03	-1.62
rufinucha	Playa Salinas	TA09	TA12	PC 1	0.04	-1.57
rufinucha	Playa Salinas	TA09	TA14	PC 1	0.03	-1.22
rufinucha	Playa Salinas	TA01	TA02	PC 2	0.01	-1.89
rufinucha	Playa Salinas	TA01	TA09	PC 2	0.01	-1.97
rufinucha	Playa Salinas	TA01	TA11	PC 2	0.03	-1.61
rufinucha	Playa Salinas	TA02	TA04	PC 2	0.04	1.18
rufinucha	Playa Salinas	TA02	TA06	PC 2	0.04	0.97
rufinucha	Playa Salinas	TA02	TA07	PC 2	0.01	1.52
rufinucha	Playa Salinas	TA02	TA08	PC 2	0.03	1.40
rufinucha	Playa Salinas	TA02	TA12	PC 2	0.02	1.55
rufinucha	Playa Salinas	TA07	TA09	PC 2	0.01	-1.52
rufinucha	Playa Salinas	TA07	TA11	PC 2	0.04	-1.26
rufinucha	Playa Salinas	TA09	TA04	PC 2	0.04	1.15
rufinucha	Playa Salinas	TA09	TA06	PC 2	0.05	0.92
rufinucha	Playa Salinas	TA09	TA08	PC 2	0.03	1.40
rufinucha	Playa Salinas	TA12	TA09	PC 2	0.02	-1.55
rufinucha	Playa Salinas	TA07	TA03	PC 3	0.01	-1.08
rufinucha	Playa Salinas	TA08	TA01	PC 3	0.03	-1.47
rufinucha	Playa Salinas	TA08	TA02	PC 3	0.01	-2.84
rufinucha	Playa Salinas	TA08	TA03	PC 3	0.00	-1.72
rufinucha	Playa Salinas	TA08	TA05	PC 3	0.04	-1.61
rufinucha	Playa Salinas	TA08	TA06	PC 3	0.03	-1.10
rufinucha	Playa Salinas	TA08	TA12	PC 3	0.01	-2.28
rufinucha	Playa Salinas	TA09	TA03	PC 3	0.01	-1.07
rufinucha	Playa Salinas	TA14	TA03	PC 3	0.04	-0.85
rufinucha	Playa Salinas	TA16	TA03	PC 3	0.05	-0.96
rufinucha	Playa Salinas	TA17	TA03	PC 3	0.00	-1.38
rufinucha	Playa Salinas	TA08	TA01	PC 4	0.03	1.79
rufinucha	Playa Salinas	TA08	TA05	PC 4	0.02	1.66
rufinucha	Playa Salinas	TA11	TA01	PC 4	0.00	3.94
rufinucha	Playa Salinas	TA11	TA02	PC 4	0.00	2.22
rufinucha	Playa Salinas	TA11	TA03	PC 4	0.01	1.89
rufinucha	Playa Salinas	TA11	TA04	PC 4	0.00	2.36
rufinucha	Playa Salinas	TA11	TA05	PC 4	0.00	3.44
rufinucha	Playa Salinas	TA11	TA06	PC 4	0.01	2.52
rufinucha	Playa Salinas	TA11	TA07	PC 4	0.01	2.02
rufinucha	Playa Salinas	TA11	TA09	PC 4	0.00	3.66
rufinucha	Playa Salinas	TA11	TA10	PC 4	0.02	1.53



rufinucha	Playa Salinas	TA12	TA03	PC 4	0.02	-1.18
rufinucha	Playa Salinas	TA12	TA06	PC 4	0.02	-1.37
rufinucha	Playa Salinas	TA12	TA07	PC 4	0.04	-1.09
rufinucha	Playa Salinas	TA12	TA08	PC 4	0.00	-1.83
rufinucha	Playa Salinas	TA12	TA10	PC 4	0.02	-1.15
rufinucha	Playa Salinas	TA12	TA11	PC 4	0.00	-3.15
rufinucha	Playa Salinas	TA14	TA11	PC 4	0.02	-1.19
rufinucha	Playa Salinas	TA14	TA12	PC 4	0.01	1.07
rufinucha	Playa Salinas	TA16	TA11	PC 4	0.00	-4.90
rufinucha	Playa Salinas	TA17	TA11	PC 4	0.02	-2.55
rufinucha	Playa Salinas	TA17	TA12	PC 4	0.01	1.54
rufinucha	Playa Salinas	TA03	TA01	PC 5	0.02	1.09
rufinucha	Playa Salinas	TA04	TA03	PC 5	0.00	-1.62
rufinucha	Playa Salinas	TA06	TA03	PC 5	0.00	-2.30
rufinucha	Playa Salinas	TA07	TA06	PC 5	0.02	1.73
rufinucha	Playa Salinas	TA08	TA03	PC 5	0.00	-2.12
rufinucha	Playa Salinas	TA08	TA07	PC 5	0.02	-1.56
rufinucha	Playa Salinas	TA11	TA03	PC 5	0.00	-1.90
rufinucha	Playa Salinas	TA12	TA01	PC 5	0.05	0.98
rufinucha	Playa Salinas	TA12	TA04	PC 5	0.01	1.50
rufinucha	Playa Salinas	TA12	TA06	PC 5	0.00	2.18
rufinucha	Playa Salinas	TA12	TA08	PC 5	0.00	1.99
rufinucha	Playa Salinas	TA12	TA11	PC 5	0.01	1.78
rufinucha	Playa Salinas	TA14	TA03	PC 5	0.00	-1.73
rufinucha	Playa Salinas	TA14	TA07	PC 5	0.03	-1.21
rufinucha	Playa Salinas	TA14	TA12	PC 5	0.00	-1.62
rufinucha	Playa Salinas	TA16	TA04	PC 5	0.04	1.38
rufinucha	Playa Salinas	TA16	TA06	PC 5	0.01	0.23
rufinucha	Playa Salinas	TA16	TA08	PC 5	0.01	2.02
rufinucha	Playa Salinas	TA16	TA11	PC 5	0.02	1.74
rufinucha	Playa Salinas	TA16	TA14	PC 5	0.01	1.51
rufinucha	Playa Salinas	TA17	TA03	PC 5	0.01	-1.44
rufinucha	Playa Salinas	TA17	TA12	PC 5	0.02	-1.32

**TABLA S4.** Results of the quadratic regressions using delay time of response and difference between songs as dependent variables and Julian date as the independent variable by group.

Variables	R	R <sup>2</sup>	B	F	<i>p</i>
<i>capistratus</i>					
Delay	0.072	0.005	0.014	0.057	0.945
Difference between songs	0.219	0.048	0.027	0.553	0.583
<i>humilis</i>					
Delay	0.225	0.05	0.045	0.851	0.437
Difference between songs	0.359	0.129	0.065	2.373	0.109
<i>rufinucha</i>					
Delay	0.189	0.039	0.033	0.772	0.469
Difference between songs	0.224	0.05	0.027	1.008	0.375



**FIGURE S1.** Dendrogram resulted from the cluster analysis at the level of pairs (territories). Values on the horizontal axis represent the average Euclidian distance (similitude) between sites. Alphanumeric codes at the end of each branch of the dendrogram represent each of the sampled territories (pairs) during the study. Letters in the code represent the first letter of the group name: R for *rufinucha*, H for *humilis* and C for *capistratus*. Numbers represent the number assigned to the pairs.