

Feeding strategies of fish living in two water reservoirs in the Magdalena River basin

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Table 1. Frequency of occurrence (FO) percentage and volumetric percentage (VP) contributed by 17 food categories to the diets of fish species of reservoirs Porce II and Porce III during four rainfall seasons.

RESERVOIR PORCE II																
Season	2011				2012				2013							
	Dry I		Rains I		Dry II		Rains II		Dry III		Rains III		Dry IV		Rains IV	
<i>Astyanax microlepis</i> Eigenmann 1913 (n= 63) (average size 80 mm)																
Number individuals	9		11		11		5		16		1		6		4	
Leaves	8.51	18.75	26.11	28.13	26.62	35.29	27.35	28.57	37.88	33.33		24.31	28.57	26.89	33.33	
Seed	24.65	12.50	4.64	15.63	3.31	17.65	26.61	21.43	9.30	15.15		3.34	21.43	8.06	25.00	
Dermaptera			0.81	3.13												
Blattodea			0.45	3.13												
Coleoptera			0.10	3.13	21.22	5.88			0.03	3.03						
Coleoptera (Larva)	5.93	12.50					0.69	7.14								
Hemiptera				3.13			0.26									
Hemiptera (Nymph)			1.46	3.13												
Diptera (Larva)	0.12	6.25	2.15	15.63	0.41	5.88	0.30	7.14	0.20	3.03				0.13	8.33	
Hymenoptera									3.25	3.03						
Formicidae	6.10	12.50														
Terrestrial insect fragments	6.28	25.00	0.89	12.50	32.53	11.76	10.17	28.57	24.36	21.21		46.34	21.43	3.03	8.33	
Decapoda					13.79	17.65	34.62	7.14	20.26	15.15		4.53	14.29	7.55	16.67	
Fish bone or muscle	46.95	6.25	63.38	12.50					4.72	6.06	100.00	100.00	14.95	7.14	54.34	8.33
Fish scales	1.47	6.25			2.12	5.88							6.53	7.14		
<i>Hoplosternum magdalenae</i> Eigenmann 1913 (n=57) (average size 81 mm)																
Number individuals	9		6		4		24		2				4		8	

Leaves	27.90	23.08					1.45	2.44			4.75	16.67		
Seed	3.35	7.69											9.06	16.00
Trichoptera					16.00	20.00							2.86	8.00
Coleoptera	2.23	7.69					8.92	14.63						
Coleoptera (Larva)							3.05	9.76					20.61	28.00
Hemiptera			2.40	9.09			1.61	2.44					0.19	4.00
Diptera (Larva)	0.22	7.69					0.12	2.44					5.71	16.00
Terrestrial insect fragments	39.06	30.77	77.46	54.55			25.42	34.15	100.00	100.00			27.10	50.00
Decapoda	27.23	23.08	20.14	36.36	84.00	80.00	59.44	34.15					68.15	33.33
													1.49	4.00

***Roeboides dayi* (Steindachner 1878) (n=43) (average size 69 mm)**

Number individuals	4		6		6		3		4		4		16	
Leaves			5.54	14.29	2.99	12.50							0.56	4.55
Seeds									9.24	12.50				
Diptera (Larva)									33.46	25.00			0.40	4.55
Terrestrial insect fragments	61.76	25.00	36.01	28.57			39.37	60.00					14.36	50.00
Decapoda					74.33	50.00			3.05	25.00			1.21	4.55
Fish bone or muscle													0.51	9.09
Fish scales	38.24	75.00	58.45	57.14	22.69	37.50	60.63	40.00	54.25	37.50			85.64	50.00
													96.28	63.64

RESERVOIR PORCE III

Season	2011				2012				2013						
	LWL I		Rains I		LWL II		Rains II		LWL III		Rains III		LWL IV		Rains IV
<i>Astyanax microlepis</i> Eigenmann 1913 (n=45) (average size 78 mm)															
Number individuals	5		6		4		4		8		4		7		7
Leaves	63.49	33.33	34.03	36.36	86.46	16.67	7.73	12.50	7.39	31.25	72.94	21.43	52.32	22.22	21.96
Seed	7.94	11.11	44.50	36.36	2.88	16.67			1.27	12.50	3.33	21.43	5.28	22.22	
Trichoptera (Larva)							43.07	12.50							
Coleoptera							30.82	25.00			2.16	14.29			
Coleoptera (Larva)	3.97	11.11							0.01	6.25					
Hemiptera		11.11											0.70		
Diptera											0.20	7.14			
Diptera (Larva)			2.68	9.09	0.86	16.67			0.18	12.50					

Hymenoptera						0.86	16.67										
Formicidae								0.50	12.50	0.41	6.25	0.39	7.14				
Terrestrial insect fragments	24.60	33.33	18.79	18.18	1.73	16.67	17.87	37.50	2.60	18.75	2.94	7.14	8.83	27.78	32.14	7.69	
Decapoda						7.20	16.67			88.14	12.50			32.86	27.78	45.89	53.85
Fish bone or muscle												18.04	21.43				

***Brycon henni* Eigenmann 1913 (n=97) (average size 134 mm)**

Number individuals	8		8		1		34		9		5		24		8	
Leaves	2.75	18.75	11.13	16.00	23.81	50.00	13.42	32.14	38.56	53.85	40.25	66.67	19.75	44.44	7.46	33.33
Seed	12.21	6.25	7.88	16.00			8.63	14.29	9.43	30.77	27.66	16.67	0.08	5.56	13.16	13.33
Trichoptera (Larva)			0.01	4.00			2.95	8.93								
Odonata (Nymph)	0.55	6.25														
Blattodea			1.86	4.00												
Coleoptera	6.10	6.25	5.57	8.00			0.33	3.57								
Hymenoptera	0.12	6.25	11.22	12.00			0.18	1.79							4.53	6.67
Formicidae	0.41	6.25	2.16	8.00			0.26	3.57								
Terrestrial insect fragments	10.50	25.00	34.47	20.00	76.19	50.00	2.32	21.43	0.84	7.69			6.44	13.89	6.73	26.67
Decapoda			25.01	4.00			25.57	7.14	51.17	7.69	32.10	16.67	15.67	8.33	43.83	13.33
Araneae			0.08	4.00									0.83	2.78		
Fish bone or muscle	67.13	18.75					46.34	7.14					57.23	25.00	24.29	6.67
Fish scales	0.24	6.25	0.62	4.00												

***Roeboides dayi* (Steindachner 1878) (n= 29) (average size 68 mm)**

Number individuals	5		7		1		8		3		5			
Leaves	0.72	14.29												
Seeds			16.81	12.50			0.36	9.09						
Diptera (Larva)	9.66	14.29	5.04	12.50										
Terrestrial insect fragments	4.83	14.29	21.85	12.50			4.81	9.09	29.09	25.00		17.41	50.00	
Decapoda							48.13	27.27	21.82	25.00				
Fish bone or muscle	7.25	14.29												
Fish scales	77.54	42.86	56.30	62.50			100.00	100.00	46.69	54.55	49.09	50.00	82.59	50.00