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Taxonomic diversity of parasitoid wasps in agricultural landscapes

PATTERNS OF TAXONOMIC DIVERSITY OF POMPILIDAE AND MUTILLIDAE (HYMENOPTERA: POMPILOIDEA) IN AGRICULTURAL LANDSCAPES IN THE BRAZILIAN ATLANTIC FOREST OF SOUTHERN BAHIA

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SUPPLEMENTARY MATERIAL

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Appendix 1. Forest cover and geographic location of 30 cocoa agroforestry sites (cabruca) and 30 Atlantic Forest remnant sites (forest) in southern Bahia, Brazil.

Landscape_cod	Habitat_type	Region	Foret_cover_(%)	Longitude	Latitude
B13	Cabruca	Severely_deforested	25.4845	-39.321616	-15.659441
B13	Forest	Severely_deforested	25.4845	-39.323028	-15.662462
B14	Cabruca	Severely_deforested	28.645754	-39.16679	-15.805828
B14	Forest	Severely_deforested	28.645754	-39.163018	-15.811215
B15	Cabruca	Severely_deforested	8.912572	-39.213718	-16.017654
B15	Forest	Severely_deforested	8.912572	-39.212349	-16.019074
B16	Cabruca	Severely_deforested	55.294327	-39.376006	-15.514847
B16	Forest	Severely_deforested	55.294327	-39.378864	-15.516445
B18	Cabruca	Severely_deforested	60.702082	-39.366053	-15.502311
B18	Forest	Severely_deforested	60.702082	-39.36509	-15.499895
B19	Cabruca	Severely_deforested	18.524418	-39.05936	-15.736234
B19	Forest	Severely_deforested	18.524418	-39.060274	-15.731892
B20	Cabruca	Severely_deforested	29.290713	-39.105631	-15.848765
B20	Forest	Severely_deforested	29.290713	-39.110264	-15.845867
B21	Cabruca	Severely_deforested	12.992108	-39.367736	-15.87798
B21	Forest	Severely_deforested	12.992108	-39.365572	-15.873984
B7	Cabruca	Severely_deforested	8.489847	-39.418548	-15.857993
B7	Forest	Severely_deforested	8.489847	-39.416355	-15.855653
B9	Cabruca	Severely_deforested	48.454309	-39.522101	-15.860159
B9	Forest	Severely_deforested	48.454309	-39.523769	-15.859274
I10	Cabruca	Moderately_forested	78.020445	-39.0951	-14.620779
I10	Forest	Moderately_forested	78.020445	-39.097511	-14.622858
I11	Cabruca	Moderately_forested	9.150214	-39.260454	-14.680981
I11	Forest	Moderately_forested	9.150214	-39.259719	-14.68211
I12	Cabruca	Moderately_forested	17.368367	-39.209393	-14.674411
I12	Forest	Moderately_forested	17.368367	-39.210186	-14.680465
I13	Cabruca	Moderately_forested	37.847934	-39.272998	-14.540616
I13	Forest	Moderately_forested	37.847934	-39.268568	-14.543048
I14	Cabruca	Moderately_forested	36.455289	-39.193279	-14.753158
I14	Forest	Moderately_forested	36.455289	-39.191644	-14.75169
I15	Cabruca	Moderately_forested	57.205038	-39.058945	-14.502768
I15	Forest	Moderately_forested	57.205038	-39.062584	-14.50154
I16	Cabruca	Moderately_forested	65.763599	-39.039892	-14.438841
I16	Forest	Moderately_forested	65.763599	-39.038531	-14.43997
I17	Cabruca	Moderately_forested	59.194917	-39.213371	-14.83192
I17	Forest	Moderately_forested	59.194917	-39.213314	-14.830204
I4	Cabruca	Moderately_forested	28.601577	-39.223316	-14.652442
I4	Forest	Moderately_forested	28.601577	-39.222626	-14.650248
I8	Cabruca	Moderately_forested	58.331676	-39.137854	-14.73368
I8	Forest	Moderately_forested	58.331676	-39.136325	-14.73427
U1	Cabruca	Highly_forested	36.134972	-39.055772	-15.338958
U1	Forest	Highly_forested	36.134972	-39.05473	-15.331624
U11	Cabruca	Highly_forested	48.063462	-39.252643	-15.19746
U11	Forest	Highly_forested	48.063462	-39.255488	-15.19947
U12	Cabruca	Highly_forested	55.742381	-39.26394	-15.129312
U12	Forest	Highly_forested	55.742381	-39.265258	-15.130132
U13	Cabruca	Highly_forested	23.244655	-39.418554	-15.252386
U13	Forest	Highly_forested	23.244655	-39.418125	-15.250077
U14	Cabruca	Highly_forested	82.018878	-39.286843	-15.128317
U14	Forest	Highly_forested	82.018878	-39.28586	-15.133451
U15	Cabruca	Highly_forested	58.696707	-39.265969	-15.363532

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U15	Forest	Highly_forested	58.696707	-39.26831	-15.363007
U16	Cabruca	Highly_forested	27.863664	-39.18911	-15.200112
U16	Forest	Highly_forested	27.863664	-39.187931	-15.204155
U17	Cabruca	Highly_forested	46.282872	-39.358354	-15.30702
U17	Forest	Highly_forested	46.282872	-39.350927	-15.305064
U3	Cabruca	Highly_forested	53.411036	-39.267703	-15.187916
U3	Forest	Highly_forested	53.411036	-39.267966	-15.183038
U7	Cabruca	Highly_forested	64.249897	-39.203697	-15.183466
U7	Forest	Highly_forested	64.249897	-39.202334	-15.180517

Appendix 2. Abundance of Mutillidae and Pompilidae in 30 cocoa agroforestry sites (cabruca) and 30 Atlantic Forest remnant sites (forest) in southern Bahia, Brazil.

Landscape	B13	B13	B14	B14	B15	B15	B16	B16	B18	B18	B19	B19	B20	B20	B21	B21	B7	B7	B9	B9	
Habitat_type	C	F	C	F	C	F	C	F	C	F	C	F	C	F	C	F	C	F	C	F	Total
Darditilla_sp.																					0
Ephuta_sp.1																					0
Ephuta_sp.2																					0
Ephuta_sp.3			1																		1
Ephuta_sp.4																					0
Ephuta_sp.5																					0
Ephuta_sp.6			1																		1
Ephuta_sp.7																					0
Lophomutilla_sp.																					0
Pseudomethoca_s.l._sp.1																					0
Pseudomethoca_s.l._sp.2																					0
Sphaeropthalma_s.l._sp.																					0
Timulla_sp.			1																		1

Landscape	I10	I10	I11	I11	I12	I12	I13	I13	I14	I14	I15	I15	I16	I16	I17	I17	I4	I4	I8	I8	
Habitat_type	C	F	C	F	C	F	C	F	C	F	C	F	C	F	C	F	C	F	C	F	Total
Darditilla_sp.																					0
Ephuta_sp.1																					0
Ephuta_sp.2							1														1
Ephuta_sp.3																					0
Ephuta_sp.4																					0
Ephuta_sp.5																					0
Ephuta_sp.6																					0
Ephuta_sp.7								1													1
Lophomutilla_sp.				1																	1
Pseudomethoca_s.l._sp.1																					0
Pseudomethoca_s.l._sp.2															1						1
Sphaeropthalma_s.l._sp.																					0
Timulla_sp.					1		1						1								3

Landscape	U1	U1	U11	U11	U12	U12	U13	U13	U14	U14	U15	U15	U16	U16	U17	U17	U3	U3	U7	U7	
Habitat_type	C	F	C	F	C	F	C	F	C	F	C	F	C	F	C	F	C	F	C	F	Total
Darditilla_sp.										1											1
Ephuta_sp.1										1											1
Ephuta_sp.2																					0
Ephuta_sp.3																					0
Ephuta_sp.4										1											1

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Ephuta_sp.5	1																				1
Ephuta_sp.6																					0
Ephuta_sp.7						1															1
Lophomutilla_sp.																					0
Pseudomethoca_s.l._sp.1		1																			1
Pseudomethoca_s.l._sp.2			2																		2
Sphaeropthalma_s.l._sp.										1											1
Timulla_sp.																					0

Landscape	B13	B13	B14	B14	B15	B15	B16	B16	B18	B18	B19	B19	B20	B20	B21	B21	B7	B7	B9	B9	
Habitat_type	C	F	C	F	C	F	C	F	C	F	C	F	C	F	C	F	C	F	C	F	Total
Ageniella_sp.1																					0
Ageniella_sp.2																					0
Ageniella_sp.3																					0
Ageniella_sp.4																					0
Ageniella_sp.5						1															1
Agenioideus_sp.1	1																				1
Aimatocare_sp								1													1
Auplopus_sp.A																					0
Auplopus_sp.B																					0
Caliadurgus_sp																					0
Cyrtagenia_sp																					0
Epipompilus_sp.1																					0
Epipompilus_sp.2																					0
Euplaniceps_sp.1																					0
Irenangelus_clarus																					0
Irenangelus_ichneumonoides																					0
Notocyphus_sp.1						3															3
Notocyphus_sp.2														1				1			2
Notocyphus_sp.3																					0
Notocyphus_sp.4								2													2
Paracyphononyx_sp.1																					0
Paracyphononyx_sp.2					1																1
Pepsini_sp																					0
Poecilopompilus_sp.1		1		1			1							1							4
Priochilus_sp.1																					0
Priocnemella_sp.1																					0

Landscape	I10	I10	I11	I11	I12	I12	I13	I13	I14	I14	I15	I15	I16	I16	I17	I17	I4	I4	I8	I8	
Habitat_type	C	F	C	F	C	F	C	F	C	F	C	F	C	F	C	F	C	F	C	F	Total
Ageniella_sp.1			1				2								2						5
Ageniella_sp.2	2				1																3
Ageniella_sp.3														1	1						2
Ageniella_sp.4							1														1
Ageniella_sp.5																					0
Agenioideus_sp.1																					0
Aimatocare_sp																					0
Auplopus_sp.A																					0
Auplopus_sp.B																	1				1
Caliadurgus_sp																					0
Cyrtagenia_sp					1																1
Epipompilus_sp.1													1								1
Epipompilus_sp.2											1										1

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Euplaniceps_sp.1					1																1
Irenangelus_clarus														1							1
Irenangelus_ichneumonoides								1													1
Notocyphus_sp.1																				1	1
Notocyphus_sp.2										1				3				1			5
Notocyphus_sp.3																					0
Notocyphus_sp.4																					0
Paracyphononyx_sp.1																					0
Paracyphononyx_sp.2																					0
Pepsini_sp														1							1
Poecilopompilus_sp.1	1					1															2
Priochilus_sp.1													1				1				2
Priocnemella_sp.1															1						1

Landscape	U1	U1	U11	U11	U12	U12	U13	U13	U14	U14	U15	U15	U16	U16	U17	U17	U3	U3	U7	U7	
Habitat_type	C	F	C	F	C	F	C	F	C	F	C	F	C	F	C	F	C	F	C	F	Total
Ageniella_sp.1			1																		1
Ageniella_sp.2																					0
Ageniella_sp.3			1																	1	2
Ageniella_sp.4													1	1							2
Ageniella_sp.5																					0
Agenioideus_sp.1																					0
Aimatocare_sp																					0
Auplopus_sp.A							1														1
Auplopus_sp.B																					0
Caliadurgus_sp									2												2
Cyrtagenia_sp																					0
Epipompilus_sp.1																					0
Epipompilus_sp.2																					0
Euplaniceps_sp.1																					0
Irenangelus_clarus																					0
Irenangelus_ichneumonoides								2													2
Notocyphus_sp.1																					0
Notocyphus_sp.2									1	1								1			3
Notocyphus_sp.3					1			1													2
Notocyphus_sp.4																					0
Paracyphononyx_sp.1															2						2
Paracyphononyx_sp.2																					0
Pepsini_sp																					0
Poecilopompilus_sp.1																					0
Priochilus_sp.1																					0
Priocnemella_sp.1				1																	1