

## SUPPLEMENTARY MATERIAL

**Table S1.** Characterization of insect galls from Chapada Diamantina National Park, Lençóis, state of Bahia, Brazil. Abbreviation: BW- Bodão Waterfall; PW- Palmital Waterfall; PRW- Primavera Waterfall; SW- Sossego Waterfall; PH- Poço Harley; RM- Ribeirão do Meio; MAR- Mandassaia River; VL- Vale do Lapão. Habit: HE-Herb; SB-Subshrub; SH-Shrub; TR-Tree; LI-Liana.

Family	Species	Organ	Surface	Shape	Color	Pilose	Occurrence	Number of larval chambers	Galling-inducing insects	Associated fauna	Vegetation	Habit	Locality	Fig.
Anacardiaceae	<i>Astronium fraxinifolium</i> Schott ex Spreng	Fruit Leaf	- Adaxial	Fusiform Lenticular	Orange Green	No No	Isolated Isolated	One One	- -	-	Cerrado s.s. Cerrado	SH SH	RM RM	2a 2b
	<i>Anacardium</i> sp.	Leaf	Adaxial	Fusiform	Brown	No	Grouped	One	-	-	Montane Forest	SH	MAR	2c
	Anacardiaceae Indet.	Leaf	Adaxial	Lenticular	Red	No	Grouped	One	-	-	Montane Forest	SH	MAR	2d
Annonaceae	<i>Duguetia flagellaris</i> Huber	Leaf	Abaxial	Lenticular	Green	No	Grouped	One	-	-	Montane Forest	SH	MAR	2e
	<i>Annona</i> sp.	Leaf	Adaxial	Globoid	Green	No	Grouped	One	-	-	Montane Forest	SH	MAR	2f
Araceae	<i>Thaumatococcus</i> sp.	Leaf	Adaxial	Fusiform	Brown	No	Isolated	One	-	-	Cerrado	SH	BW	2g
Asteraceae	<i>Baccharis minutiflora</i> Mart. ex Baker	Stem	-	Fusiform	Brown	No	Isolated	Several	Cecidomyiidae	-	Cerrado s.s.	SB	RM	2h
	<i>Moquiniastrum paniculatum</i> (Less) G. Sancho	Leaf	Abaxial	Amorphous	White	Yes	Grouped	Several	Curculionidae (Coleoptera)	Lepidoptera	Cerrado s.s.	SB	RM	2i
	<i>Paralychnophora bicolor</i> (DC.) MacLeish	Leaf	Adaxial	Amorphous	Brown	Yes	Isolated	One	-	-	Cerrado s.s.	SB	BW	2j
	Asteraceae Indet. 1	Stem	-	Globoid	Brown	Yes	Isolated	Several	Cecidomyiidae	-	Cerrado s.s.	SH	BW	2k
		Leaf	Abaxial	Globoid	Brown	Yes	Isolated	One	-	-	Cerrado s.s.	SH	BW	2l
	Asteraceae Indet. 2	Leaf	Adaxial	Lenticular	Brown	No	Grouped	One	-	-	Cerrado s.s.	TR	PRW	2m
Bignoniaceae	<i>Handroanthus chrysotrichus</i> (Mart. Ex DC.) Mattos	Leaf	Adaxial	Amorphous	Black	No	Isolated	One	-	-	Cerrado s.s.	TR	VL	2n
	Bignoniaceae Indet. 1	Stem	-	Globoid	Brown	No	Grouped	One	Cecidomyiidae	-	Cerrado s.s.	TR	VL	2o
	Bignoniaceae Indet. 2	Leaf	Abaxial	Globoid	Brown	No	Grouped	One	Cecidomyiidae	Hymenoptera	Cerrado s.s.	TR	VL	2p
	Bignoniaceae Indet. 3	Leaf	Adaxial	Globoid	Brown	No	Isolated	One	-	-	Cerrado s.s.	TR	BW	2q
Boraginaceae	Boraginaceae Indet.	Leaf	Adaxial	Globoid	Green	No	Grouped	One	-	-	Montane Forest	TR	PRW	2r
		Stem	-	Globoid	Green	No	Grouped	One	-	-	Montane Forest	HE	PW	2s
		Leaf	Abaxial	Globoid	Green	No	Isolated	One	-	-	Rupestrian field	HE	PW	2s
Burseraceae	<i>Protium heptaphyllum</i> (Aubl.) Marchand	Leaf	Adaxial	Fusiform	Green	No	Grouped	Several	<i>Lopesia similis</i> Maia, 2004 (Diptera, Cecidomyiidae)	-	Rupestrian field	TR	RM	2t
		Leaf	Abaxial	Globoid	Green	Yes	Grouped	One	-	-	Cerrado s.s.	TR	RM	3a
		Leaf	Adaxial	Fusiform	Green	No	Grouped	One	-	-	Montane Forest	TR	MAR	3b
Calophyllaceae	<i>Calophyllum brasiliense</i> Cambess.	Leaf	Adaxial	Fusiform	Green	No	Grouped	One	<i>Lopesia linearis</i> Maia, 2003 (Diptera, Cecidomyiidae)	-	Cerrado s.s.	TR	PH	3c
	<i>Calophyllum</i> sp.	Stem	-	Globoid	Brown	No	Grouped	One	-	-	Montane Forest	SH	VL	3d
Clusiaceae	Clusiaceae Indet 1	Stem	-	Globoid	Brown	No	Grouped	Several	-	-	Gallery forest	SH	RM	3e

Table S1. Continuation.

<b>Combretaceae</b>	<i>Combretum Glaucocarpum</i> Mart.	Leaf	Abaxial	Globoid	Green	No	Grouped	One	-	Thysanoptera	Gallery forest	TR	PRW	3f
	<i>Terminalia</i> sp.	Leaf	Adaxial	Lenticular	Yellow	No	Grouped	One	-	-	Cerrado s.s.	SH	BW	3g
<b>Chrysobalanaceae</b>	<i>Parinari obtusifolia</i> Hook. f.	Leaf	Abaxial	Conical	Brown	No	Grouped	One	-	-	Cerrado s.s.	TR	PH	3h
<b>Ebenaceae</b>	<i>Diospyros</i> sp.	Stem	-	Globoid	Green	No	Isolated	One	-	Coleoptera	Cerrado s.s.	TR	VL	3i
<b>Euphorbiaceae</b>	<i>Manihot tripartite</i> (Spreng) Müll. Arg.	Leaf	Adaxial	Fusiform	Purple	No	Grouped	One	Hymenoptera	Formicidae	Gallery forest	HE	RM	3j
	<i>Croton</i> sp.	Leaf	Adaxial	Amorphous	Green	No	Grouped	One	-	-	Cerrado s.s.	SH	PRW	3k-l
	Euphorbiaceae Indet.	Gema	-	Globoid	Green	No	Grouped	One	-	-	Cerrado s.s.	SH	RM	3m
		Leaf	Adaxial	Lenticular	Brown	No	Isolated	One	-	-	Cerrado s.s.	SH	RM	3n
<b>Erythroxylaceae</b>	<i>Erythroxylum suberosum</i> A. St. - Hil.	Leaf	Adaxial	Amorphous	Red	Yes	Isolated	Several	<i>Myrciaryamia admirabilis</i> Maia, 2007 (Diptera, Cecidomyiidae)	-	Cerrado s.s.	SH	RM	3o
	<i>Erythroxylum</i> sp.	Leaf	Abaxial	Globoid	Green	No	Isolated	One	Cecidomyiidae	-	Cerrado s.s.	SH	VL	3p
<b>Fabaceae</b>	<i>Calliandra dysantha</i> Benth.	Stem	-	Globoid	Brown	No	Isolated	One	Cecidomyiidae	-	Cerrado s.s.	HE	BW	3q
	<i>Copaifera duckei</i> Dwyer	Leaf	Abaxial	Lenticular	Brown	No	Grouped	One	-	-	Cerrado s.s.	TR	PRW	3r
	<i>Copaifera langsdorffii</i> Desf.	Stem	-	Lenticular	Brown	No	Grouped	Several	-	Psocoptera	Cerrado s.s.	TR	MAR	3s
		Leaf	-	Globoid	Brown	No	Isolated	One	-	-	Cerrado s.s.	TR	MAR	3t
	<i>Copaifera luetzelburgii</i> Harms	Leaf	-	Leaf fold	Green	No	Isolated	One	-	-	Montane Forest	TR	MAR	4a
	<i>Periandra coccinea</i> (Schard.) Benth.	Flower	-	Fusiform	Brown	No	Isolated	One	-	-	Montane Forest	SH	VL	4b
	<i>Senna multijuga</i> (Rich.) H.S. Irwin & Barneby	Leaf	Abaxial	Lenticular	Green	Yes	Isolated	One	-	-	Montane Forest	SH	BW	4c
	Fabaceae Indet. 1	Stem	-	Globoid	Yellow	No	Grouped	One	-	-	Cerrado s.s.	SH	SW	4d
<b>Lauraceae</b>	Lauraceae Indet. 1	Leaf	Abaxial	Fusiform	Green	No	Grouped	One	-	Hymenoptera	Cerrado s.s.	SH	PW	4e
	Lauraceae Indet. 2	Leaf	Adaxial	Globoid	White	Yes	Grouped	One	-	-	Rupestrian field	TR	PRW	4f
	Lauraceae Indet. 3	Leaf	Abaxial	Lenticular	White	No	Grouped	Several	-	-	Rupestrian field	SH	RM	4g
<b>Loranthaceae</b>	<i>Struthanthus</i> sp.	Stem	-	Fusiform	Red	No	Grouped	One	-	-	Cerrado	LI	BW	4h
		Leaf	-	Amorphous	White	Yes	Grouped	One	-	-	Cerrado s.s.	LI	BW	4i
<b>Lythraceae</b>	Lythraceae Indet. 1	Leaf	Abaxial	Globoid	Purple	No	Grouped	One	-	-	Cerrado s.s.	HE	PRW	4j
<b>Malpighiaceae</b>	<i>Byrsonima gardneriana</i> A. Juss.	Stem	-	Fusiform	Brown	No	Isolated	Several	Hymenoptera	Formicidae	Cerrado s.s.	SH	RM	4k
		Leaf	Abaxial	Conical	Brown	No	Grouped	Several	-	Acarinos	Cerrado s.s.	SH	RM	4l
		Leaf	Abaxial	Fusiform	Brown	No	Grouped	One	-	-	Cerrado s.s.	SH	RM	4m
	<i>Byrsonima guilleminiana</i> A. Juss.	Leaf	Adaxial	Lenticular	Green	Yes	Grouped	One	Cecidomyiidae	-	Cerrado s.s.	TR	VL	4n
	Malpighiaceae Indet 1	Leaf	Abaxial	Amorphous	Green	No	Grouped	One	-	-	Cerrado s.s.	SH	PH	4o
	Malpighiaceae Indet 2	Leaf	Abaxial	Fusiform	Green	No	Grouped	One	Cecidomyiidae	-	Cerrado s.s.	SH	MAR	4p
	Malpighiaceae Indet 3	Leaf	Adaxial	Lenticular	Black	No	Grouped	Several	-	-	Gallery forest	SH	BW	4q

Table S1. Continuation.

<b>Malvaceae</b>	<i>Luehea candicans</i> Mart.	Leaf	Adaxial	Globoid	White	Yes	Isolated	One	Cecidomyiidae	Hymenoptera	Montane Forest	HE	PRW	4r	
	<i>Helicteres</i> sp.	Leaf	Abaxial	Amorphous	White	Yes	Grouped	One	-	-	Cerrado s.s.	HE	MAR	4s	
<b>Melastomataceae</b>	<i>Macairea radula</i> (Bonpl.) DC.	Bud	-	Globoid	Brown	Yes	Isolated	Several	-	Hymenoptera	Cerrado s.s.	HE	VL	4t	
	<i>Marcetia bahiensis</i> (Brade & Markgraf) Wurdack.	Leaf	Abaxial	Fusiform	Green	No	Isolated	One	-	-	Montane Forest	SH	RM	5a	
	<i>Miconia albicans</i> (SW.) Triana	Leaf	Adaxial	Lenticular	Yellow	No	Grouped	One	-	-	Cerrado s.s.	SH	BW	5b	
	<i>M. alborufescens</i> Naudin	Leaf	Abaxial	Amorphous	White	Yes	Grouped	One	-	-	Cerrado s.s.	SH	VL	5c	
	<i>Miconia</i> sp.	Leaf	Adaxial	Globoid	Purple	Yes	Grouped	One	-	-	Cerrado s.s.	HE	RM	5d	
	<i>Leandra</i> sp.	Leaf	Adaxial	Amorphous	Brown	Yes	Grouped	One	-	-	Cerrado s.s.	HE	SW	5e	
	<i>Tibouchina</i> sp.	Leaf	Adaxial	Amorphous	White	No	Grouped	One	-	Cecidomyiidae	-	Cerrado s.s.	SH	PRW	5f
<b>Meliaceae</b>	<i>Trichilia catigua</i> A. Juss.	Leaf	Adaxial	Lenticular	Red	No	Grouped	One	-	Hymenoptera	Rupestrian field	SH	BW	5g	
	<i>Guarea</i> sp.	Leaf	Adaxial	Amorphous	Green	No	Grouped	One	-	-	Cerrado s.s.	SH	MAR	5h	
		Leaf	Adaxial	Globoid	Green	No	Grouped	One	-	-	Cerrado s.s.	SH	VL	5i	
	Meliaceae Indet. 1	Leaf	Adaxial	Lenticular	Yellow	No	Grouped	One	-	-	Montane Forest	TR	RM	5j	
<b>Myrtaceae</b>	<i>Eugenia catharinae</i> O. Berg	Stem	-	Globoid	Brown	No	Grouped	Several	-	-	Cerrado s.s.	SH	PH	5k	
		Leaf	Adaxial	Globoid	Red	No	Grouped	One	-	-	Cerrado s.s.	SH	PH	5l	
	<i>Campomanesia</i> sp.	Leaf	Abaxial	Globoid	Brown	Yes	Grouped	Several	-	Hymenoptera	Gallery forest	SH	BW	5m	
	<i>Eugenia</i> sp.	Stem	-	Globoid	Brown	No	Grouped	One	-	Hymenoptera	Gallery forest	SH	MAR	5n	
		Leaf	Adaxial	Fusiform	Purple	No	Grouped	One	-	-	Cerrado s.s.	SH	PRW	5o	
		Leaf	Adaxial	Globoid	Brown	No	Grouped	One	-	-	Montane Forest	SH	MAR	5p	
	<i>Myrcia neoobscura</i> E.Lucas & C.E.Wilson	Leaf	Abaxial	Conical	Green	No	Grouped	One	-	Cecidomyiidae	-	Cerrado s.s.	SH	RM	5q
	Myrtaceae Indet. 1	Stem	-	Amorphous	Purple	No	Isolated	Several	-	Hymenoptera	Montane Forest	TR	RM	5r	
	Myrtaceae Indet. 2	Leaf	Adaxial	Marginal roll	Green	No	Isolated	One	-	Hymenoptera	Cerrado s.s.	TR	VL	5s	
	Myrtaceae Indet. 3	Leaf	Adaxial	Globoid	Pink	Yes	Grouped	One	-	Hymenoptera	Cerrado s.s.	TR	BW	5t	
<b>Nyctaginaceae</b>	Nyctaginaceae Indet. 1	Leaf	Adaxial	Lenticular	Purple	No	Grouped	One	-	-	Cerrado s.s.	SH	PRW	6a	
<b>Ochnaceae</b>	<i>Ouratea nana</i> (A. St. Hil.) Engl.	Leaf	Adaxial	Lenticular	Brown	No	Grouped	One	-	-	Cerrado s.s.	SH	VL	6b	
	<i>Ouratea</i> sp.	Leaf	Adaxial	Lenticular	Brown	No	Grouped	One	-	-	Cerrado s.s.	SH	MAR	6c	
<b>Passifloraceae</b>	<i>Passiflora</i> sp.	Leaf	Adaxial	Globoid	Green	No	Grouped	One	-	-	Cerrado s.s.	HE	RM	6d	
<b>Peraceae</b>	<i>Pogonophora schomburgkiana</i> Miers ex Benth.	Leaf	Adaxial	Lenticular	Yellow	No	Grouped	One	-	Hymenoptera	Montane Forest	TR	PRW	6e	
<b>Phyllanthaceae</b>	Phyllanthaceae Indet. 1	Leaf	Adaxial	Amorphous	Green	No	Grouped	One	-	-	Cerrado s.s.	SB	RMA	6f	
<b>Piperaceae</b>	<i>Piper arboretum</i> Aubl.	Stem	-	Globoid	Yellow	No	Isolated	One	Cecidomyiidae	Hymenoptera	Cerrado s.s.	SB	RM	6g	

Table S1. Continuation.

<b>Proteaceae</b>	Proteaceae Indet. 1	Leaf	Adaxial	Globoid	Brown	No	Grouped	One	Cecidomyiidae	Leptopetera	Montane Forest	SH	VL	6h
Rubiaceae	<i>Randia armata</i> var. <i>pubescens</i> (K. Schum.) Standl.	Stem	-	Fusiform	Brown	No	Isolated	Several	Hymenoptera	Fomicidae	Cerrado s.s.	TR	MAR	6i
		Leaf	Abaxial	Globoid	Green	No	Grouped	One	-	-	Cerrado s.s.	TR	RM	6j
	<i>Psychotria</i> sp.	Stem	-	Globoid	Green	No	Grouped	One	-	-	Montane Forest	SH	BW	6k
	Rubiaceae Indet. 1	Stem	-	Fusiform	Green	No	Grouped	One	-	-	Cerrado s.s.	HE	PH	6l
	Rubiaceae Indet. 2	Leaf	Abaxial	Globoid	Green	No	Grouped	One	-	Hymenoptera	Cerrado s.s.	TR	PH	6m
Sapindaceae	<i>Allophylus racemosus</i> Sw.	Stem	-	Globoid	Green	No	Isolated	Several	Lepidoptera	-	Gallery forest	SH	PRW	6n
	<i>Serjania glabrata</i> Kunth	Leaf	Abaxial	Globoid	Green	No	Isolated	One	-	Hymenoptera	Gallery forest	SH	RM	6o
	Sapindaceae Indet. 1	Stem	-	Fusiform	Green	Yes	Isolated	One	-	-	Cerrado s.s.	HE	MAR	6p
		Leaf	Abaxial	Globoid	Green	Yes	Grouped	One	-	-	Cerrado s.s.	HE	MAR	6q
<b>Sapotaceae</b>	<i>Pouteria torta</i> (Mart.) Radlk.	Leaf	Adaxial	Globoid	Green	No	Grouped	One	-	Hymenoptera	Montane Forest	SH	RM	6r
Siparunaceae	<i>Siparuna guianensis</i> Aubl.	Leaf	Abaxial	Lenticular	Green	No	Grouped	One	-	Thysanoptera	Montane Forest	TR	VL	6s
Smilacaceae	<i>Smilax</i> sp.	Leaf	-	Leaf fold	Green	No	Isolated	One	-	-	Cerrado s.s.	SH	MAR	6t
Verbenaceae	<i>Lantana camara</i> L.	Leaf	Adaxial	Globoid	Green	Yes	Grouped	One	-	Thysanoptera	Cerrado s.s.	TR	MAR	7a
		Leaf	Abaxial	Globoid	Green	Yes	Grouped	Several	<i>Schimatodiplosis lantanae</i> Rübsaamen, 1916 (Diptera, Cecidomyiidae)	-	Montane Forest	TR	BW	7b
<b>Volchysiaceae</b>	<i>Qualea cryptantha</i> (Spreng.) Warm.	Leaf	Adaxial	Globoid	Green	No	Grouped	One	-	-	Montane Forest	TR	MAR	7c
	<i>Qualea parviflora</i> Mart.	Leaf	Abaxial	Globoid	Green	Yes	Isolated	One	-	-	Cerrado s.s.	SH	BW	7d
<b>Winteraceae</b>	<i>Drimys brasiliensis</i> Miers	Leaf	Adaxial	Globoid	Brown	No	Grouped	One	-	-	Montane Forest	SH	MAR	7e
		Leaf	Abaxial	Globoid	Brown	No	Isolated	One	-	-	Cerrado s.s.	SH	MAR	7f