

The striking endemism pattern of the species-richest snake genus *Atractus* (Dipsadidae: Serpentes) highlights the hidden diversity in the Andes

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Supplementary material

Table S1. Summary of the database of snake's genus *Atractus* considered in the biogeographical analyses of this study: list of species, individuals and number of unique localities per species.

Species	Number of individuals	Number unique localities
<i>Atractus acheronius</i>	3	2
<i>Atractus alphonsehogeii</i>	28	15
<i>Atractus altagratiae</i>	2	1
<i>Atractus alytogrammimus</i>	1	1
<i>Atractus apophis</i>	2	1
<i>Atractus atlas</i>	4	4
<i>Atractus atratus</i>	3	3
<i>Atractus avernus</i>	1	1
<i>Atractus badius</i>	21	19
<i>Atractus bocki</i>	6	3
<i>Atractus bocourti</i>	1	1
<i>Atractus boulengerii</i>	1	1
<i>Atractus caete</i>	3	2
<i>Atractus carrioni</i>	21	12
<i>Atractus chthonius</i>	2	2
<i>Atractus clarki</i>	6	4
<i>Atractus crassicaudatus</i>	449	449
<i>Atractus darienensis</i>	3	2
<i>Atractus depressiocellus</i>	2	1
<i>Atractus duboisi</i>	73	17
<i>Atractus duidensis</i>	2	1
<i>Atractus dunni</i>	28	18
<i>Atractus echidna</i>	2	1

<i>Atractus emigdioi</i>	6	6
<i>Atractus erythromelas</i>	23	17
<i>Atractus favae</i>	2	1
<i>Atractus flammigerus</i>	28	22
<i>Atractus franciscopaivai</i>	10	9
<i>Atractus francoi</i>	10	4
<i>Atractus fuliginosus</i>	65	31
<i>Atractus gaigeae</i>	24	16
<i>Atractus gigas</i>	12	10
<i>Atractus guentheri</i>	45	23
<i>Atractus heliobelluomini</i>	4	2
<i>Atractus hoogmoedi</i>	1	1
<i>Atractus hostilitractus</i>	2	1
<i>Atractus indistinctus</i>	14	14
<i>Atractus insipidus</i>	3	3
<i>Atractus iridescens</i>	12	12
<i>Atractus lancinii</i>	29	16
<i>Atractus lasallei</i>	83	73
<i>Atractus lehmanni</i>	27	24
<i>Atractus loveridgei</i>	21	5
<i>Atractus macondo</i>	2	1
<i>Atractus maculatus</i>	16	12
<i>Atractus mariselae</i>	2	1
<i>Atractus matthewi</i>	4	4
<i>Atractus medusa</i>	4	3
<i>Atractus melanogaster</i>	16	10
<i>Atractus melas</i>	3	2

<i>Atractus microrhynchus</i>	2	2
<i>Atractus mijaresi</i>	10	4
<i>Atractus modestus</i>	11	11
<i>Atractus multicinctus</i>	6	6
<i>Atractus multidentatus</i>	2	1
<i>Atractus nasutus</i>	3	2
<i>Atractus nicefori</i>	42	42
<i>Atractus nigricaudus</i>	41	41
<i>Atractus nigriventris</i>	13	13
<i>Atractus obesus</i>	4	4
<i>Atractus obtusirostris</i>	10	10
<i>Atractus occipitoalbus</i>	19	18
<i>Atractus orcesi</i>	9	8
<i>Atractus paisa</i>	9	5
<i>Atractus pamplonensis</i>	96	96
<i>Atractus pantostictus</i>	641	286
<i>Atractus paraguayensis</i>	340	206
<i>Atractus paucidens</i>	8	8
<i>Atractus peruvianus</i>	9	6
<i>Atractus potschi</i>	118	50
<i>Atractus punctiventris</i>	7	7
<i>Atractus pyroni</i>	1	1
<i>Atractus resplesdens</i>	9	5
<i>Atractus reticulatus</i>	433	430
<i>Atractus riveroi</i>	4	4
<i>Atractus ronnie</i>	95	36
<i>Atractus roulei</i>	4	4

<i>Atractus sanctaemartae</i>	23	23
<i>Atractus sanguineus</i>	12	11
<i>Atractus savagei</i>	3	3
<i>Atractus serranus</i>	30	17
<i>Atractus</i> sp.1	4	4
<i>Atractus</i> sp.2	2	1
<i>Atractus</i> sp.3	4	3
<i>Atractus</i> sp.4	2	1
<i>Atractus</i> sp.5	4	4
<i>Atractus</i> sp.6	4	2
<i>Atractus</i> sp.7	2	1
<i>Atractus</i> sp.8	3	2
<i>Atractus</i> sp.9	7	2
<i>Atractus spinalis</i>	15	3
<i>Atractus steyermarki</i>	3	2
<i>Atractus surucucu</i>	3	1
<i>Atractus tamessari</i>	2	1
<i>Atractus taphorni</i>	5	4
<i>Atractus tartarus</i>	12	12
<i>Atractus thalesdelemai</i>	28	14
<i>Atractus titanicus</i>	6	2
<i>Atractus touzeti</i>	2	1
<i>Atractus trihedrurus</i>	111	111
<i>Atractus trilineatus</i>	61	27
<i>Atractus turikensis</i>	2	1
<i>Atractus typhon</i>	10	5
<i>Atractus variegatus</i>	16	16

<i>Atractus ventrimaculatus</i>	19	16
<i>Atractus vertebralis</i>	5	4
<i>Atractus vittatus</i>	2	2
<i>Atractus wagleri</i>	6	5
<i>Atractus weneri</i>	35	9
<i>Atractus zebrinus</i>	187	132
<i>Atractus zidoki</i>	15	14

Figure 1 displays 16 panels showing the spatial distribution of 10 species across a 10x10 grid for sets 0 to 15. Each panel includes a legend for species status and a list of species names and their counts.

Legend:

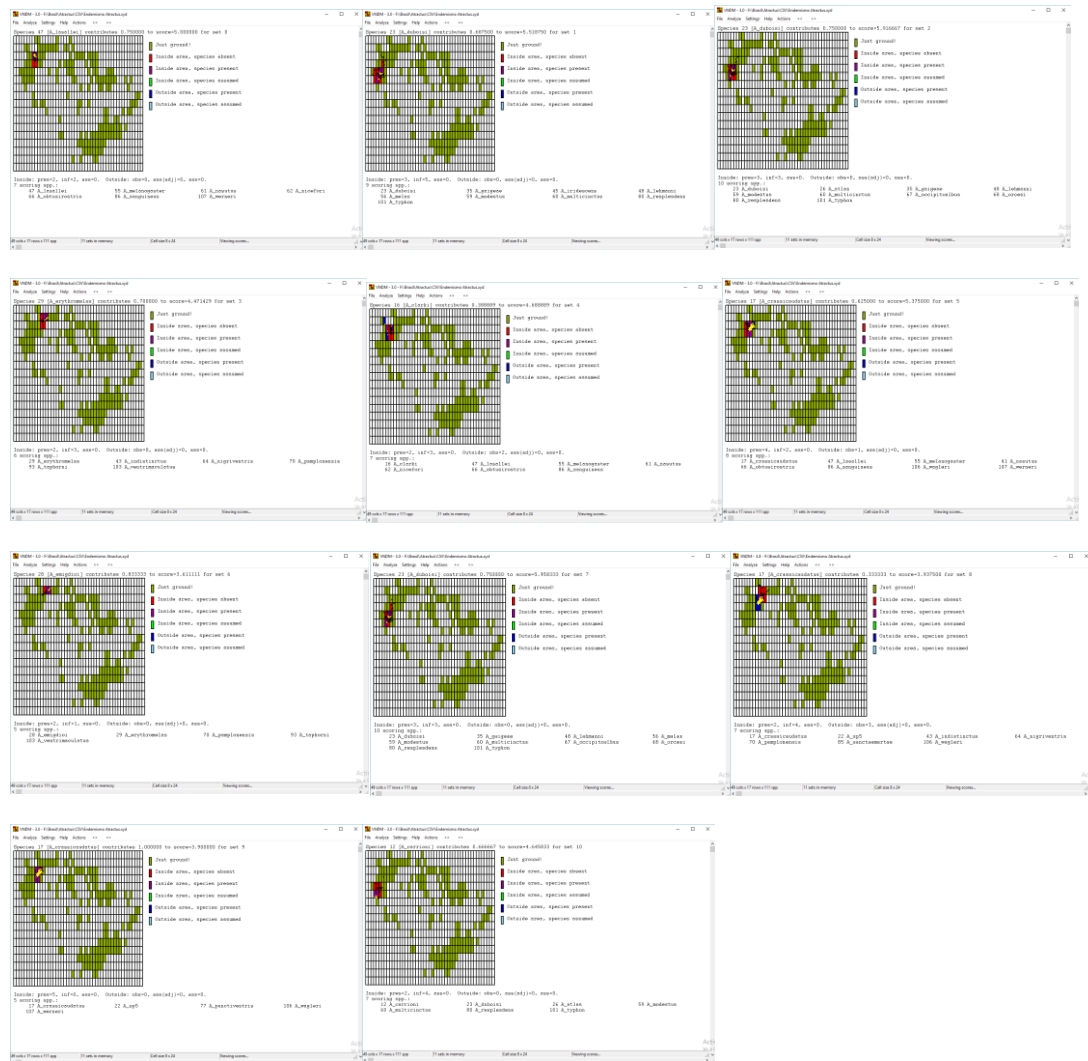
- Just present (green)
- Inside area, species absent (red)
- Inside area, species present (purple)
- Outside area, species present (blue)
- Outside area, species assumed (light blue)

Species and Counts:

- 10 *A. palmarum*
- 10 *A. palmarum*
- 10 *A. palmarum*
- 10 *A. palmarum*
- 10 *A. palmarum*
- 10 *A. palmarum*
- 10 *A. palmarum*
- 10 *A. palmarum*
- 10 *A. palmarum*
- 10 *A. palmarum*

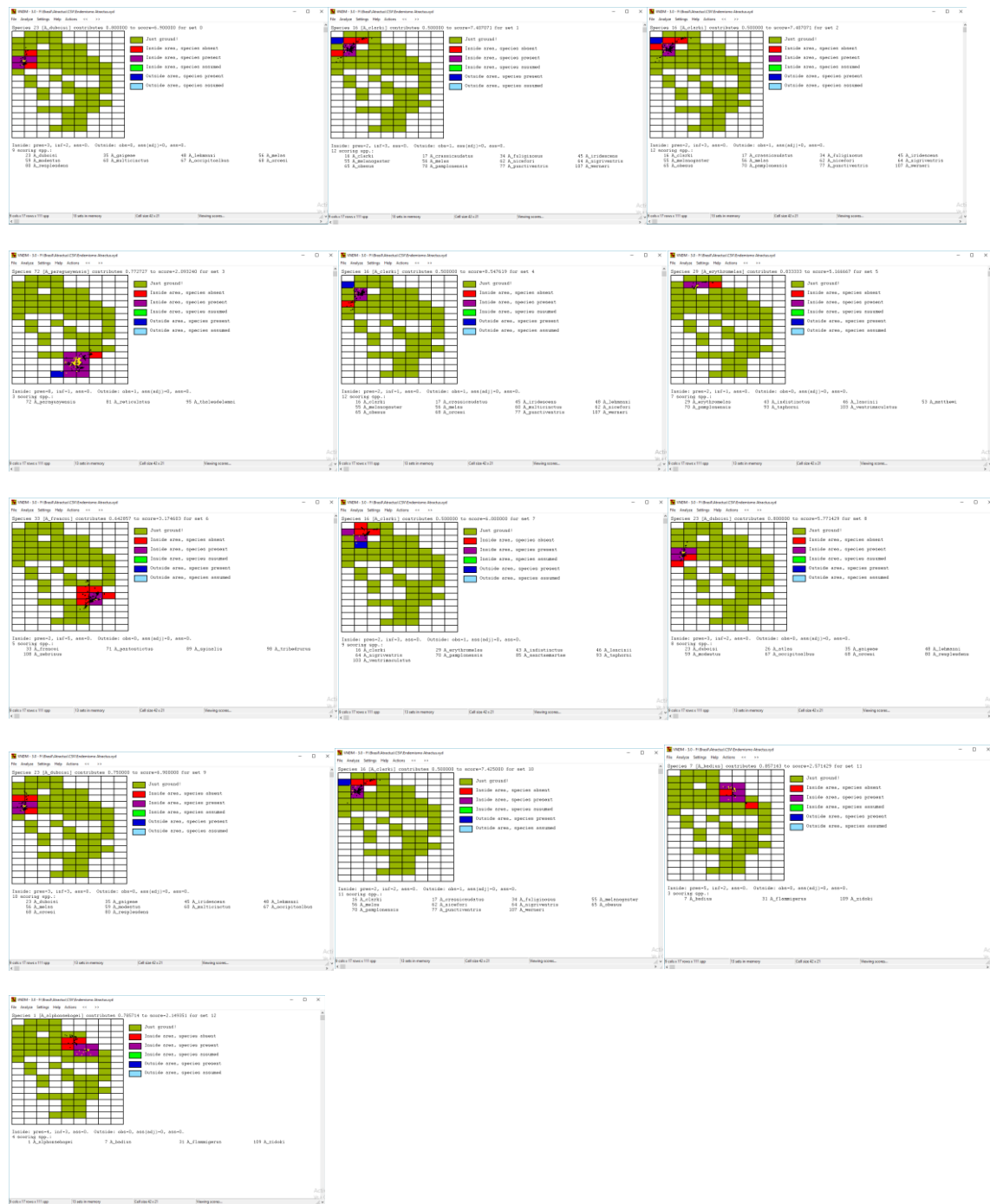
The panels are arranged in four rows of four, corresponding to sets 0-3, 4-7, 8-11, and 12-15. Each panel shows a 10x10 grid with colored cells representing the presence or absence of a species. The legend and species list are provided for each panel.

E) Grid shape resolution $1^{\circ} \times 3^{\circ}$: Screen shots showing the results produced using a matrix containing 17 rows and 49 columns and 111 species analysed using NDM/VNDM. Below each map you can see the list of species supporting each area of endemism.



F) Grid shape resolution $3^{\circ} \times 1^{\circ}$: Screen shots showing the results produced using a matrix containing 47 rows and 17 columns and 111 species analysed using NDM/VNDM. Below each map you can see the list of species supporting each area of endemism.

H) Grid size resolution $6^{\circ} \times 3^{\circ}$: Screen shots showing the results produced using a matrix containing 17 rows and 9 columns and 111 species analysed using NDM/VNDM. Below each map you can see the list of species supporting each area of endemism.



I) Special case for the Atlantic Forest: Screen shots showing the results produced using NDM/VNDM. Below each map you can see the list of species supporting each area of endemism.

