

**Table 1**

Results of the statistical tests applied to the data of the restoration trial, Isla del Coco National Park, Costa Rica, 2018.

Test	<i>p</i> value	Chi <sup>2</sup>	Chi <sup>2</sup> , tie corrected
Shapiro	<0.05		
Levene	0.2442 (>0,05)		
Kruskal-Wallis	0.1146	4.106	4.333
Friedman	0.34673	2.625	2.8

**TABLE 2**

Values of SIMPER for the treatments Control outside the exclusion fence (CoEx) and Vegetation uprooting within the exclusion (VUwEx), applied in the restoration trial, Isla del Coco National Park, Costa Rica, 2018.

Taxon	Origen	Form	Average. dissimilarity	Contribution%	Cumulative%	Mean CoEx	Mean VUwEx
<i>Paspalum conjugatum</i>	Native	Grass	31.94	39.6	39.6	0.4	61.7
<i>Entada gigas</i>	Native	Vine	22.74	28.19	67.79	50.8	6.49
<i>Clidemia strigillosa</i>	Native	Shrub	10.03	12.44	80.24	23.3	13.3
<i>Hypolytrum amplum</i>	Native	Grass	5.44	6.745	86.98	10.2	3.54
<i>Pterium feei</i>	Native	Fern	1.917	2.377	89.36	1.72	3.88
Litter	---	---	1.909	2.367	91.73	4.19	1.02
Soil	---	---	1.345	1.668	93.39	2.55	0.45
<i>Paspalum nutans</i>	Introduced*	Grass	0.9316	1.155	94.55	1.45	0.45
<i>Dicranopteris pectinata</i>	Native	Fern	0.9266	1.149	95.7	1.74	0
<i>Cecropia pittieri</i>	Endemic	Tree	0.8242	1.022	96.72	0	1.65
<i>Nephrolepis cocosensis</i>	Endemic	Fern	0.7658	0.9495	97.67	0.075	1.39
<i>Rolandra fruticosa</i>	Native	Herb	0.5402	0.6698	98.34	0	1.02
<i>Urena lobata</i>	Introduced	Shrub	0.3403	0.422	98.76	0.463	0.45
<i>Phytolacca rivinoides</i>	Native	Shrub	0.264	0.3273	99.09	0	0.525
<i>Coffea arabiga</i>	Introduced*	Shrub	0.2092	0.2594	99.35	0.388	0
<i>Pityrogramma calomelanos</i>	Native	Fern	0.1766	0.2189	99.57	0	0.338
<i>Rugoloa polygonata</i>	Introduced*	Grass	0.1565	0.194	99.76	0.338	0.025
<i>Miconia appendiculata</i>	Native	Shrub	0.1247	0.1546	99.92	0.225	0
Rock	---	---	0.03561	0.04416	99.96	0.0625	0
<i>Panicum maximum</i>	Introduced*	Grass	0.03292	0.04082	100	0.075	0
<i>Cyathea nesiotica</i>	Endemic	Tree fern	0	0	100	0	0

\* Reported by Estrada-Chavarría et al. (2020).





**S1.** Changes in the vegetation cover in the restoration site: **A.** Original vegetation cover in the Excluded Witness comprised by *Entada gigas*, *Hypolytrum amplum* and *Clidemia strigillosa*. **B.** New vegetation cover dominated by *Paspalum conjugatum*. Isla del Coco National Park, Costa Rica, 2018. Image: Luis Acosta.





**S2.** Regeneration of *Sacoglottis holdridgei* branch-grazed by white-tailed deer (*Odocoileus virginianus*) in the restoration site. Notice that this herbivore consumes tender sprouts, which in the case of seedlings means death for the individual. Isla del Coco National Park, Costa Rica, 2018. Image: Luis Acosta.





**S3.** Location of the site of the restoration trial. Notice the gradient of the site and the deforestation from the summit down to the mountain base. Isla del Coco National Park, Costa Rica, 2018. Image: Felipe Chacón.