Procedimiento CLUSTER
Análisis del conglomerado de la varianza mínima de Ward

Historia de conglomerado

NCL	Conglomerados unidos		Frecuencia	SPRSQ	RSQ	PSF	PST2	Tie
46	L.albirostratum	L.autrohumifusus	2	0.0000	1.00	.	.	T
45	L.hortorum	L.meridensis	2	0.0000	1.00	.	.	T
44	L.lanatocarpus	L.paniculatus	2	0.0000	1.00	.	.	T
43	CL45	L.protrusus	3	0.0000	1.00	.	.	T
42	CL44	L.radiatus	3	0.0000	1.00	.	.	T
41	L.ornatus	L.spraguensis	2	0.0000	1.00	.	.	T
40	CL41	L.triananus	3	0.0000	1.00	.	.	T
39	L.cfgalactrensis	L.tricolor	2	0.0000	1.00	.	.	
38	L.chipaquensis	L.mirabilis	2	0.0041	.996	59.0	.	T
37	L.cuatrecasii	L.ulbrichianus	2	0.0041	.992	33.6	.	
36	L.albirevolutus	CL46	3	0.0055	.986	22.7	.	
35	L.andicola	CL43	4	0.0062	.980	17.4	.	T
34	CL42	L.monserratensis	4	0.0062	.974	14.8	.	T
33	CL35	L.argirocalix	5	0.0070	.967	12.8	3.4	T
32	L.galactrensis	CL34	5	0.0070	.960	11.6	3.4	
31	CL33	L.ruizcensis	6	0.0074	.953	10.7	2.3	T
30	CL31	L.santanderensis	7	0.0076	.945	10.1	1.9	T
29	CL30	L.dotatus	8	0.0078	.937	9.6	1.7	T
28	CL29	L.ramossisimus	9	0.0079	.929	9.3	1.5	T
27	CL28	L.taurus	10	0.0079	.921	9.0	1.5	
26	L.perennis	L.sarmentosus	2	0.0082	.913	8.8	.	
25	CL37	L.expetendus	3	0.0123	.901	8.3	3.0	T
24	L.amandus	L.interruptus	2	0.0123	.889	8.0	.	T
23	L.falsorevoutus	L.microphyllus	2	0.0123	.876	7.7	.	
22	CL27	CL39	12	0.0146	.862	7.4	2.8	
21	CL38	CL32	7	0.0156	.846	7.1	4.5	
20	L.carrikeri	L.puracensis	2	0.0164	.830	6.9	.	T
19	CL36	CL23	5	0.0183	.811	6.7	3.1	
18	L.albus	CL26	3	0.0192	.792	6.5	2.3	
17	CL22	CL40	15	0.0212	.771	6.3	4.2	
16	CL19	L.colombiensis	6	0.0213	.750	6.2	2.4	
15	CL21	L.guacensis	8	0.0215	.728	6.1	3.9	
14	L.humifusus	L.pubescens	2	0.0246	.703	6.0	.	T
13	L.alopecuroides	CL24	3	0.0260	.677	6.0	2.1	
12	CL17	CL25	18	0.0283	.649	5.9	4.4	
11	CL16	L.revolutus	7	0.0293	.620	5.9	2.6	
10	L.aberrans	L.mutabilis	2	0.0328	.587	5.8	.	
9	CL11	CL20	9	0.0391	.548	5.8	2.7	
8	CL18	L.caucensis	4	0.0424	.506	5.7	3.1	
7	CL13	L.bogotensis	4	0.0520	.454	5.5	2.7	
6	CL10	CL9	11	0.0532	.400	5.5	2.7	
5	CL15	CL14	10	0.0548	.346	5.5	5.5	
4	CL8	CL12	22	0.0606	.285	5.7	6.0	
3	CL4	CL5	32	0.0778	.207	5.7	5.9	
2	CL6	CL3	43	0.0877	.119	6.1	5.1	
1	CL2	CL7	47	0.1194	.000	.	6.1	

Sistema SAS

Obs	CLUSTER	Especie
1	1	L.aberrans
2	1	L.albirevolutus
3	1	L.albirostratum
4	4	L.albus
5	5	L.alopecuroides
6	5	L.amandus
7	2	L.andicola
8	2	L.argirocalix
9	1	L.autrohumifusus
10	5	L.bogotensis
11	1	L.carrikeri
12	4	L.caucensis
13	2	L.cfgalactrensis
14	3	L.chipaquensis
15	1	L.colombiensis
16	2	L.cuatrecasii
17	2	L.dotatus
18	2	L.expetendus
19	1	L.falsorevoutus
20	3	L.galactrensis
21	3	L.guacensis
22	2	L.hortorum
23	3	L.humifusus
24	5	L.interruptus
25	3	L.lanatocarpus
26	2	L.meridensis
27	1	L.microphyllus
28	3	L.mirabilis
29	3	L.monserratensis
30	1	L.mutabilis
31	2	L.ornatus
32	3	L.paniculatus
33	4	L.perennis
34	2	L.protrusus
35	3	L.pubescens
36	1	L.puracensis
37	3	L.radiatus
38	2	L.ramossisimus
39	1	L.revolutus
40	2	L.ruizcensis
41	2	L.santanderensis
42	4	L.sarmentosus
43	2	L.spraguensis
44	2	L.taurus
45	2	L.triananus
46	2	L.tricolor
47	2	L.ulbrichianus

---------- CLUSTER=1 ----------

Obs	Especie	BaMH-ME	BaMH-MF	BaMH-MG	BaMH-MH	BaaH-MF	BaaH-MH	BaaMH-MF	BaaMH-MG	BaaMH-MH	BaaP-MF
1	L.aberrans	1	1	0	0	0	0	0	1	0	1
2	L.albirevolutus	0	0	0	0	0	0	0	0	0	0
3	L.albirostratum	0	0	0	0	0	0	0	0	0	0
4	L.autrohumifusus	0	0	0	0	0	0	0	0	0	0
5	L.carrikeri	0	1	0	0	0	0	0	0	0	0
6	L.colombiensis	0	0	0	0	0	0	0	0	0	0
7	L.falsorevoutus	0	0	0	0	0	0	0	1	0	0
8	L.microphyllus	0	0	0	0	0	1	0	0	0	0
9	L.mutabilis	1	1	0	0	1	0	0	0	0	0
10	L.puracensis	0	1	0	0	0	0	0	0	0	0
11	L.revolutus	0	1	0	0	0	0	0	1	0	0

Obs	BaH-ME	BaH-MF	BaH-MG	BaH-MH	BaP-MF	BaS-ME	BaSME-PF	BsaH-MF	PH-ME	PH-MF	PH-MG	PH-MH	PMH-ME	PMH-MF
1	0	1	0	0	1	0	0	0	0	0	0	0	0	1
2	0	0	0	0	0	0	0	0	0	0	0	0	0	1
3	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5	1	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	1	0	0	0	0	1
7	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8	0	0	0	0	0	0	0	0	0	0	0	0	0	1
9	0	1	0	0	0	0	0	1	0	0	0	0	0	0
10	1	0	0	0	0	0	0	0	0	0	0	0	0	1
11	0	0	0	0	0	0	0	0	0	0	0	0	0	1

Obs	PMH-MF-C7	PMH-MG	PMH-MH	PP-MF	PP-MG	PS-ME	SH-ME	SH-MH	SMH-MF	SMH-MH	SP	SP-MF	SS-ME
1	0	1	0	0	0	0	0	0	1	0	0	0	0
2	0	0	0	0	0	0	0	0	1	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	1	0	0	0	1	0	0	0	0	1	0	0
6	0	1	0	0	0	1	0	0	1	0	0	0	0
7	0	1	0	0	0	0	0	0	0	0	0	0	0
8	0	1	0	0	0	0	0	0	0	0	1	0	0
9	0	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	1	0	1	0	0
11	1	0	1	0	0	0	0	0	0	0	0	0	0

---------- CLUSTER=2 ----------

Obs	Especie	BaMH-ME	BaMH-MF	BaMH-MG	BaMH-MH	BaaH-MF	BaaH-MH	BaaMH-MF	BaaMH-MG	BaaMH-MH	BaaP-MF
12	L.andicola	1	0	0	0	0	0	0	0	0	0
13	L.argirocalix	0	0	0	0	0	0	0	0	0	0
14	L.cfgalactrensis	0	0	0	0	0	0	0	0	0	0
15	L.cuatrecasii	0	0	1	0	0	0	1	0	0	0
16	L.dotatus	0	0	0	0	0	0	0	0	0	0
17	L.expetendus	0	0	0	0	0	0	1	0	0	0
18	L.hortorum	0	0	0	0	0	0	0	0	0	0
19	L.meridensis	0	0	0	0	0	0	0	0	0	0
20	L.ornatus	0	0	0	0	0	0	0	0	0	0
21	L.protrusus	0	0	0	0	0	0	0	0	0	0
22	L.ramossisimus	0	0	0	0	0	0	0	1	0	0
23	L.ruizcensis	0	0	0	0	0	0	0	0	0	0
24	L.santanderensis	0	0	0	0	0	0	0	0	0	0
25	L.spraguensis	0	0	0	0	0	0	0	0	0	0

Obs	BaH-ME	BaH-MF	BaH-MG	BaH-MH	BaP-MF	BaS-ME	BaSME-PF	BsaH-MF	PH-ME	PH-MF	PH-MG	PH-MH	PMH-ME	PMH-MF
12	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	0	0	0	0	0	1	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0	0	0	0	1
18	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	1	0	0	0	0	0
21	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	0	0	0	0	0	0	0	0	0	0	1	0	0	0
25	0	0	0	0	0	0	0	0	1	0	0	0	0	0

Obs	PMH-MF-C7	PMH-MG	PMH-MH	PP-MF	PP-MG	PS-ME	SH-ME	SH-MH	SMH-MF	SMH-MH	SP	SP-MF	SS-ME
12	0	0	0	0	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	0	1	0	0
14	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	1	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0	1	0	0
18	0	0	0	0	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0	0	0	0	0
23	0	0	0	0	0	0	0	0	0	0	0	1	0
24	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0
26	L.taurus	0	0	0	0	0	0	0	0	0	0	0	0
27	L.triananus	0	0	0	0	0	0	0	0	0	0	0	0
28	L.tricolor	0	0	0	0	0	0	0	0	0	0	0	0
29	L.ulbrichianus	0	0	0	0	0	0	1	0	0	0	0	0

Obs	BaH-ME	BaH-MF	BaH-MG	BaH-MH	BaP-MF	BaS-ME	BaSME-PF	BsaH-MF	PH-ME	PH-MF	PH-MG	PH-MH	PMH-ME	PMH-MF
26	0	0	0	0	0	0	0	0	0	0	0	1	0	0
27	0	0	0	0	0	0	0	0	1	0	0	0	0	0
28	0	0	0	0	0	1	0	0	0	0	0	0	0	0
29	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Obs	PMH-MF-C7	PMH-MG	PMH-MH	PP-MF	PP-MG	PS-ME	SH-ME	SH-MH	SMH-MF	SMH-MH	SP	SP-MF	SS-ME
26	0	0	0	0	0	0	0	0	0	0	0	0	0
27	0	0	0	0	0	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0	0	0	0	0
29	0	0	0	0	0	0	0	0	0	0	0	0	0

---------- CLUSTER=3 ----------

Obs	Especie	BaMH-ME	BaMH-MF	BaMH-MG	BaMH-MH	BaaH-MF	BaaH-MH	BaaMH-MF	BaaMH-MG	BaaMH-MH	BaaP-MF	BaH-ME
30	L.chipaquensis	0	0	0	0	0	0	0	0	0	0	1
31	L.galactrensis	0	0	0	0	0	0	0	0	0	0	1
32	L.guacensis	0	0	0	0	0	0	0	0	0	0	1
33	L.humifusus	0	1	0	1	0	1	0	1	0	0	1
34	L.lanatocarpus	0	0	0	0	0	0	0	0	0	0	1

Obs	BaH-MF	BaH-MG	BaH-MH	BaP-MF	BaS-ME	BaSME-PF	BsaH-MF	PH-ME	PH-MF	PH-MG	PH-MH	PMH-ME	PMH-MF	PMH-MF-C7
30	1	0	0	0	0	0	0	0	0	0	0	0	0	0
31	0	0	0	0	0	0	0	0	0	0	0	0	0	0
32	1	0	0	0	0	0	0	1	0	0	0	1	0	0
33	0	0	0	0	0	0	0	1	0	0	0	1	1	0
34	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Obs	PMH-MG	PMH-MH	PP-MF	PP-MG	PS-ME	SH-ME	SH-MH	SMH-MF	SMH-MH	SP	SP-MF	SS-ME
30	0	0	0	0	0	0	0	0	0	0	0	0
31	0	0	0	0	1	0	0	0	0	0	0	0
32	0	0	0	0	1	0	0	0	0	0	0	0
33	0	1	0	0	0	0	0	0	0	0	0	0
34	0	0	0	0	0	0	0	0	0	0	0	0

---------- CLUSTER=3 ----------
(continuación)

Obs	Especie	BaMH-ME	BaMH-MF	BaMH-MG	BaMH-MH	BaaH-MF	BaaH-MH	BaaMH-MF	BaaMH-MG	BaaMH-MH	BaaP-MF
35	L.mirabilis	0	0	0	0	0	0	0	0	0	0
36	L.monserratensis	0	0	0	0	0	0	0	0	0	0
37	L.paniculatus	0	0	0	0	0	0	0	0	0	0
38	L.pubescens	0	0	1	1	0	1	0	0	0	0
39	L.radiatus	0	0	0	0	0	0	0	0	0	0

Obs	BaH-ME	BaH-MF	BaH-MG	BaH-MH	BaP-MF	BaS-ME	BaSME-PF	BsaH-MF	PH-ME	PH-MF	PH-MG	PH-MH	PMH-ME	PMH-MF
35	1	1	0	0	0	0	0	0	0	0	1	0	0	0
36	1	0	0	0	0	0	0	0	1	0	0	0	0	0
37	1	0	0	0	0	0	0	0	0	0	0	0	0	0
38	1	0	0	0	0	0	0	0	1	0	0	0	0	0
39	1	0	0	0	0	0	0	0	0	0	0	0	0	0

Obs	PMH-MF-C7	PMH-MG	PMH-MH	PP-MF	PP-MG	PS-ME	SH-ME	SH-MH	SMH-MF	SMH-MH	SP	SP-MF	SS-ME
35	0	0	0	0	0	0	0	0	0	0	0	0	0
36	0	0	0	0	0	0	0	0	0	0	0	0	0
37	0	0	0	0	0	0	0	0	0	0	0	0	0
38	0	0	0	0	0	0	0	0	0	0	0	0	0
39	0	0	0	0	0	0	0	0	0	0	0	0	0

---------- CLUSTER=4 ----------

Obs	Especie	BaMH-ME	BaMH-MF	BaMH-MG	BaMH-MH	BaaH-MF	BaaH-MH	BaaMH-MF	BaaMH-MG	BaaMH-MH	BaaP-MF	BaH-ME
40	L.albus	0	0	0	1	0	0	0	0	0	0	0
41	L.caucensis	0	0	0	0	0	0	1	1	1	0	0
42	L.perennis	0	0	0	0	0	0	0	0	1	0	0
43	L.sarmentosus	0	0	0	0	0	0	0	0	1	0	0

Obs	BaH-MF	BaH-MG	BaH-MH	BaP-MF	BaS-ME	BaSME-PF	BsaH-MF	PH-ME	PH-MF	PH-MG	PH-MH	PMH-ME	PMH-MF	PMH-MF-C7
40	1	0	0	0	0	0	0	0	1	0	0	0	0	0
41	0	0	0	0	0	0	0	0	0	0	1	0	0	0
42	0	0	0	0	0	0	0	1	0	0	0	0	0	0
43	0	0	0	0	0	0	0	0	1	0	0	0	0	0

Obs	PMH-MG	PMH-MH	PP-MF	PP-MG	PS-ME	SH-ME	SH-MH	SMH-MF	SMH-MH	SP	SP-MF	SS-ME
40	0	1	0	0	0	0	0	0	0	0	0	0
41	1	1	0	1	0	0	0	1	0	0	0	0
42	0	1	0	0	0	0	0	0	0	0	0	0
43	0	1	0	0	0	0	0	0	0	0	0	0

---------- CLUSTER=5 ----------

Obs	Especie	BaMH-ME	BaMH-MF	BaMH-MG	BaMH-MH	BaaH-MF	BaaH-MH	BaaMH-MF	BaaMH-MG	BaaMH-MH	BaaP-MF
44	L.alopecuroides	1	0	0	0	0	0	0	0	0	0
45	L.amandus	0	0	0	0	0	0	0	0	0	0
46	L.bogotensis	1	0	0	0	1	0	0	0	0	0
47	L.interruptus	0	0	0	0	1	0	0	0	0	0

Obs	BaH-ME	BaH-MF	BaH-MG	BaH-MH	BaP-MF	BaS-ME	BaSME-PF	BsaH-MF	PH-ME	PH-MF	PH-MG	PH-MH	PMH-ME	PMH-MF
44	0	0	0	0	0	1	0	0	1	0	1	0	1	1
45	0	0	0	0	0	1	0	0	1	0	1	0	0	0
46	1	1	0	0	0	1	1	0	1	0	0	0	1	1
47	0	0	0	0	0	1	0	0	1	0	1	0	0	0

Obs	PMH-MF-C7	PMH-MG	PMH-MH	PP-MF	PP-MG	PS-ME	SH-ME	SH-MH	SMH-MF	SMH-MH	SP	SP-MF	SS-ME
44	0	1	0	0	0	1	0	0	0	0	1	0	0
45	0	0	1	0	0	1	0	0	0	0	1	0	0
46	0	0	0	0	0	1	1	0	0	0	0	0	1
47	0	0	0	0	0	1	0	0	0	0	0	0	0