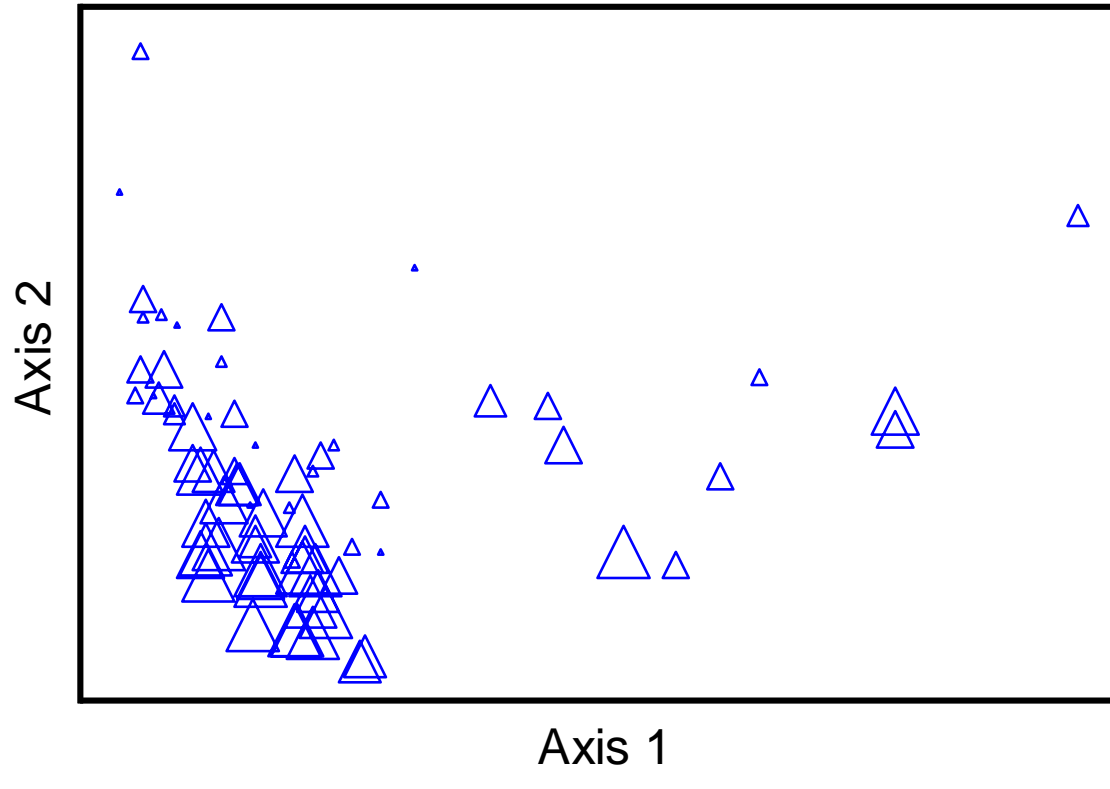


# PCA, Similarity = Correlation Rows > 6

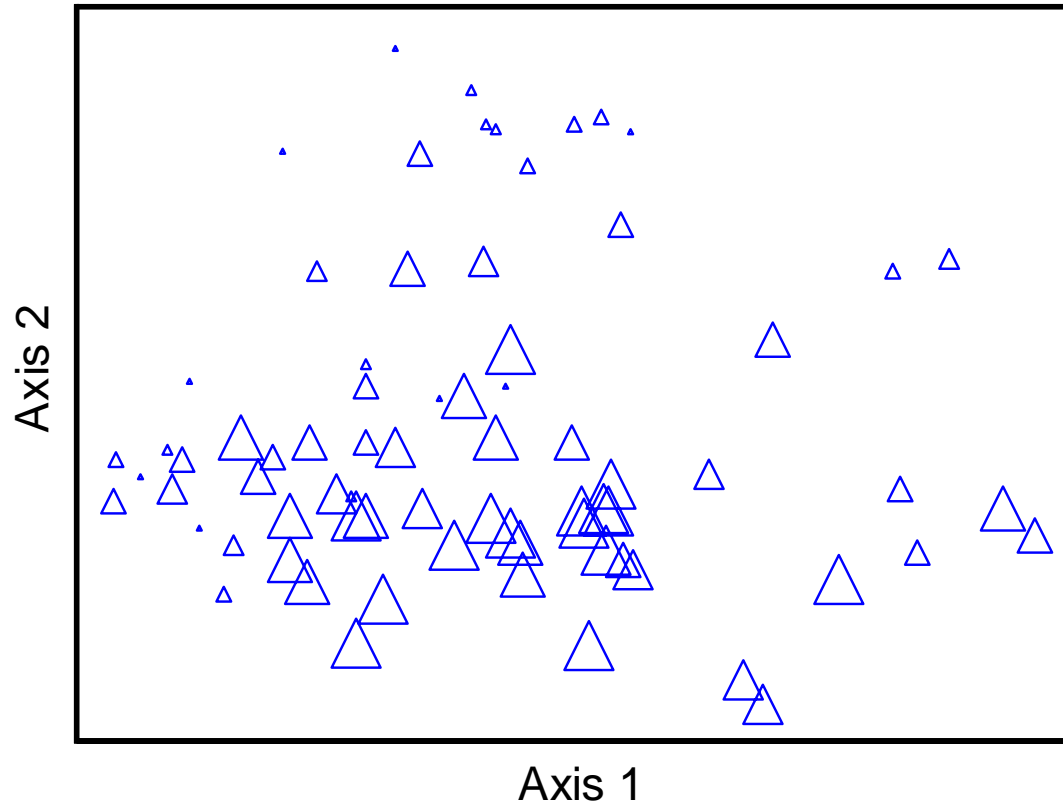
Spencer PCA Correlation



	1	2	3
lyam	<b>0.895</b>	0.204	0.1
imno	<b>0.824</b>	0.215	-0.181
atfi	<b>0.808</b>	0.197	-0.23
rusp	<b>0.797</b>	0.089	-0.284
rudi	<b>0.795</b>	0.236	-0.071
gasp	<b>0.769</b>	0.26	-0.017
sodu	<b>0.747</b>	0.064	-0.231
assu	<b>0.651</b>	0.237	0.119
lysam	<b>0.627</b>	0.066	0.289
oesa	<b>0.61</b>	-0.111	0.319
leor	<b>0.529</b>	0.358	0.357
agsp	0.497	0.18	-0.075
rumsp	0.473	0.314	0.22
mysp	0.346	0.171	0.423
juef	0.293	0.132	-0.136
scmi	0.212	0.056	0.309
brsp	0.19	-0.103	-0.121
sccy	0.174	-0.206	0.075
spem	0.1	0.189	<b>0.721</b>
carexsp	0.094	0.249	-0.152
rasp	0.059	0.05	0.328
epci	0.052	0.135	0.332
glsp	0.036	0.151	<b>0.652</b>
phar	0.022	<b>-0.613</b>	-0.236
tyla	0.011	-0.345	-0.222
jusp	-0.074	0.146	0.337
sisu	-0.108	-0.231	-0.037
cosp	-0.14	0.044	-0.001
lupa	-0.165	0.5	-0.011
migu	-0.166	-0.018	0.027
rosp	-0.185	0.126	-0.028
lysa	-0.186	0.216	0.03
liaq	-0.247	<b>0.579</b>	-0.332
elsp	-0.268	<b>0.506</b>	-0.272
elpa	-0.297	0.457	-0.219
scac	-0.31	0.488	-0.197
posp	-0.401	0.129	-0.139
sala	<b>-0.503</b>	0.435	-0.35
alpl	<b>-0.509</b>	0.168	<b>0.516</b>
bisp	<b>-0.519</b>	-0.208	0.389
juac	<b>-0.522</b>	0.421	0.057
grne	<b>-0.524</b>	0.448	-0.202
calst	<b>-0.6</b>	0.074	0.482
trsp	<b>-0.607</b>	0.373	0.129

# PCA, Similarity = Covariance Rows > 6

Spencer PCA Covariance

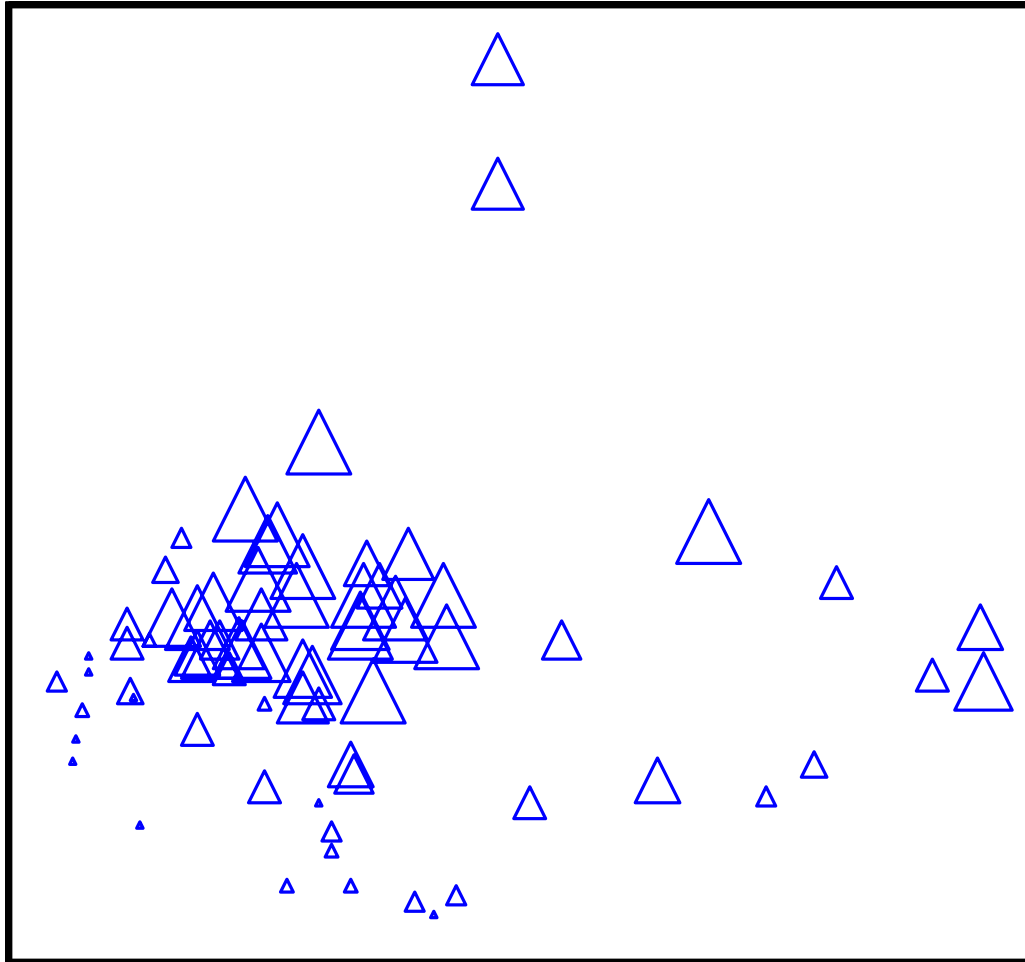


	1	2	3
lyam	<b>0.695</b>	0.253	-0.346
rusp	<b>0.654</b>	-0.09	-0.349
imno	<b>0.627</b>	0.032	-0.404
sodu	<b>0.619</b>	-0.042	-0.308
atfi	<b>0.589</b>	-0.01	-0.366
oesa	<b>0.573</b>	0.164	0.146
rudi	<b>0.561</b>	0.055	-0.285
gasp	<b>0.529</b>	0.12	-0.355
lysam	<b>0.525</b>	0.386	-0.185
assu	0.427	0.157	-0.216
agsp	0.323	0.041	-0.222
leor	0.312	0.3	-0.21
rumsp	0.291	0.247	-0.221
mysp	0.258	0.219	-0.016
sccy	0.224	-0.025	0.122
phar	0.217	<b>-0.606</b>	<b>0.623</b>
juéf	0.213	-0.085	-0.138
scmi	0.202	0.13	0.015
tyla	0.151	-0.478	0.224
brsp	0.129	-0.111	-0.019
carexsp	0.093	-0.069	-0.341
rasp	0.039	0.281	0.062
spem	0.011	<b>0.901</b>	0.025
glsp	-0.028	0.486	0.114
cosp	-0.058	0.172	0.019
sisu	-0.07	-0.262	0.254
epci	-0.108	0.004	0.144
jusp	-0.122	0.265	0.031
migu	-0.155	-0.178	0.129
rosp	-0.211	-0.084	-0.038
lysa	-0.216	-0.023	-0.047
lupa	-0.218	0.057	-0.311
elpa	-0.333	-0.095	-0.293
elsp	-0.335	-0.091	<b>-0.502</b>
liaq	-0.391	-0.159	<b>-0.541</b>
scac	-0.393	-0.09	-0.335
posp	-0.447	-0.196	-0.019
bisp	<b>-0.528</b>	0.212	<b>0.56</b>
alpl	<b>-0.568</b>	0.43	0.321
sala	<b>-0.653</b>	-0.269	-0.357
calst	<b>-0.684</b>	0.345	0.401
juac	<b>-0.713</b>	-0.042	-0.158
trsp	<b>-0.737</b>	0.141	-0.106
grne	<b>-0.75</b>	-0.315	-0.211

Bray Curtis, Similarity = Relative Sorenson Rows > 6

Spencer Bray Curtis, Relative Sorenson, Variance

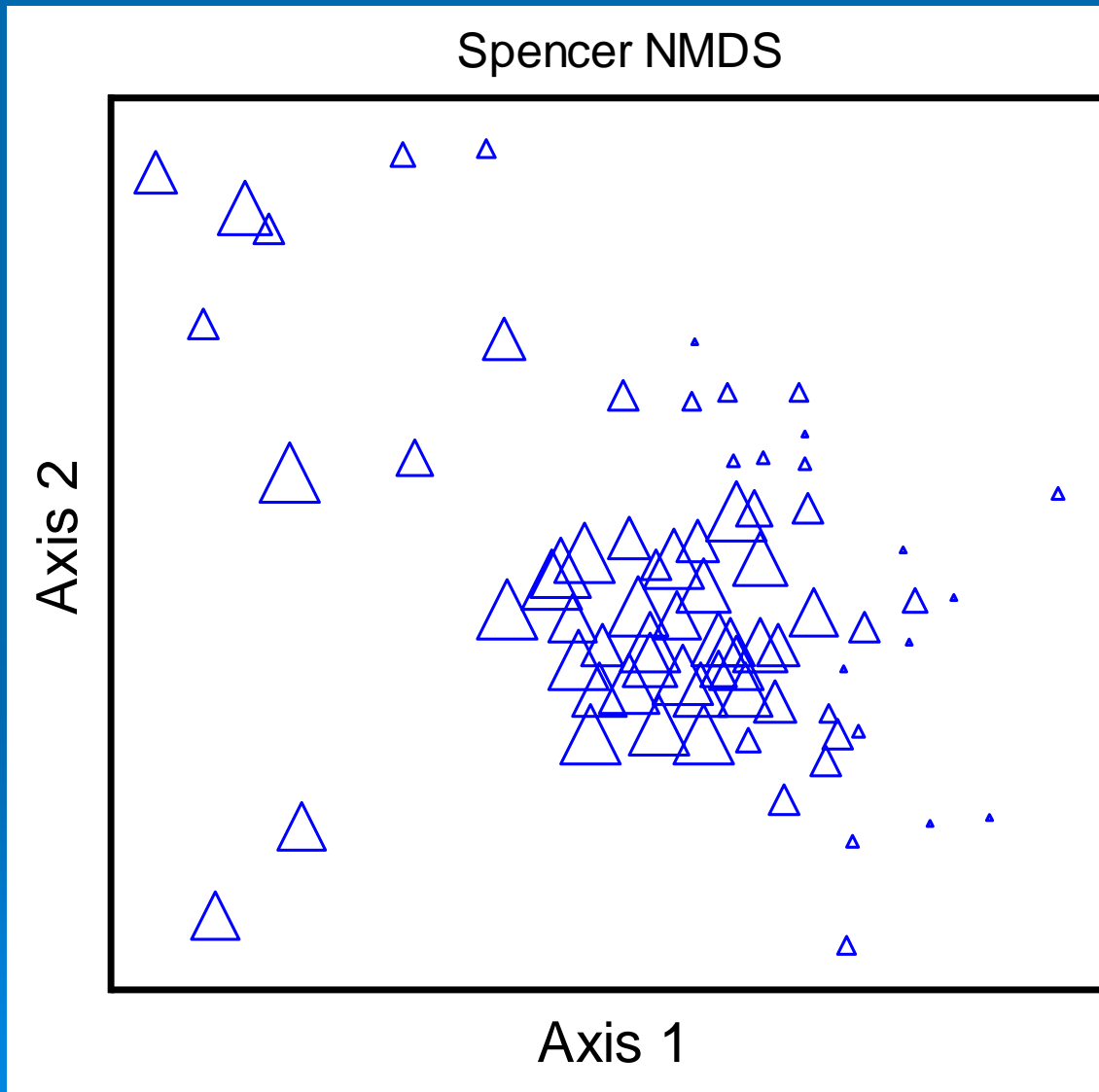
Axis 2



Axis 1

	1	2	3
lyam	<b>0.807</b>	-0.256	0.199
rusp	<b>0.777</b>	0.01	0.156
sodu	<b>0.737</b>	-0.016	0.125
imno	<b>0.727</b>	-0.091	0.236
atfi	<b>0.697</b>	-0.038	0.225
oesa	<b>0.675</b>	-0.26	-0.005
rudi	<b>0.632</b>	-0.076	0.153
gasp	<b>0.604</b>	-0.121	0.262
lysam	<b>0.599</b>	-0.388	0.059
assu	<b>0.523</b>	-0.142	0.179
agsp	0.453	-0.092	0.215
leor	0.37	-0.189	0.158
rumsp	0.344	-0.228	0.218
juef	0.299	0.069	0.172
mosp	0.284	-0.2	0.063
scmi	0.229	-0.144	0.058
sccy	0.218	0.016	-0.125
phar	0.193	<b>0.54</b>	-0.388
rasp	0.142	-0.279	0.019
tyla	0.131	<b>0.652</b>	-0.205
brsp	0.117	0.075	-0.008
carexsp	0.116	0.002	0.426
spem	0.04	<b>-0.678</b>	-0.051
epci	0.022	-0.116	0.116
glsp	0.013	-0.344	0.056
jusp	-0.066	-0.207	0.021
sisu	-0.067	0.131	-0.052
migu	-0.092	0.09	0.056
cosp	-0.101	-0.082	-0.084
rosp	-0.136	0.012	0.091
lysa	-0.184	0.024	0.196
lupa	-0.193	-0.043	0.312
elpa	-0.258	0.025	0.385
liaq	-0.283	0.074	<b>0.574</b>
scac	-0.306	0.015	0.43
elsp	-0.311	0.054	<b>0.51</b>
posp	-0.415	0.035	0.181
alpl	<b>-0.52</b>	-0.366	-0.078
bisp	<b>-0.533</b>	-0.274	-0.275
grne	<b>-0.558</b>	0.1	<b>0.578</b>
sala	<b>-0.56</b>	0.07	<b>0.507</b>
juac	<b>-0.578</b>	-0.061	0.485
calst	<b>-0.623</b>	-0.397	-0.146
trsp	<b>-0.685</b>	-0.187	0.261

# NMDS, Similarity = Relative Sorenson Rows > 6



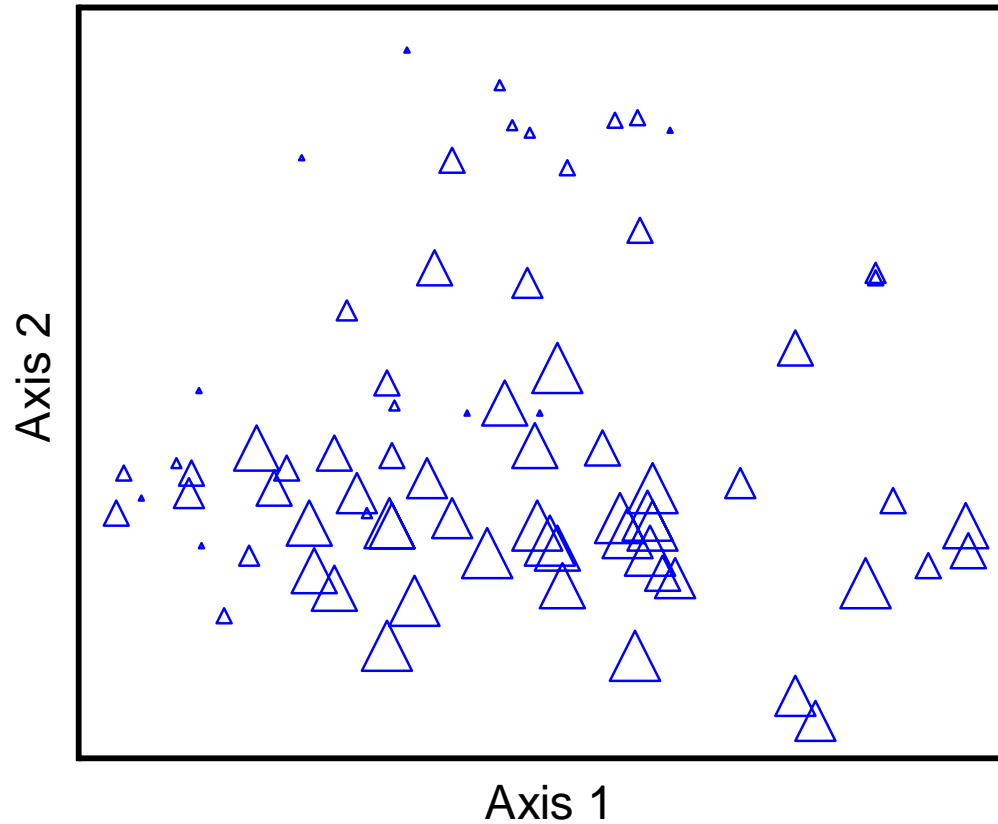
	1	2
trsp	<b>0.721</b>	-0.413
calst	<b>0.649</b>	-0.219
alpl	<b>0.58</b>	-0.157
juac	<b>0.507</b>	-0.452
sala	0.455	<b>-0.584</b>
bisp	0.426	-0.264
posp	0.404	-0.296
grne	0.402	<b>-0.603</b>
elpa	0.357	-0.261
elsp	0.306	-0.357
liaq	0.296	-0.423
scac	0.295	-0.36
cosp	0.294	0.074
lupa	0.264	-0.138
spem	0.233	0.435
lysa	0.174	-0.126
rosp	0.172	-0.091
jusp	0.135	0.054
glsp	0.088	0.191
migu	0.042	-0.14
rasp	0.032	0.222
epci	-0.05	0.1
sisu	-0.074	-0.153
carexsp	-0.077	-0.07
scmi	-0.148	0.228
brsp	-0.155	0.08
rumsp	-0.179	0.402
leor	-0.216	0.454
misp	-0.222	0.334
sccy	-0.237	0.168
juef	-0.278	0.092
agsp	-0.329	0.416
assu	-0.356	0.49
lysam	-0.375	<b>0.663</b>
tyla	-0.416	-0.231
phar	-0.444	-0.143
gasp	-0.448	<b>0.574</b>
rudi	-0.489	<b>0.552</b>
imno	<b>-0.544</b>	<b>0.659</b>
lyam	<b>-0.558</b>	<b>0.804</b>
atfi	<b>-0.564</b>	<b>0.583</b>
oesa	<b>-0.567</b>	<b>0.627</b>
sodu	<b>-0.602</b>	<b>0.58</b>
rusp	<b>-0.677</b>	<b>0.6</b>

## Comparison of main species associated with Factor 1

Correlation		Covariance		Bray Curtis		NMDS		
species	r	species	r	species	r	species	r	
assu	<b>0.651</b>	assu	0.427	assu	<b>0.523</b>	assu	-0.356	0.49
atfi	<b>0.808</b>	atfi	<b>0.589</b>	atfi	<b>0.697</b>	atfi	<b>-0.564</b>	<b>0.583</b>
gasp	<b>0.769</b>	gasp	<b>0.529</b>	gasp	<b>0.604</b>	gasp	-0.448	<b>0.574</b>
imno	<b>0.824</b>	imno	<b>0.627</b>	imno	<b>0.727</b>	imno	<b>-0.544</b>	<b>0.659</b>
leor	<b>0.529</b>	leor	0.312	leor	0.37	leor	-0.216	0.454
lyam	<b>0.895</b>	lyam	<b>0.695</b>	lyam	<b>0.807</b>	lyam	<b>-0.558</b>	<b>0.804</b>
lysam	<b>0.627</b>	lysam	<b>0.525</b>	lysam	<b>0.599</b>	lysam	-0.375	<b>0.663</b>
oesa	<b>0.61</b>	oesa	<b>0.573</b>	oesa	<b>0.675</b>	oesa	<b>-0.567</b>	<b>0.627</b>
rudi	<b>0.795</b>	rudi	<b>0.561</b>	rudi	<b>0.632</b>	rudi	-0.489	<b>0.552</b>
rusp	<b>0.797</b>	rusp	<b>0.654</b>	rusp	<b>0.777</b>	rusp	<b>-0.677</b>	<b>0.6</b>
sodu	<b>0.747</b>	sodu	<b>0.619</b>	sodu	<b>0.737</b>	sodu	<b>-0.602</b>	<b>0.58</b>
alpl	<b>-0.509</b>	alpl	<b>-0.568</b>	alpl	<b>-0.52</b>	alpl	<b>0.58</b>	-0.157
bisp	<b>-0.519</b>	bisp	<b>-0.528</b>	bisp	<b>-0.533</b>	bisp	0.426	-0.264
calst	<b>-0.6</b>	calst	<b>-0.684</b>	calst	<b>-0.623</b>	calst	<b>0.649</b>	-0.219
grne	<b>-0.524</b>	grne	<b>-0.75</b>	grne	<b>-0.558</b>	grne	0.402	<b>-0.603</b>
juac	<b>-0.522</b>	juac	<b>-0.713</b>	juac	<b>-0.578</b>	juac	<b>0.507</b>	-0.452
sala	<b>-0.503</b>	sala	<b>-0.653</b>	sala	<b>-0.56</b>	sala	0.455	<b>-0.584</b>
trsp	<b>-0.607</b>	trsp	<b>-0.737</b>	trsp	<b>-0.685</b>	trsp	<b>0.721</b>	-0.413

# Effects of removing species that might have been understamped

Spencer PCA Cov > 13



## Covariance

Rows>6

species	r
assu	0.427
atfi	<b>0.589</b>
gasp	<b>0.529</b>
imno	<b>0.627</b>
leor	0.312
lyam	<b>0.695</b>
lysam	<b>0.525</b>
oesa	<b>0.573</b>
rudi	<b>0.561</b>
rusp	<b>0.654</b>
sodu	<b>0.619</b>

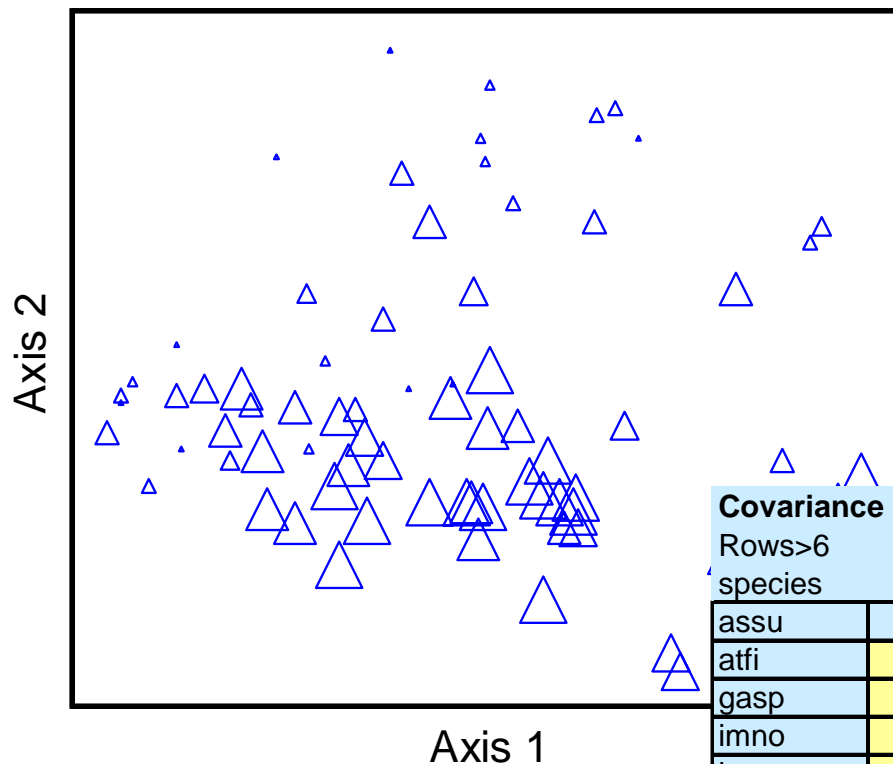
Rows > 13

species	r
lyam	<b>0.633</b>
oesa	<b>0.557</b>

alpl	<b>-0.568</b>
bisp	<b>-0.528</b>
calst	<b>-0.684</b>
grne	<b>-0.75</b>
juac	<b>-0.713</b>
sala	<b>-0.653</b>
trsp	<b>-0.737</b>

alpl	<b>-0.552</b>
calst	<b>-0.665</b>
grne	<b>-0.781</b>
juac	<b>-0.733</b>
sala	<b>-0.679</b>
trsp	<b>-0.743</b>

Spencer PCA Cov > 13 Relativised by Max



**Covariance**

Rows > 6 species	r
assu	0.427
atfi	<b>0.589</b>
gasp	<b>0.529</b>
imno	<b>0.627</b>
lyam	<b>0.695</b>
lysam	<b>0.525</b>
oesa	<b>0.573</b>
rudi	<b>0.561</b>
rusp	<b>0.654</b>
sodu	<b>0.619</b>

alpl	<b>-0.568</b>
bisp	<b>-0.528</b>
calst	<b>-0.684</b>
grne	<b>-0.75</b>
juac	<b>-0.713</b>
sala	<b>-0.653</b>
trsp	<b>-0.737</b>

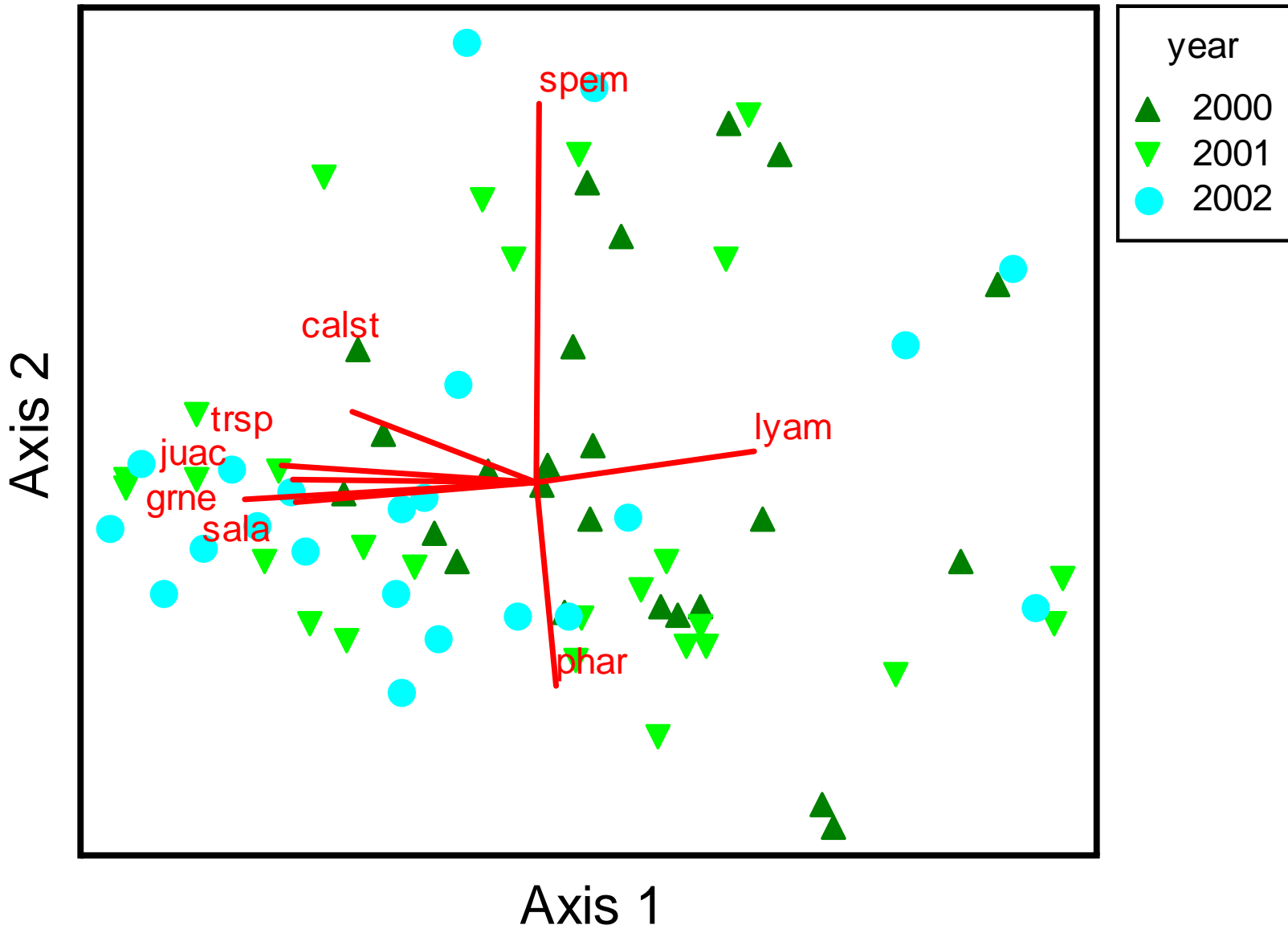
Rows > 13 species	r
lyam	<b>0.633</b>
oesa	<b>0.557</b>

alpl	<b>-0.552</b>
calst	<b>-0.665</b>
grne	<b>-0.781</b>
juac	<b>-0.733</b>
sala	<b>-0.679</b>
trsp	<b>-0.743</b>

Rows > 13 Relativised by Max	r
lyam	<b>0.676</b>
lysam	<b>0.567</b>
oesa	<b>0.604</b>

alpl	<b>-0.515</b>
calst	<b>-0.622</b>
grne	<b>-0.78</b>
juac	<b>-0.713</b>
sala	<b>-0.71</b>
trsp	<b>-0.731</b>

# Spencer PCA Cov > 13 Relativised by Max



# Spencer PCA Cov > 13 Relativised by Max

