



13-19 Ocak 2014/ ANTALYA

## Bray - Purts Ordinasyon Metodu

Eğitmen

Yrd. Doç. Dr. Özdemir ŞENTÜRK

Mehmet Akif Ersoy Üniversitesi

Gölkhisar Meslek Yüksekokulu / Ormancılık Bölümü



## Main - VVM\_PCORD5\_Q.WK1

80	ornek							
42	bitki							
	q	q	q	q	q	q	q	q
	ArbAnd	BerCra	CedLib	CelGlb	CisSal	CotNum	CotCog	CraOri
10a	0	0	0	1	0	1	0	0
20a	0	0	0	0	0	0	0	0
30a	0	0	0	0	0	1	0	0
40a	0	0	0	0	0	0	0	0
50a	0	0	0	0	0	0	0	1
60a	0	0	0	0	0	0	0	0
70a	0	0	0	0	0	0	0	0
80a	0	0	0	0	0	0	0	0
90a	0	0	0	0	0	0	0	0
100a	0	0	0	0	0	0	0	0
110a	0	0	1	0	0	1	0	0

## Second - CVM\_NEW.WK1

80	ornek							
20	degisken							
	q	q	q	q	q	q	q	q
	yukslt	radinx	egim	yuztas	topder	kum	toz	kil
oa1	1462	0.0669872	95	90	20.5	61.8608	29.6638	8.47537
oa2	1545	0.982962	10	60	7.1875	29.8227	34.0253	36.1518
oa3	1485	0.0669872	80	60	32.8125	73.6378	19.7716	6.59053
oa4	1089	0.933012	60	30	26.48	17.6568	23.2249	59.1181
oa5	1224	0.982962	25	60	22.04	16.1992	23.0451	60.7555
oa6	1010	0.0669872	75	40	41.12	6.81018	14.4961	78.6936
oa7	1030	0.982962	55	70	26.04	25.1448	14.5551	60.3
oa8	1028	0.982962	65	80	15.76	70.0499	12.2746	17.6754
oa9	990	0.629409	20	20	33.12	22.7328	23.197	54.0701
oa10	950	0.25	55	50	27.4	21.7262	24.9544	53.3193
oa11	1350	0.0669872	90	90	7.68	64.2334	23.6437	12.1227

Main - VVM\_PCORD5\_Q.WK1

	ornek						
	q	q	q	q	q	q	q
	ArbAnd	BerC	IGlb	CisSal	CotNum	CotCog	
80	ornek						
42	bitki						
10a	0	0		0	1	0	
20a	0	0		0	0	0	
30a	0	0	0	0	1	0	
40a	0	0	0	0	0	0	
50a	0	0	0	0	0	0	
60a	0	0	0	0	0	0	
70a	0	0	0	0	0	0	
80a	0	0	0	0	0	0	
90a	0	0	0	0	0	0	
100a	0	0	0	0	0	0	
110a	0	0	1	0	1	0	
120a	0	0	0	0	1	0	
130a	0	1	0	0	1	0	

- Bray-Curtis
- DCA (DECORANA)
- NMS
- NMS Scores
- PCA
- RA
- CCA
- Weighted Averaging

Second - CVM\_NEW.WK1

	ornek						
	q	q	q	q	q	q	q
	yukslt	radinx	egim	yuztas	topder	kum	toz
80	ornek						
20	degisken						
oa1	1462	0.0669872	95	90	20.5	61.8608	29.663
oa2	1545	0.982962	10	60	7.1875	29.8227	34.025
oa3	1485	0.0669872	80	60	32.8125	73.6378	19.771
oa4	1089	0.933012	60	30	26.48	17.6568	23.224
oa5	1224	0.982962	25	60	22.04	16.1992	23.045
oa6	1010	0.0669872	75	40	41.12	6.81018	14.496
oa7	1030	0.982962	55	70	26.04	25.1448	14.555
oa8	1028	0.982962	65	80	15.76	70.0499	12.274
oa9	990	0.629409	20	20	33.12	22.7328	23.197
oa10	950	0.25	55	50	27.4	21.7262	24.954
oa11	1350	0.0669872	90	90	7.68	64.2334	23.643
oa12	1365	0.0669872	60	80	10.04	30.5322	31.924
oa13	1440	0.37059	60	80	14.92	39.4339	30.677

80	ornek						
42	bitki						
	q	q	q	q	q	q	q
	ArbAnd	BerCra	CedLib	CelGlb	CisSal	CotNum	CotCog
10a	0	0	0	1	0	1	0
20a	0	0	0	0	0	0	0
30a	0	0	0	0	0	1	0
40a	0	0	0	0	0	0	0
50a	0	0	0	0	0	0	0
60a	0	0	0	0	0	0	0
70a	0	0	0	0	0	0	0

## Bray-Curtis Setup

## Distance Measure

- Sorensen (Bray-Curtis)  
 Relative Sorensen  
 Jaccard  
 Euclidean (Pythagorean)  
 Relative Euclidean  
 Correlation  
 Chi-squared  
 Squared Euclidean

Number of axes = 3

List residual Matrix for axis 0

 List distance Matrix Calculate scores for bitki by weighted averaging

## Endpoint Selection Method

- Bray-Curtis original  
 Variance-regression  
 Minimum deviation  
 Subjective

## Axis Projection Geometry

- Euclidean  
 City-block 1-2W/(A+B)

## Residual Distances

- Euclidean  
 City-block 1-2W/(A+B)

OK

Cancel

Help

Main - VVM\_PCORD5\_Q.WK1

80	ornek							
42	bitki							
	q	q	q	q	q	q	q	q
	ArbAnd	BerCra	CedLib	CelGlb	CisSal	CotNum	CotCog	CraOri
10a	0	0	0	1	0	1	0	0
20a	0	0	0	0	0	0	0	0
30a	0	0	0	0	0	1	0	0
40a	0	0	0	0	0	0	0	0
50a	0	0	0	0	0	0	0	1
60a	0	0	0	0	0	0	0	0
70a	0	0	0	0	0	0	0	0
80a	0	0	0	0	0	0	0	0
90a	0	0	0	0	0	0	0	0
100a	0	0	0	0	0	0	0	0
110a	0	0	1	0	0	0	0	0

Second - CVM\_NEW.WK1

80	ornek							
20	degisken							
	q	q	q	q	q	q	q	q
	yukslt	radinx	eg					
oa1	1462	0.0669872	94	60	7.1875	29.8227	34.0253	36.1518
oa2	1545	0.982962	10	60	32.8125	73.6378	19.7716	6.59053
oa3	1485	0.0669872	80	30	26.48	17.6568	23.2249	59.1181
oa4	1089	0.982962	25	60	22.04	16.1992	23.0451	60.7555
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oa8	990	0.629409	20	20	33.12	22.7328	23.197	54.0701
oa9	950	0.25	55	50	27.4	21.7262	24.9544	53.3193
oa10	1350	0.0669872	90	90	7.68	64.2334	23.6437	12.1227

## Bray-Curtis

Descriptive title for results:

OK

Cancel

Help

Main - VVM\_PCORD5\_Q.WK1

	q	q	q	q	q	q	q	q
	ArbAnd	BerCra	CedLib	CelGlb	CisSal	CotNum	CotCog	CraOri
80	ornek							
42	bitki							
10a	0	0	0	1	0	1	0	0
20a	0	0	0	0	0	0	0	0
30a	0	0	0	0	0	1	0	0
40a	0	0	0	0	0	0	0	0
50a	0	0	0	0	0	0	0	1
60a	0	0	0	0	0	0	0	0
70a	0	0	0	0	0	0	0	0
80a	0	0	0	0	0	0	0	0
90a	0	0	0	0	0	0	0	0
100a	0	0	0	0	0	0	0	0
110a	0	0	1	0	0	1	0	0

Graph - GRAPHROW.GPH

80			
10a	0.84568	0.29763	0.52537
20a	0.50000	0.51750	0.92237
30a	0.50000	0.52119	0.79006
40a	0.12500	0.30123	0.85272
50a	0.37531	0.00000	0.71533
60a	0.25510	0.05558	0.69894
70a	0.30642	0.17942	0.92539
80a	0.09184	0.22091	0.95813
90a	0.37463	0.18821	0.76767
100a	0.19531	0.30532	0.92751
110a	0.54784	0.67232	0.61489
120a	0.68679	0.24147	0.61725
130a	0.80281	0.23374	0.59762
140a	0.15432	0.30148	0.61007
150a	0.60289	0.65466	0.52699

Second - CVM\_NEW.WK1

	q	q	q	q	q	q	q	q
	yukslt	radinx	egim	yuztas	topder	kum	toz	kil
80	ornek							
20	degisken							
oa1	1462	0.0669872	95	90	20.5	61.8608	29.6638	8.47537
oa2	1545	0.982962	10	60	7.1875	29.8227	34.0253	36.1518
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oa6	1010	0.0669872	75	40	41.12	6.81018	14.4961	78.6936
oa7	1030	0.982962	55	70	26.04	25.1448	14.5551	60.3
oa8	1028	0.982962	65	80	15.76	70.0499	12.2746	17.6754
oa9	990	0.629409	20	20	33.12	22.7328	23.197	54.0701
oa10	950	0.25	55	50	27.4	21.7262	24.9544	53.3193
oa11	1350	0.0669872	90	90	7.68	64.2334	23.6437	12.1227

Result - RESULT.TXT

```

***** Bray-Curtis Ordination *****
PC-ORD, Version 4.0
5 Jan 2014, 17:05

Ordination of ornek      in bitki      space.              80 ornek

      The following options were selected:

Distance measure = Sorensen (Bray & Curtis)
Endpoint selection = Var.-Regression
Projection geometry = Euclidean
Calculation of residuals = Euclidean
    
```

\*\*\*\*\* Bray-Curtis Ordination \*\*\*\*\*

PC-ORD, Version 4.0

5 Jan 2014, 17:18

Ordination of ornek in bitki space. 80 ornek 42 bitki

The following options were selected:

Distance measure = Sorensen (Bray & Curtis)

Endpoint selection = Var.-Regression

Projection geometry = Euclidean

Calculation of residuals = Euclidean

Output options selected:

Write distance matrix

\* Write axes 1 through 3

Write no residual distance matrix

Endpoints for axis 1: 74oa 17oa

Distances (ordination scores) are from 74oa

Sum of squares of non-redundant distances

in original matrix = .173120E+04

Regression coefficient for this axis = -42.20

Variance in distances from the first endpoint = 4.63

Axis 1 extracted 29.00% of the original distance matrix

Cumulative: 29.00%

Sum of squares of residual distances remaining = .122910E+04

Ordination scores on axis 1

Endpoints for axis 1: 74oa 17oa  
 Distances (ordination scores) are from 74oa

Sum of squares of non-redundant distances  
 in original matrix = .173120E+04

Regression coefficient for this axis = -42.20  
 Variance in distances from the first endpoint = 4.63

Axis 1 extracted 29.00% of the original distance matrix  
 Cumulative: 29.00%  
 Sum of squares of residual distances remaining = .122910E+04

Ordination scores on axis 1

Seq.	Name	Score	Seq.	Name	Score	Seq.	Name	Score	Seq.	Name	Score
1	1oa	0.846	2	2oa	0.500	3	3oa	0.500	4	4oa	0.125
5	5oa	0.375	6	6oa	0.255	7	7oa	0.306	8	8oa	0.092
9	9oa	0.375	10	10oa	0.195	11	11oa	0.548	12	12oa	0.687
13	13oa	0.803	14	14oa	0.154	15	15oa	0.603	16	16oa	0.378
17	17oa	1.000	18	18oa	0.192	19	19oa	0.389	20	20oa	0.466
21	21oa	0.154	22	22oa	0.145	23	23oa	0.080	24	24oa	0.046
25	25oa	0.045	26	26oa	0.056	27	27oa	0.025	28	28oa	0.112
29	29oa	0.125	30	30oa	0.045	31	31oa	0.056	32	32oa	0.254
33	33oa	0.590	34	34oa	0.718	35	35oa	0.760	36	36oa	0.703
37	37oa	0.375	38	38oa	0.358	39	39oa	0.376	40	40oa	0.099
41	41oa	0.875	42	42oa	0.603	43	43oa	0.323	44	44oa	0.305
45	45oa	0.284	46	46oa	0.189	47	47oa	0.230	48	48oa	0.980
49	49oa	0.310	50	50oa	0.068	51	51oa	0.703	52	52oa	0.114
53	53oa	0.820	54	54oa	0.846	55	55oa	0.559	56	56oa	0.269
57	57oa	0.163	58	58oa	0.820	59	59oa	0.555	60	60oa	0.745
61	61oa	0.778	62	62oa	0.573	63	63oa	0.376	64	64oa	0.109
65	65oa	0.202	66	66oa	0.680	67	67oa	0.680	68	68oa	0.778
69	69oa	0.375	70	70oa	0.056	71	71oa	0.163	72	72oa	0.112
73	73oa	0.070	74	74oa	0.000	75	75oa	0.010	76	76oa	0.077
77	77oa	0.077	78	78oa	0.112	79	79oa	0.066	80	80oa	0.125



75 75oa	0.077	76 76oa	0.000	77 77oa	0.077	78 78oa	0.112	79 79oa	0.066	80 80oa	0.125
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Endpoints for axis 2: 5oa            63oa  
 Distances (ordination scores) are from 5oa

Regression coefficient for this axis =                    -21.43  
 Variance in distances from the first endpoint =                    3.51

Axis 2 extracted 12.48% of the original distance matrix  
 Cumulative: 41.49%  
 Sum of squares of residual distances remaining = .101297E+04

#### Ordination scores on axis 2

Seq.	Name	Score	Seq.	Name	Score	Seq.	Name	Score	Seq.	Name	Score
1	1oa	0.298	2	2oa	0.518	3	3oa	0.521	4	4oa	0.301
5	5oa	0.000	6	6oa	0.056	7	7oa	0.179	8	8oa	0.221
9	9oa	0.188	10	10oa	0.305	11	11oa	0.672	12	12oa	0.241
13	13oa	0.234	14	14oa	0.301	15	15oa	0.655	16	16oa	0.517
17	17oa	0.320	18	18oa	0.348	19	19oa	0.402	20	20oa	0.392
21	21oa	0.426	22	22oa	0.381	23	23oa	0.603	24	24oa	0.435
25	25oa	0.510	26	26oa	0.281	27	27oa	0.507	28	28oa	0.507
29	29oa	0.603	30	30oa	0.603	31	31oa	0.614	32	32oa	0.514
33	33oa	0.425	34	34oa	0.511	35	35oa	0.511	36	36oa	0.610
37	37oa	0.712	38	38oa	0.820	39	39oa	0.359	40	40oa	0.515
41	41oa	0.512	42	42oa	0.655	43	43oa	0.432	44	44oa	0.397
45	45oa	0.293	46	46oa	0.278	47	47oa	0.203	48	48oa	0.302
49	49oa	0.428	50	50oa	0.428	51	51oa	0.722	52	52oa	0.512
53	53oa	0.628	54	54oa	0.778	55	55oa	0.589	56	56oa	0.423
57	57oa	0.423	58	58oa	0.305	59	59oa	0.606	60	60oa	0.820
61	61oa	0.517	62	62oa	0.298	63	63oa	1.000	64	64oa	0.733
65	65oa	0.719	66	66oa	0.509	67	67oa	0.760	68	68oa	0.517
69	69oa	0.156	70	70oa	0.515	71	71oa	0.520	72	72oa	0.304
73	73oa	0.234	74	74oa	0.320	75	75oa	0.217	76	76oa	0.508
77	77oa	0.350	78	78oa	0.507	79	79oa	0.433	80	80oa	0.303

75 75oa	0.207	77 77oa	0.350	79 79oa	0.217	80 80oa	0.300
77 77oa	0.350	78 78oa	0.507	79 79oa	0.433	80 80oa	0.303

Endpoints for axis 3: 78oa 8oa  
 Distances (ordination scores) are from 78oa

Regression coefficient for this axis = -47.28  
 Variance in distances from the first endpoint = 3.47

Axis 3 extracted 15.10% of the original distance matrix  
 Cumulative: 56.58%  
 Sum of squares of residual distances remaining = .751612E+03

## Ordination scores on axis 3

Seq.	Name	Score	Seq.	Name	Score	Seq.	Name	Score	Seq.	Name	Score
1	1oa	0.525	2	2oa	0.922	3	3oa	0.790	4	4oa	0.853
5	5oa	0.715	6	6oa	0.699	7	7oa	0.925	8	8oa	0.958
9	9oa	0.768	10	10oa	0.928	11	11oa	0.615	12	12oa	0.617
13	13oa	0.598	14	14oa	0.610	15	15oa	0.527	16	16oa	0.523
17	17oa	0.485	18	18oa	0.534	19	19oa	0.355	20	20oa	0.684
21	21oa	0.573	22	22oa	0.435	23	23oa	0.352	24	24oa	0.313
25	25oa	0.461	26	26oa	0.106	27	27oa	0.325	28	28oa	0.213
29	29oa	0.059	30	30oa	0.351	31	31oa	0.404	32	32oa	0.470
33	33oa	0.878	34	34oa	0.655	35	35oa	0.479	36	36oa	0.609
37	37oa	0.376	38	38oa	0.827	39	39oa	0.537	40	40oa	0.529
41	41oa	0.436	42	42oa	0.644	43	43oa	0.497	44	44oa	0.277
45	45oa	0.347	46	46oa	0.327	47	47oa	0.167	48	48oa	0.479
49	49oa	0.503	50	50oa	0.718	51	51oa	0.541	52	52oa	0.580
53	53oa	0.356	54	54oa	0.496	55	55oa	0.600	56	56oa	0.686
57	57oa	0.806	58	58oa	0.521	59	59oa	0.599	60	60oa	0.629
61	61oa	0.539	62	62oa	0.520	63	63oa	0.715	64	64oa	0.582
65	65oa	0.683	66	66oa	0.535	67	67oa	0.610	68	68oa	0.539
69	69oa	0.745	70	70oa	0.528	71	71oa	0.527	72	72oa	0.603
73	73oa	0.687	74	74oa	0.485	75	75oa	0.356	76	76oa	0.254
77	77oa	0.164	78	78oa	0.000	79	79oa	0.232	80	80oa	0.120

Main - VVM\_PCORD5\_Q.WK1

	q	q	q	q	q	q	q
	ArbAnd	BerCra	CedLib	CelGlb	CisSal	CotNu	CotCog
10a	0	0	0	1	0	1	0
20a	0	0	0	0	0	0	0
30a	0	0	0	0	0	1	0
40a	0	0	0	0	0	0	0
50a							
60a							
70a							
80a							
90a							
100a							
110a							

Graph - GRAPHROW.GPH

10a	0.84568	0.29763	0.52537
20a	0.50000	0.51750	0.92237
30a	0.50000	0.52119	0.79006
40a	0.12500	0.30123	0.85272
50a	0.37531	0.00000	0.71533
60a	0.25510	0.05558	0.69894
70a	0.30642	0.17942	0.92539
80		0.2091	0.95813
		0.8821	0.76767
		0.0532	0.92751
		0.7232	0.61489
		0.4147	0.61725
		0.3374	0.59762
		0.0148	0.61007
		0.5466	0.52699

PC-ORD

Main - VVM\_PCORD5\_Q.WK1

File Edit Modify Data Summary Ordination Graph Groups Window Options Help

Graph Ordination  
Cluster Dendrogram  
Species-area Curves  
NMS Scree Plot

	q	q	q	q	q	q
	ArbAnd	BerCra	CedLib	CelGlb	CisSal	CotNu
10a	0	0	0	1	0	1
20						
30						
40						
50						
60						
70						
80						
90						
100						
110						

Second

	1485	0.0669872	80	60	32.8125	73.6378	19.7716	6.59053
oa3	1485	0.0669872	80	60	32.8125	73.6378	19.7716	6.59053
oa4	1089	0.933012	60	30	26.48	17.6568	23.2249	59.1181
oa5	1224	0.982962	25	60	22.04	16.1992	23.0451	60.7555
oa6	1010	0.0669872	75	40	41.12	6.81018	14.4961	78.6936
oa7	1030	0.982962	55	70	26.04	25.1448	14.5551	60.3
oa8	1028	0.982962	65	80	15.76	70.0499	12.2746	17.6754
oa9	990	0.629409	20	20	33.12	22.7328	23.197	54.0701
oa10	950	0.25	55	50	27.4	21.7262	24.9544	53.3193
oa11	1350	0.0669872	90	90	7.68	64.2334	23.6437	12.1227

Bray-Curtis Ordination \*\*\*\*\*

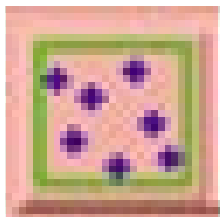
Ordination of ornek in bitki space. 80 ornek

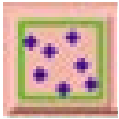
The following options were selected:

Distance measure = Sorensen (Bray & Curtis)  
 Endpoint selection = Var.-Regression  
 Projection geometry = Euclidean  
 Calculation of residuals = Euclidean

Icons for plot types (Main, End), a value of .200, a 'Raw' button, and statistical symbols including  $\Sigma$ ,  $\Sigma^2$ , and  $r^2$ .

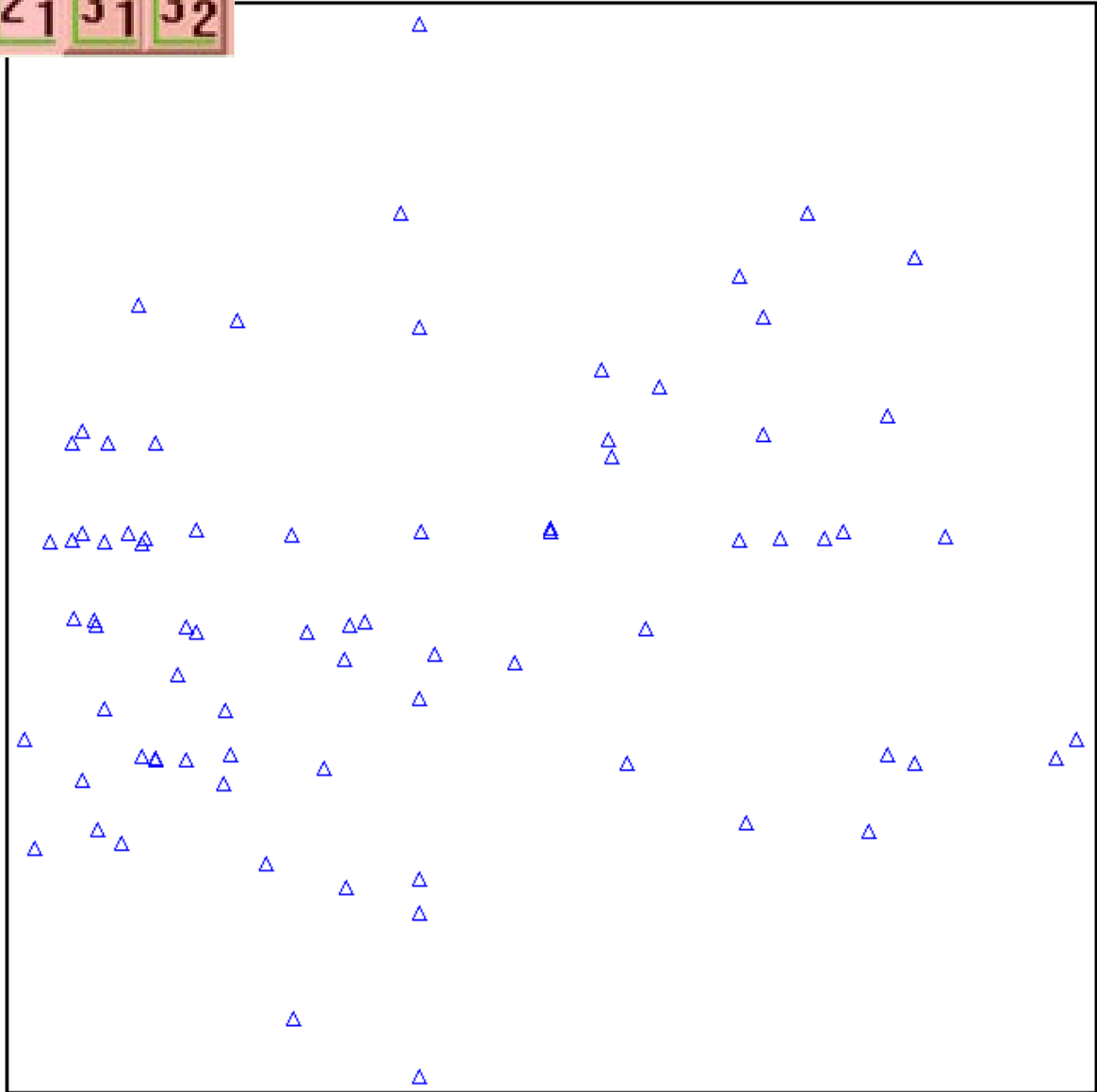
Simple scatterplot





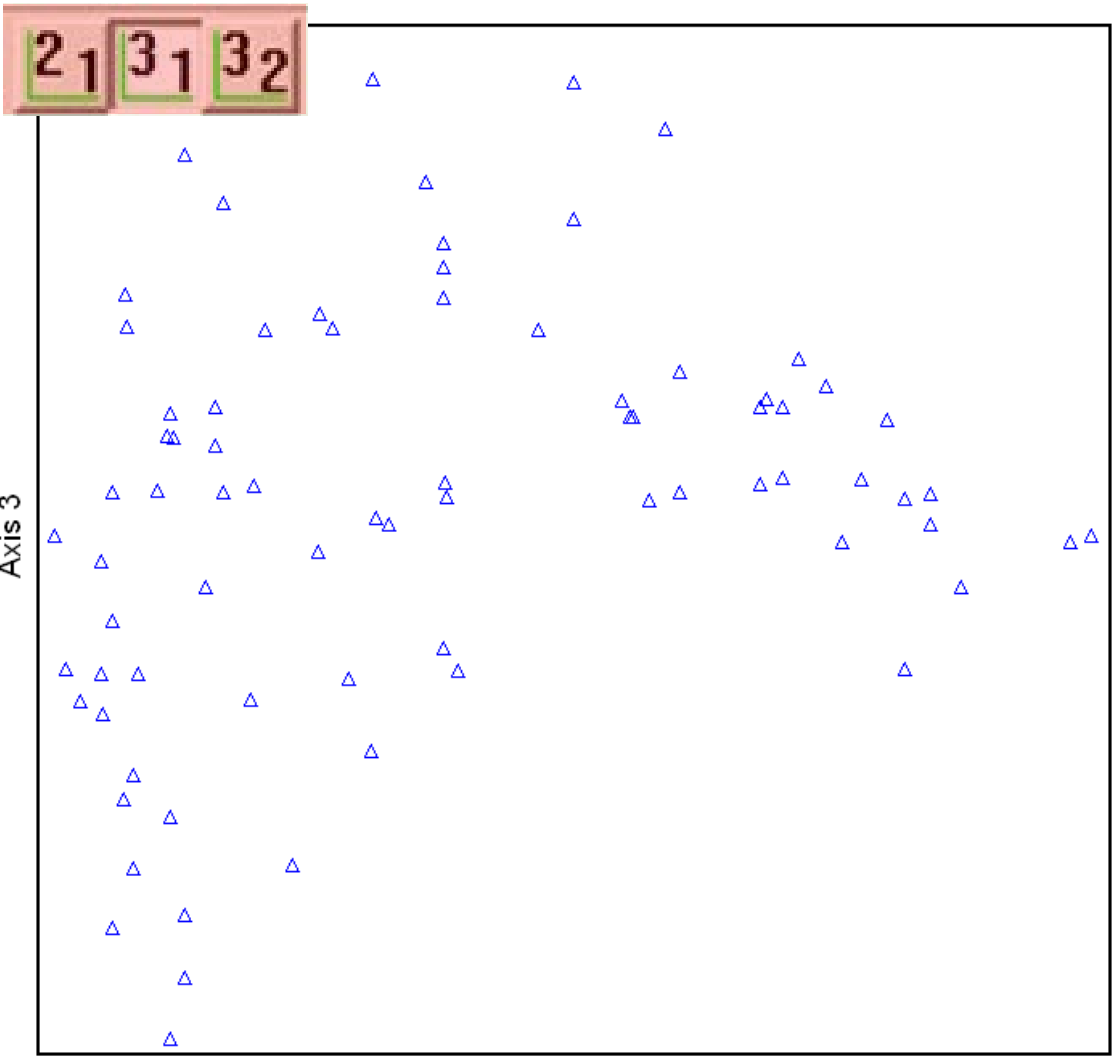
**21** **31** **32**

Axis 2



Axis 1

1 vs 3



Axis 1

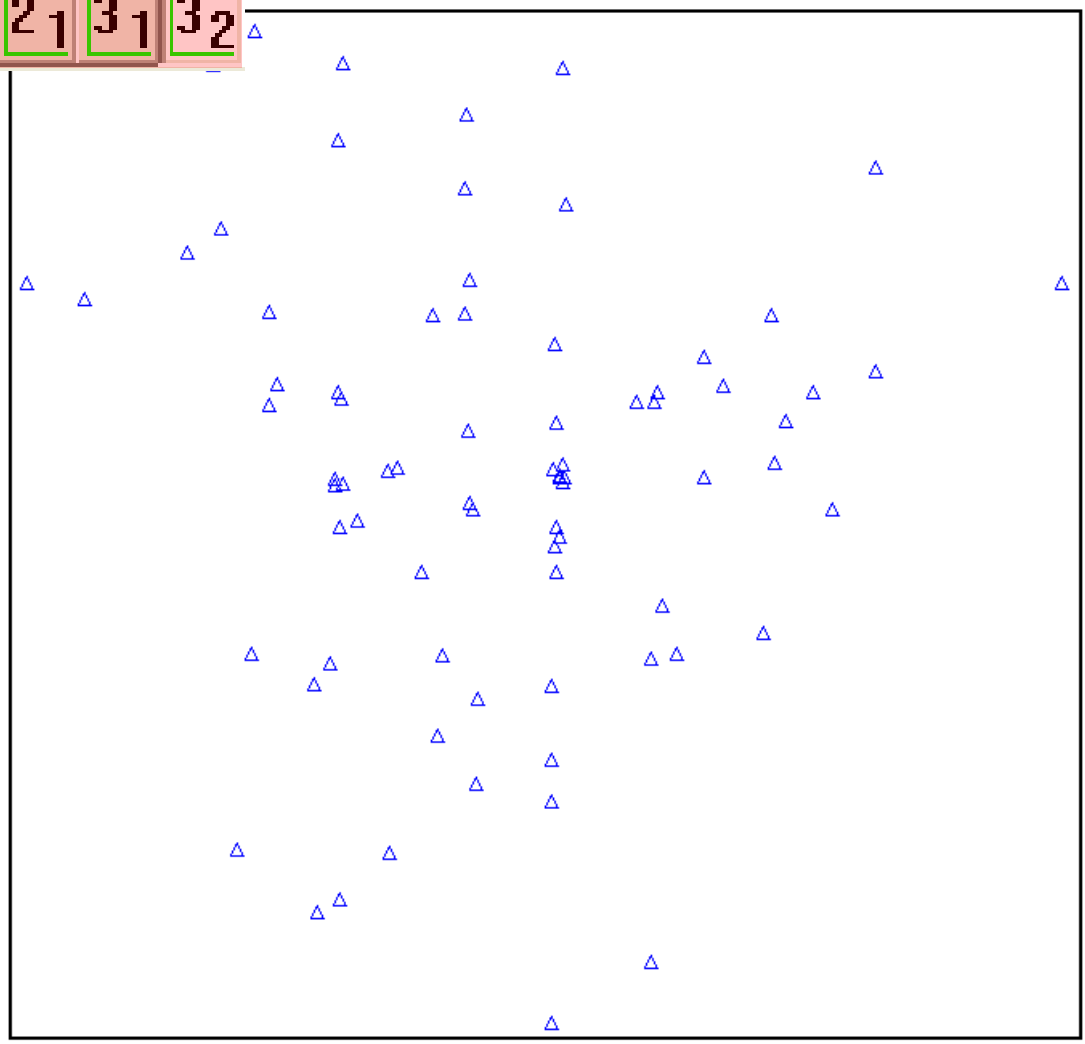
Axis 3

2 vs 3

2 1 3 1 3 2

Axis 3

Axis 2



### Preferences

Format | Styles | Fonts

- Graph title
- Axis titles
- Tick marks
- Tick labels
- Label every other tick
- Overlay tick marks
- Hide toolbar

Background Color

- White
- Black
- Navy

- Print in black and white
- Save in black and white

Label Points

- ornek
- bitki

Plot Points

- ornek
- bitki

Groups

- Color code categories
- Symbol code categories
- Show legend
- Show legend frame

Legend Symbol / Color

Quantitative Overlays

- Show side scatterplots
- Show regression line
- Show envelope line

Flexibility = 5

Standard deviation = 2.0

OK Cancel Defaults Help

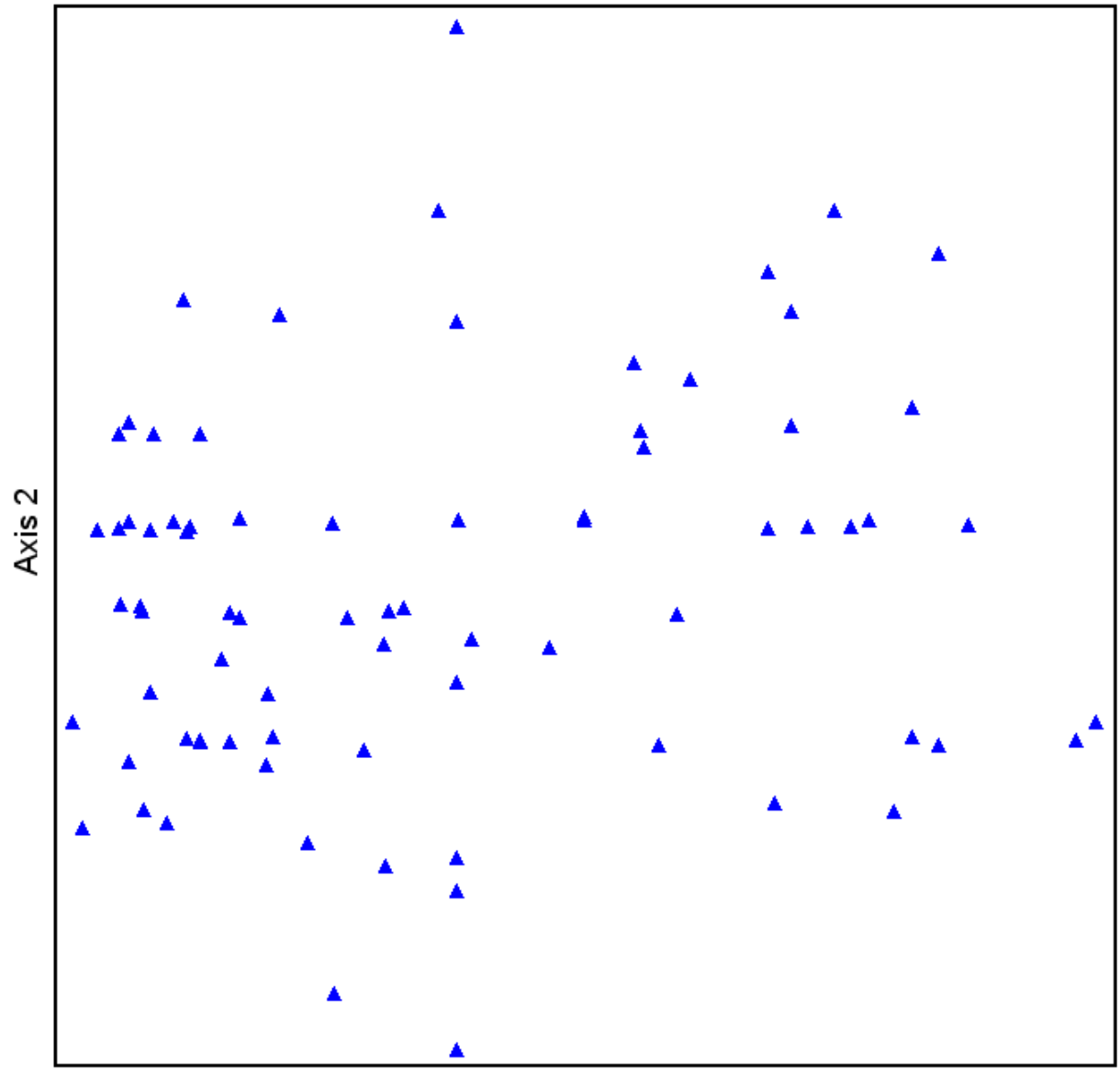




.200

$\Sigma 1$   $\Sigma 2$   $r^2$

- Correlations With Main Matrix
- Correlations With Second Matrix
- Percent Of Variance In Distance Matrix



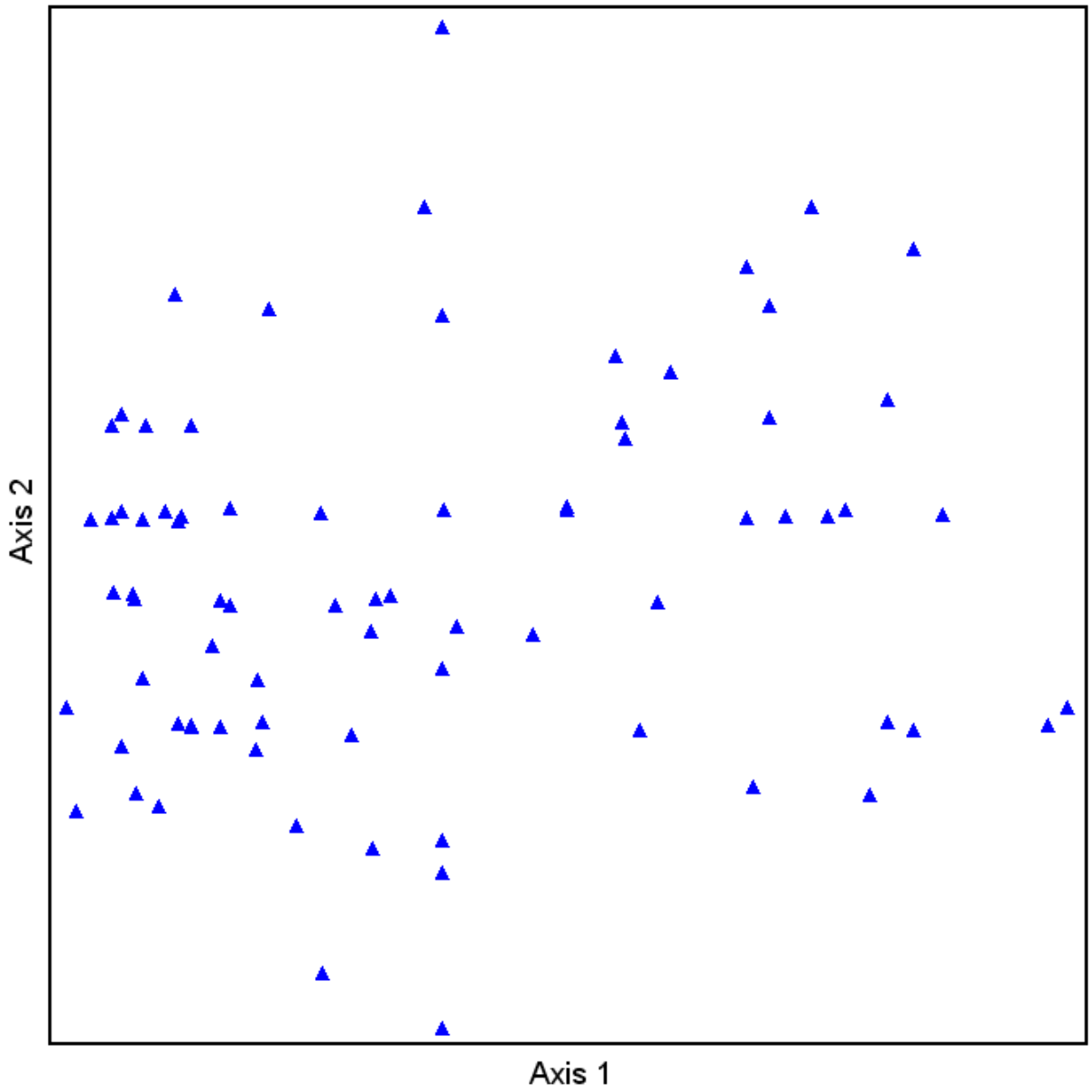
Axis 1

Axis 2

Pearson and Kendall Correlations with Ordination Axes N= 80

Axis:	1			2			3		
	r	r-sq	tau	r	r-sq	tau	r	r-sq	tau
ArbAnd	-.536	.287	-.502	-.093	.009	-.101	-.736	.541	-.599
BerCra	.638	.407	.487	.222	.049	.177	.090	.008	.062
CedLib	.340	.115	.282	.216	.047	.139	.203	.041	.176
CelGlb	.146	.021	.135	.007	.000	-.021	.074	.006	.054
CisSal	-.523	.274	-.515	-.001	.000	-.007	-.564	.318	-.455
CotNum	.455	.207	.356	.235	.055	.163	.110	.012	.112
CotCog	-.325	.106	-.283	-.145	.021	-.144	-.534	.285	-.401
CraOri	.025	.001	.031	-.204	.042	-.147	.083	.007	.084
CraMon	-.274	.075	-.251	.063	.004	.055	-.168	.028	-.172
DapOle	.471	.222	.392	-.408	.167	-.333	.079	.006	.049
DapSer	-.235	.055	-.187	.419	.175	.361	-.378	.143	-.334
FonPhl	-.477	.227	-.419	-.435	.190	-.349	-.016	.000	-.027
FrXOrn	-.016	.000	.030	-.131	.017	-.091	.002	.000	-.014
JasFru	-.167	.028	-.118	.330	.109	.261	.069	.005	.098
JunCom	.290	.084	.236	.434	.188	.330	.134	.018	.166
JunExc	.589	.346	.474	.144	.021	.137	.027	.001	-.028
JunFoe	.365	.134	.277	.237	.056	.222	-.035	.001	-.045
JunOxy	-.101	.010	-.018	-.359	.129	-.291	-.264	.070	-.162
MryCom	-.295	.087	-.225	-.138	.019	-.147	-.576	.331	-.431
NerOle	-.270	.073	-.230	-.160	.025	-.174	-.467	.218	-.349
OleOle	-.251	.063	-.201	-.054	.003	-.070	-.234	.055	-.237
PalSpi	-.198	.039	-.127	-.117	.014	-.126	-.029	.001	-.033
PhlArm	.282	.079	.218	.241	.058	.198	.155	.024	.152
PhlGra	-.401	.160	-.294	-.376	.141	-.315	.267	.071	.188
PhyLat	-.560	.313	-.479	.041	.002	.036	-.616	.379	-.509
PinBru	-.724	.524	-.621	-.155	.024	-.136	-.614	.377	-.510
PinNig	.112	.013	.147	-.486	.237	-.393	.440	.194	.349
PisTer	-.589	.347	-.521	-.070	.005	-.081	-.623	.388	-.518
PlaOri	-.289	.083	-.201	-.132	.017	-.125	-.270	.073	-.203
PruDiv	.294	.086	.261	.091	.008	.067	.080	.006	.053
QueCer	-.132	.018	-.078	-.107	.012	-.109	-.122	.015	-.087
QueCoc	-.472	.223	-.347	.107	.011	.075	.342	.117	.231
QueIlx	-.277	.077	-.290	.069	.005	.058	-.277	.077	-.244
QueInf	.061	.004	.069	-.207	.043	-.203	-.176	.031	-.157
QueIth	-.225	.051	-.163	-.130	.017	-.115	-.262	.069	-.211
RhaOle	.173	.030	.106	.102	.010	.114	-.024	.001	-.031
RhaRho	.029	.001	.025	.095	.009	.086	.071	.005	.084
RosCan	.368	.135	.297	.023	.001	.019	.084	.007	.057
SorUmb	.256	.066	.197	.199	.040	.167	.069	.005	.076
SprJun	-.147	.022	-.111	-.096	.009	-.086	-.180	.032	-.133

- Correlations With Main Matrix
- Correlations With Second Matrix
- Percent Of Variance In Distance Matrix





\*\*\*\*\* Output from Graph \*\*\*\*\*

PC-ORD Version 4.0

12.01.2014, 16:08

Pearson and Kendall Correlations with Ordination Axes N= 80

Axis:	1			2			3		
	r	r-sq	tau	r	r-sq	tau	r	r-sq	tau
yukslt	.782	.612	.590	.235	.055	.154	.545	.297	.347
radinx	-.060	.004	-.014	.058	.003	.037	.092	.008	.060
egim	.035	.001	.018	-.023	.001	.011	.272	.074	.233
yuztas	.544	.296	.354	.185	.034	.159	.438	.191	.301
topder	-.420	.177	-.245	-.121	.015	-.117	-.558	.312	-.266
kum	.271	.073	.124	.173	.030	.088	-.005	.000	-.043
toz	.259	.067	.214	.175	.031	.102	-.071	.005	-.009
kil	-.384	.148	-.216	-.249	.062	-.125	.031	.001	.015
pH	.186	.035	.128	.107	.011	.047	-.192	.037	-.094
kirec	-.183	.034	-.133	.027	.001	-.036	-.298	.089	-.132
orgmad	.305	.093	.122	.010	.000	.036	.118	.014	.045
zyzprz	.383	.147	.336	.340	.116	.254	.179	.032	.153
krctas	.617	.381	.510	.186	.035	.143	.413	.171	.339
konglo	-.334	.112	-.324	.105	.011	.087	-.426	.181	-.364
karsk	-.410	.168	-.302	-.284	.080	-.223	-.117	.014	-.084
disbky	.274	.075	.187	-.016	.000	-.035	.242	.059	.179
duzarz	-.114	.013	-.098	.145	.021	.127	-.176	.031	-.120
ondule	.002	.000	.013	-.039	.002	-.020	-.201	.040	-.167
icbuky	-.166	.028	-.102	-.121	.015	-.101	.215	.046	.168
yamkon	-.342	.117	-.245	-.137	.019	-.103	-.184	.034	-.138

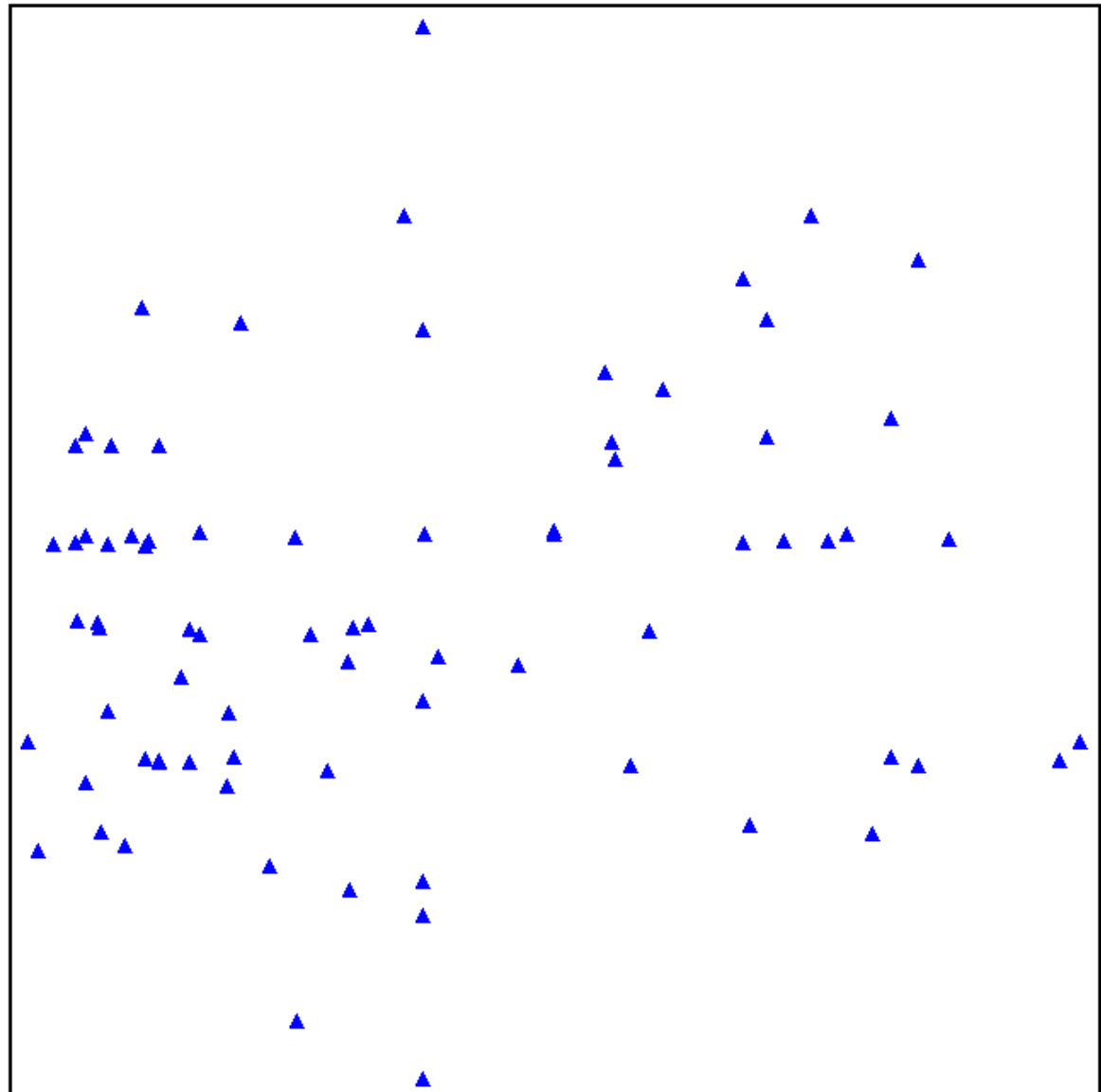


.200

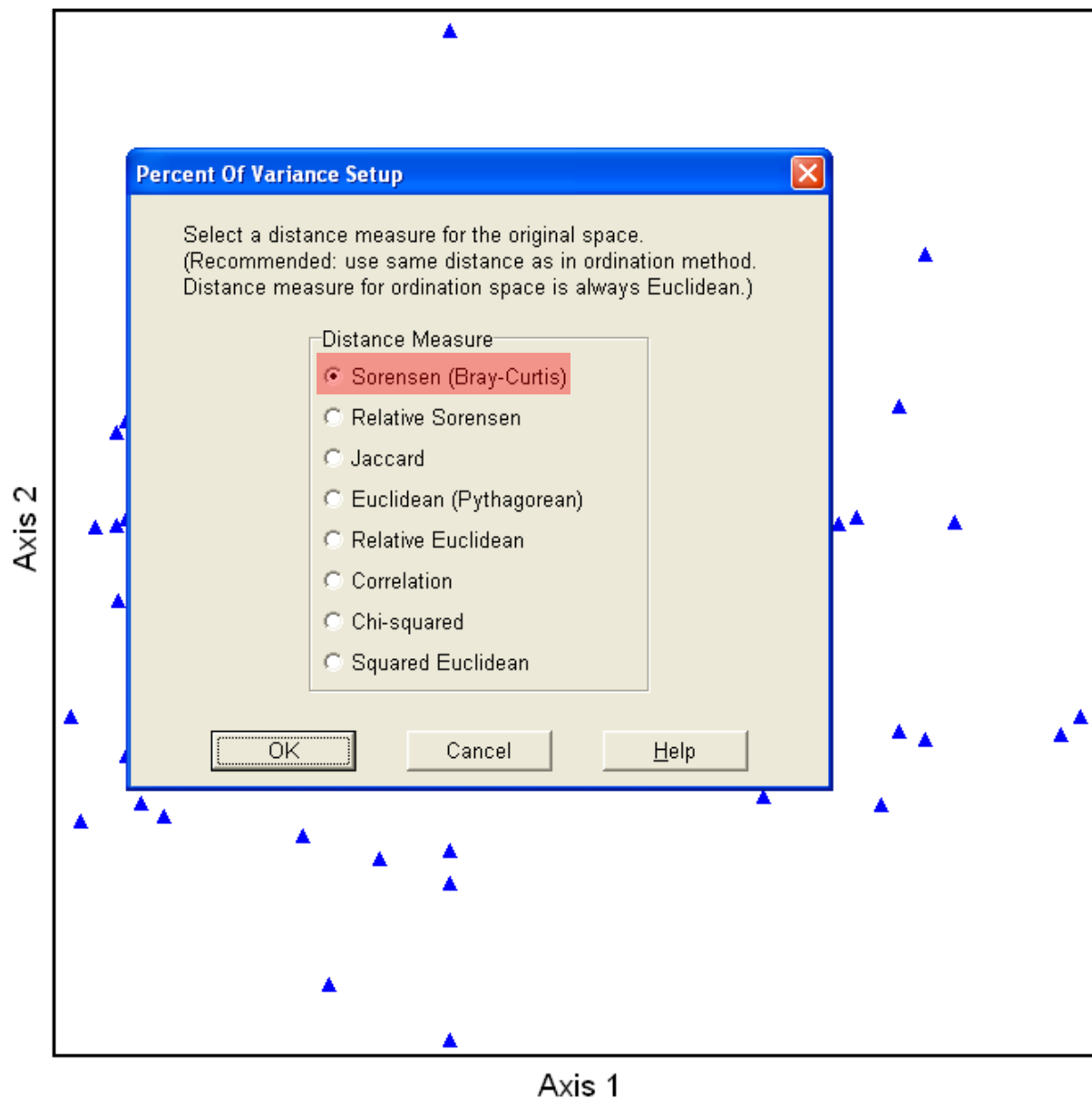
$\Sigma 1 \Sigma 2 r^2$

- Correlations With Main Matrix
- Correlations With Second Matrix
- Percent Of Variance In Distance Matrix

Axis 2



Axis 1



\*\*\*\*\* Output from Graph \*\*\*\*\*

PC-ORD Version 4.0  
12.01.2014, 16:11

Coefficients of determination for the correlations between ordination distances and distances in the original n-dimensional space:

R Squared		
Axis	Increment	Cumulative
1	.369	.369
2	.060	.429
3	.060	.489

Number of entities = 80  
Number of entity pairs used in correlation = 3160  
Distance measure for ORIGINAL distance: Sorensen (Bray-Curtis)  
|



\*\*\*\*\*  
PC-ORD Version  
12.01.2014, 16

Pearson and Ke

Axis:

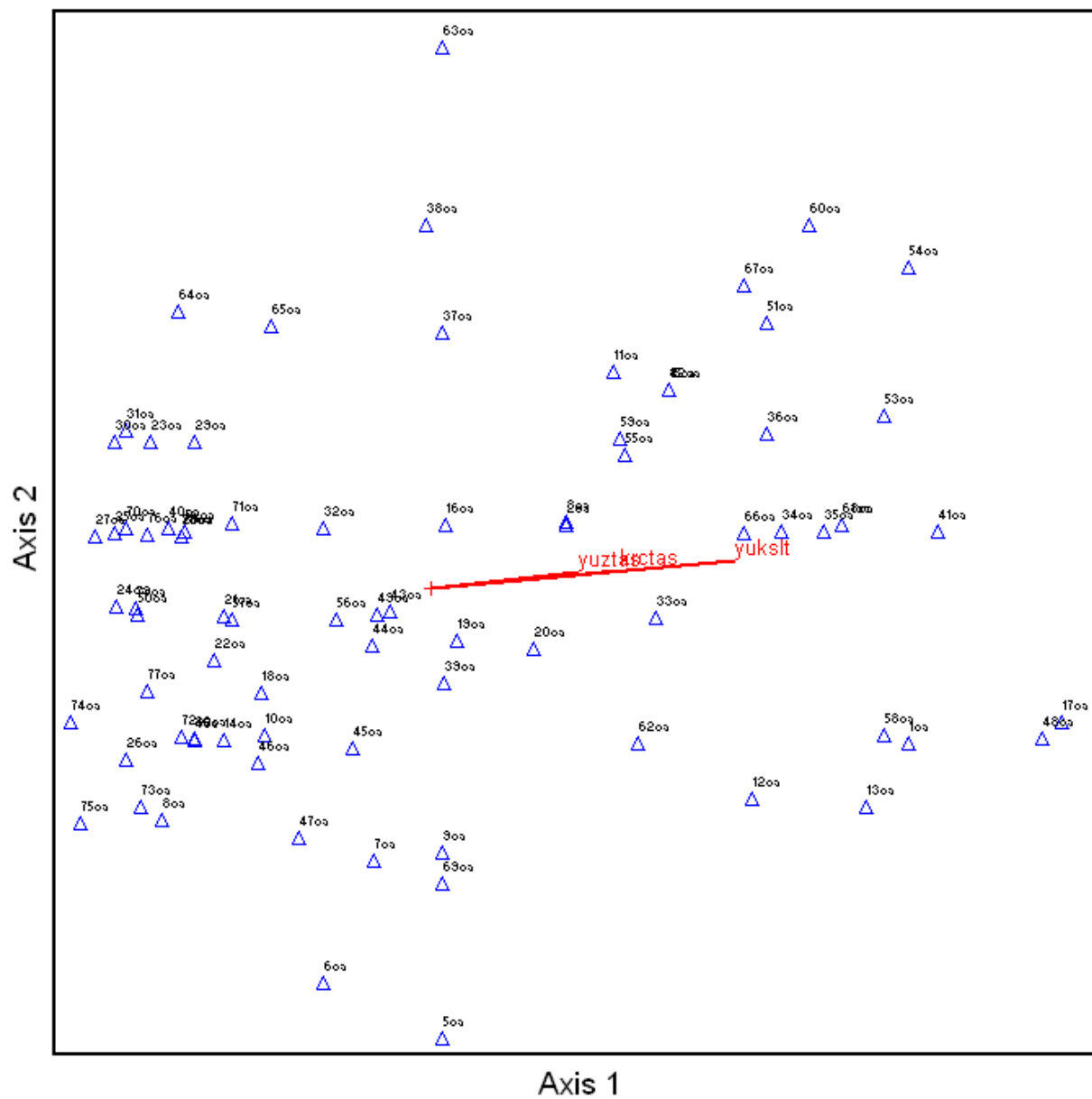
r

### Correlations

		Eksen1	Eksen2	Eksen3	yukslt	radinx	egim	yuztas	topder
Eksen1	Pearson Correlation	1	,172	,220	,782**	-,060	,035	,544**	-,420**
	Sig. (2-tailed)		,126	,050	,000	,595	,758	,000	,000
	N	80	80	80	80	80	80	80	80
Eksen2	Pearson Correlation	,172	1	-,048	,235*	,058	,823	,185	-,121
	Sig. (2-tailed)	,126		,671	,036	,612	,842	,100	,283
	N	80	80	80	80	80	80	80	80
Eksen3	Pearson Correlation	,220*	-,048	1	,545**	,092	,272*	,438**	-,558**
	Sig. (2-tailed)	,050	,671		,000	,417	,015	,000	,000
	N	80	80	80	80	80	80	80	80

yukslt	.782	.612	.590	.285	.055	.154	.545	.297	.347
radinx	-,060	.004	-,011	.058	.003	.037	.092	.008	.068
egim	.035	.001	.018	-,023	.001	.011	.272	.074	.233
yuztas	.544	.296	.354	.185	.034	.159	.438	.191	.301
topder	-,420	.177	-,245	-,121	.015	-,117	-,558	.312	-,266
kum	.271	.073	.124	.173	.030	.088	-,005	.000	-,043
toz	.259	.067	.214	.175	.031	.102	-,071	.005	-,009
kil	-,384	.148	-,216	-,249	.062	-,125	.031	.001	.015
pH	.186	.035	.128	.107	.011	.047	-,192	.037	-,094
kirec	-,183	.034	-,133	.027	.001	-,036	-,298	.089	-,132
orgmad	.305	.093	.122	.010	.000	.036	.118	.014	.045
yzyprz	.383	.147	.336	.340	.116	.254	.179	.032	.153
krctas	.617	.381	.510	.186	.035	.143	.413	.171	.339
konglo	-,334	.112	-,324	.105	.011	.087	-,426	.181	-,364
karsk	-,410	.168	-,302	-,284	.080	-,223	-,117	.014	-,084
disbky	.274	.075	.187	-,016	.000	-,035	.242	.059	.179
duzarz	-,114	.013	-,098	.145	.021	.127	-,176	.031	-,120
ondule	.002	.000	.013	-,039	.002	-,020	-,201	.040	-,167
icbuky	-,166	.028	-,102	-,121	.015	-,101	.215	.046	.168
yamkon	-,342	.117	-,245	-,137	.019	-,103	-,184	.034	-,138







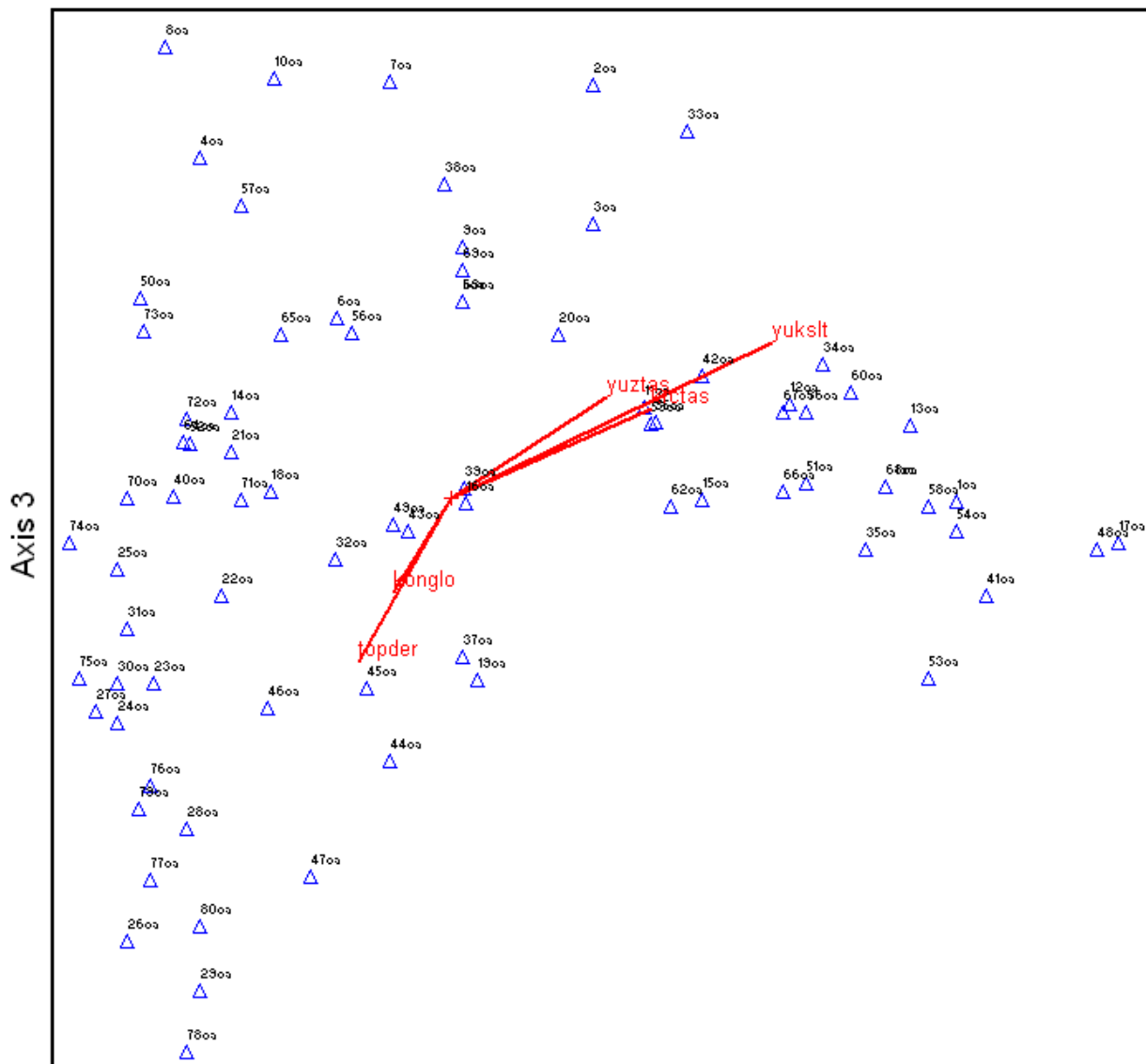
21 31 32 Raw



$\Sigma 1$   $\Sigma 2$   $r^2$

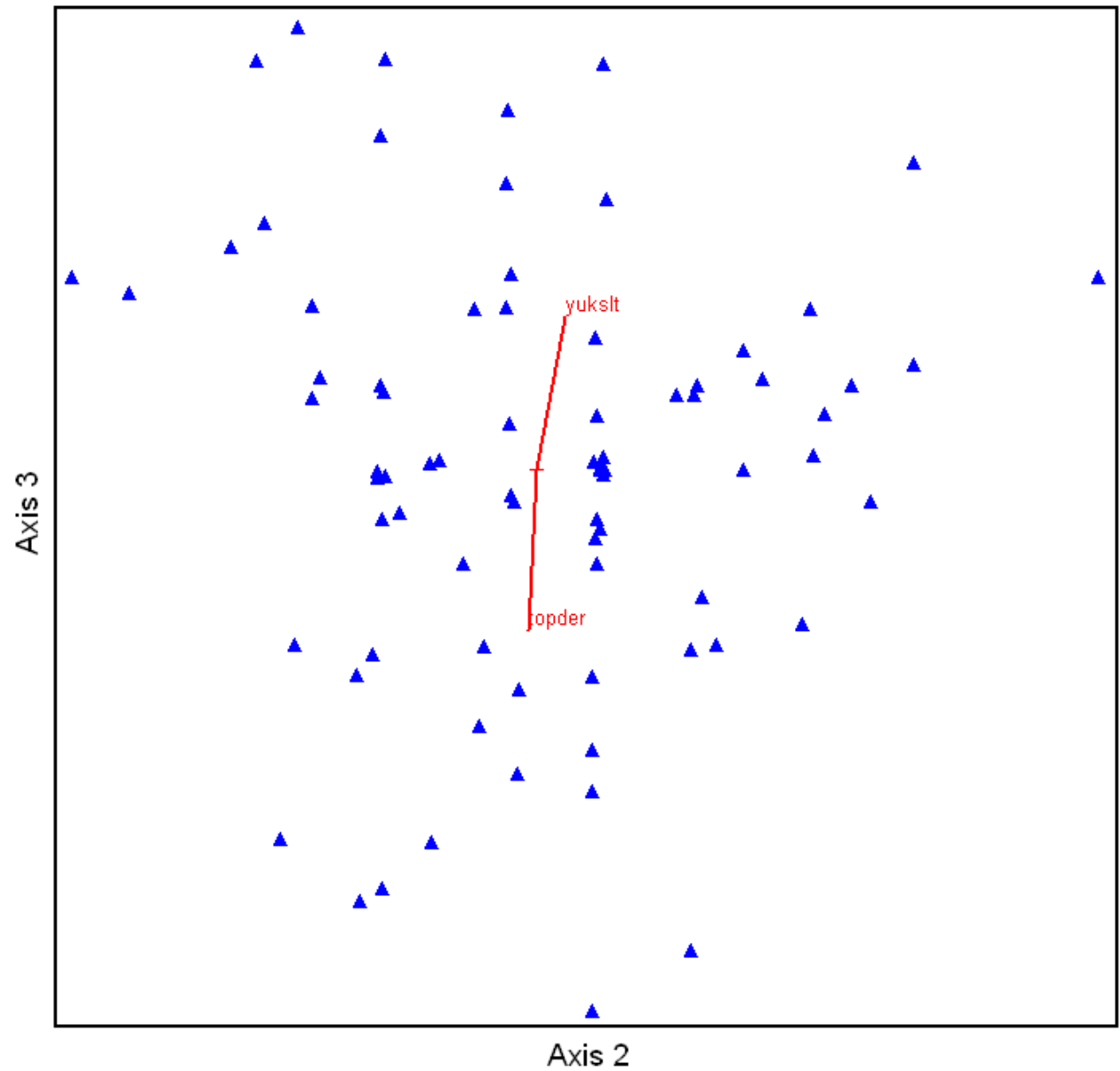


1 vs 3

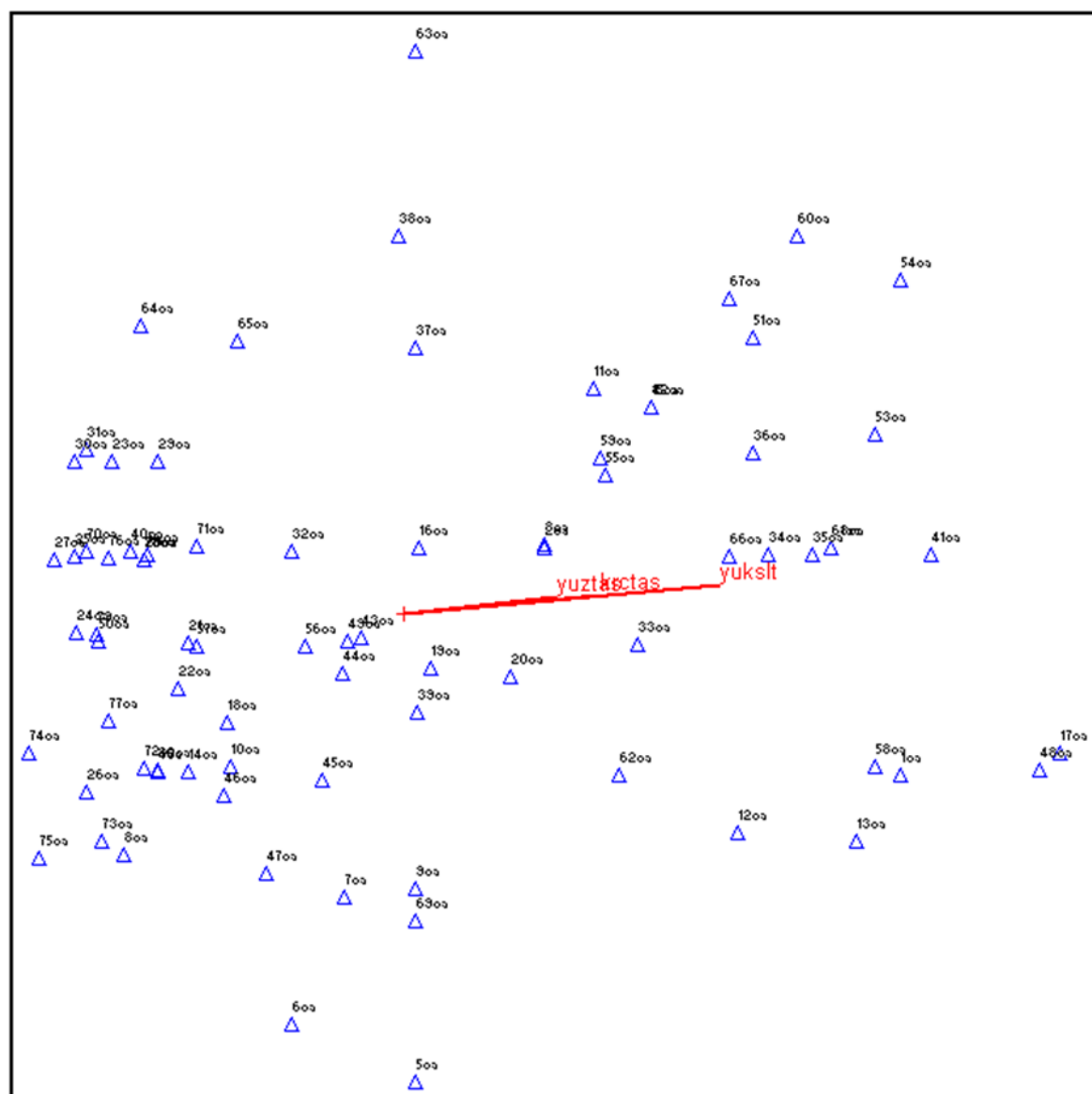


Axis 1

Axis 3



Axis 2

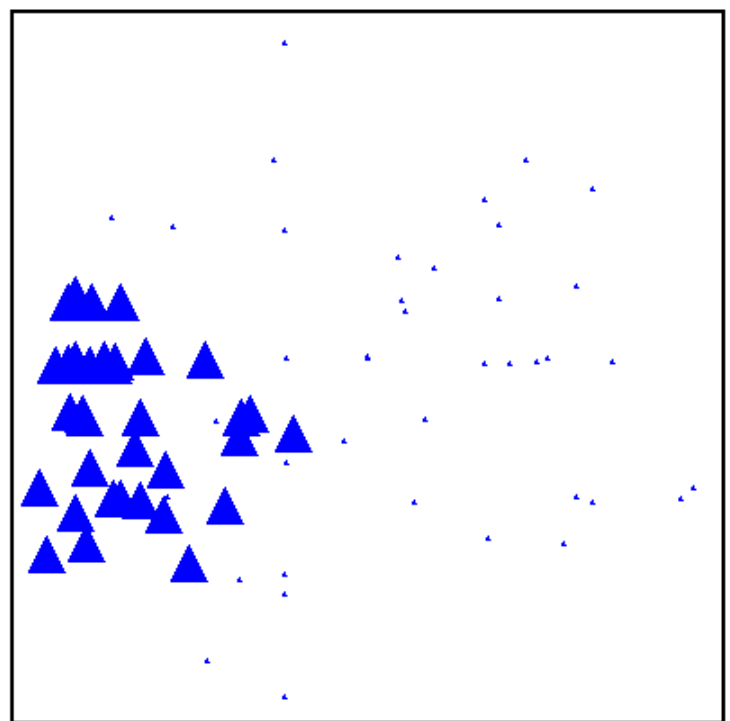
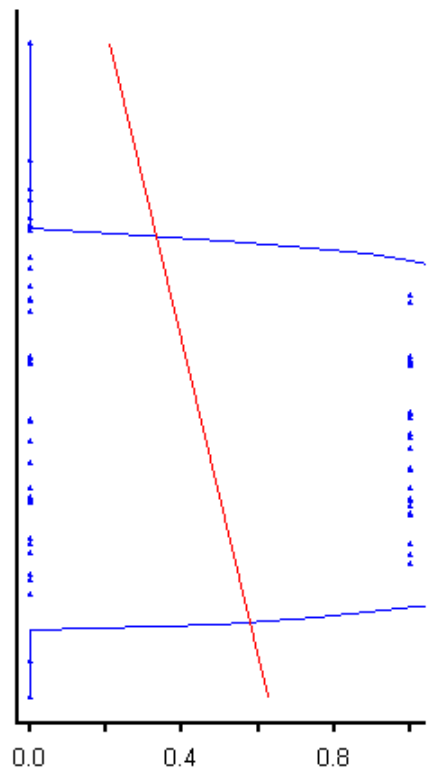


Axis 1

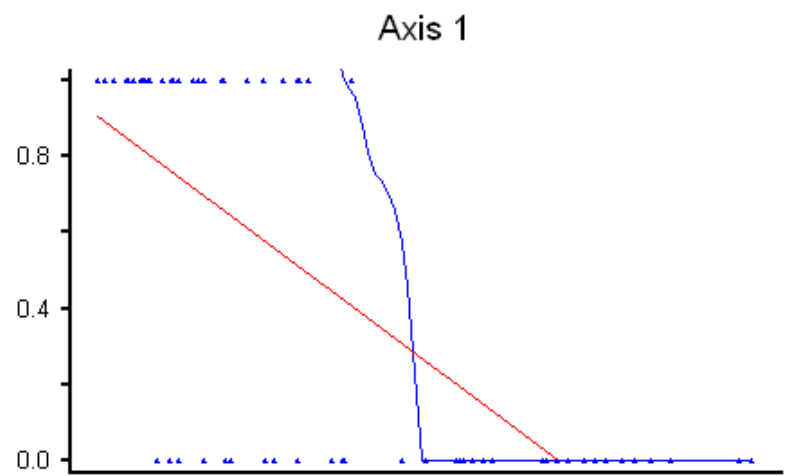
Axis:

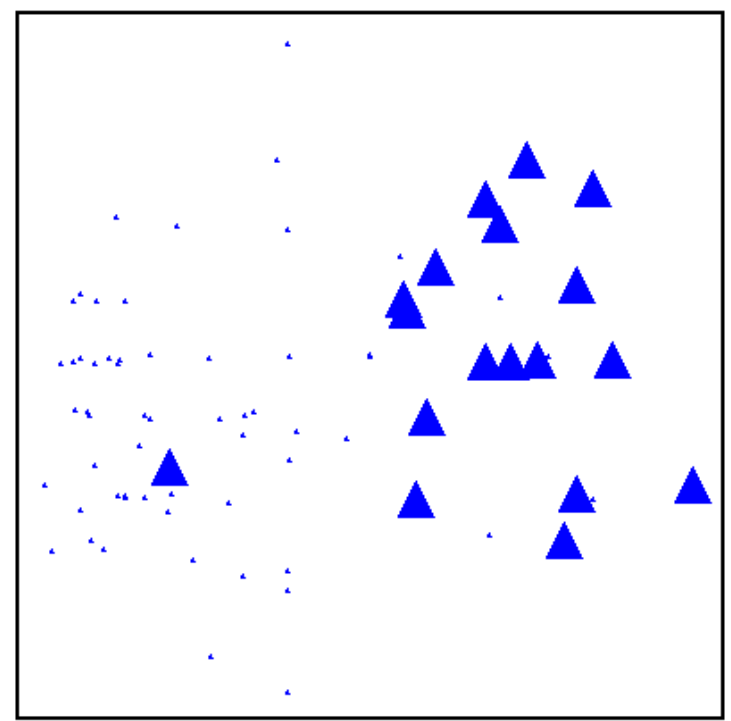
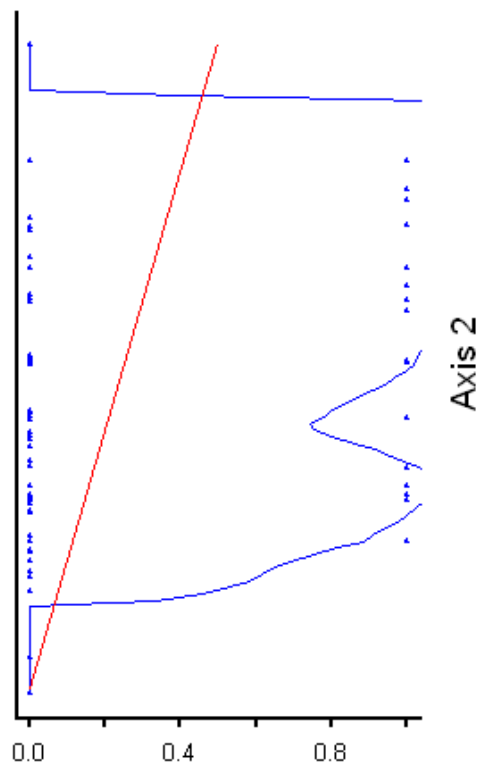
	r
yukslt	.782
radinx	-.060
egim	.035
yuztas	.544
topder	-.420
kum	.271
toz	.259
kil	-.384
pH	.186
kirec	-.183
orgmad	.305
yzyprz	.383
krctas	.617
konglo	-.334
karsk	-.410
disbky	.274
duzarz	-.114
ondule	.002
icbuky	-.166
yamkon	-.342

	r
ArbAnd	-.536
BerCra	.638
CedLib	.340
CelGlb	.146
CisSal	-.523
CotNum	.455
CotCog	-.325
CraOri	.025
CraMon	-.274
DapOle	.471
DapSer	-.235
FonPhl	-.477
FrxOrn	-.016
JasFru	-.167
JunCom	.290
JunExc	.589
JunFoe	.365
JunOxy	-.101
MryCom	-.295
NerOle	-.270
OleOle	-.251
PalSpi	-.198
PhlArm	.282
PhlGra	-.401
PhyLat	-.560
PinBru	-.724
PinNig	.112
PisTer	-.589
PlaOri	-.289
PruDiv	.294
QueCer	-.132
QueCoc	-.472
QueIlx	-.277
QueInf	.061
QueIth	-.225
RhaOle	.173
RhaRho	.029
RosCan	.368
SorUmb	.256
SprJun	-.147

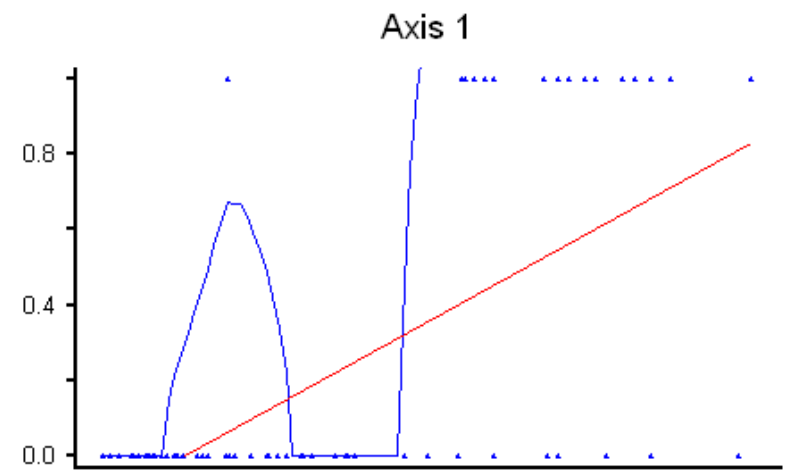


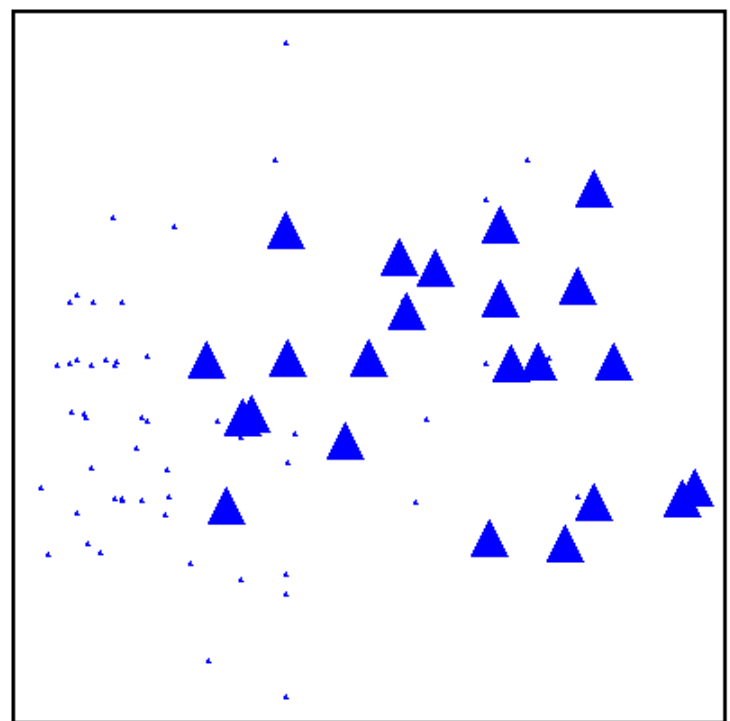
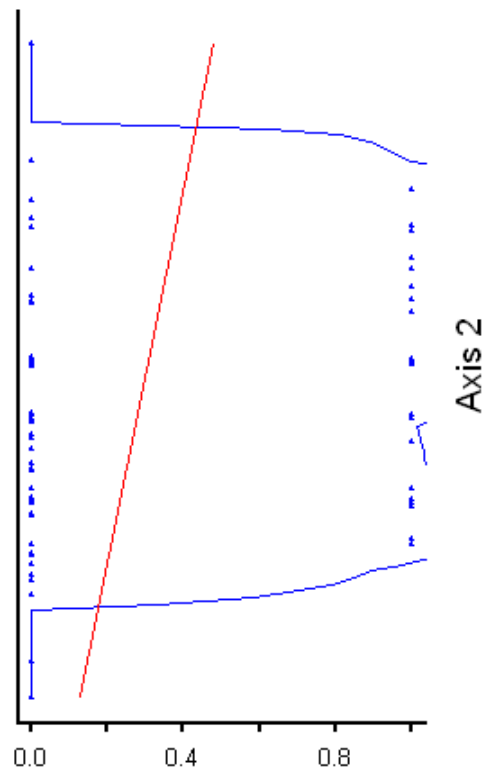
PinBru  
Axis 1  
r = -.724 tau = -.621  
Axis 2  
r = -.155 tau = -.136



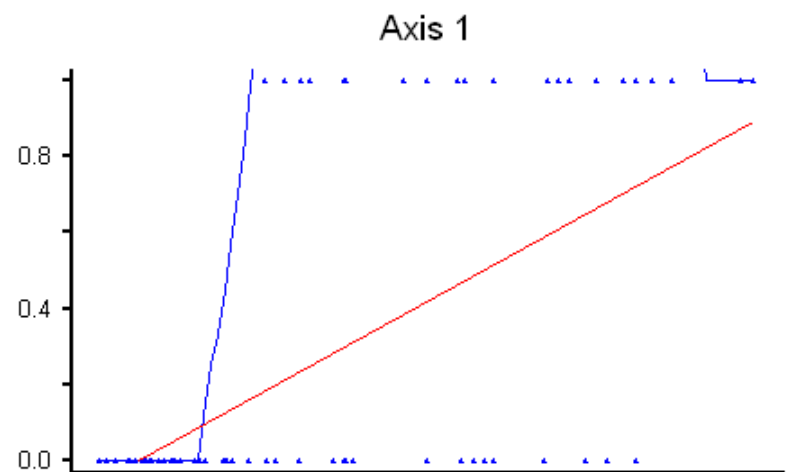


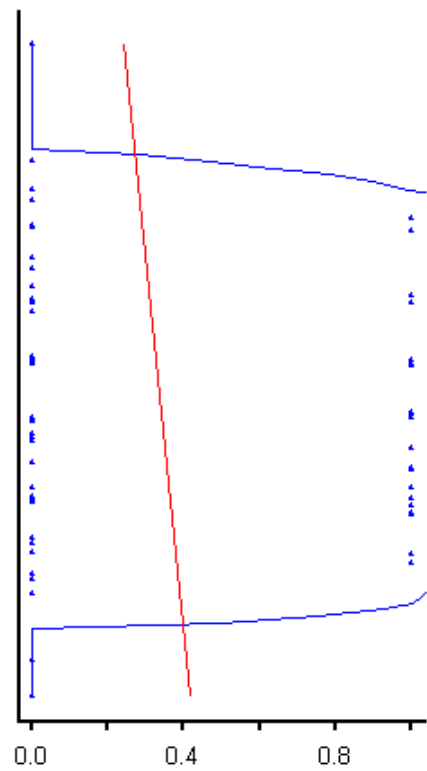
BerCra  
Axis 1  
 $r = .638$   $\tau = .487$   
Axis 2  
 $r = .222$   $\tau = .177$



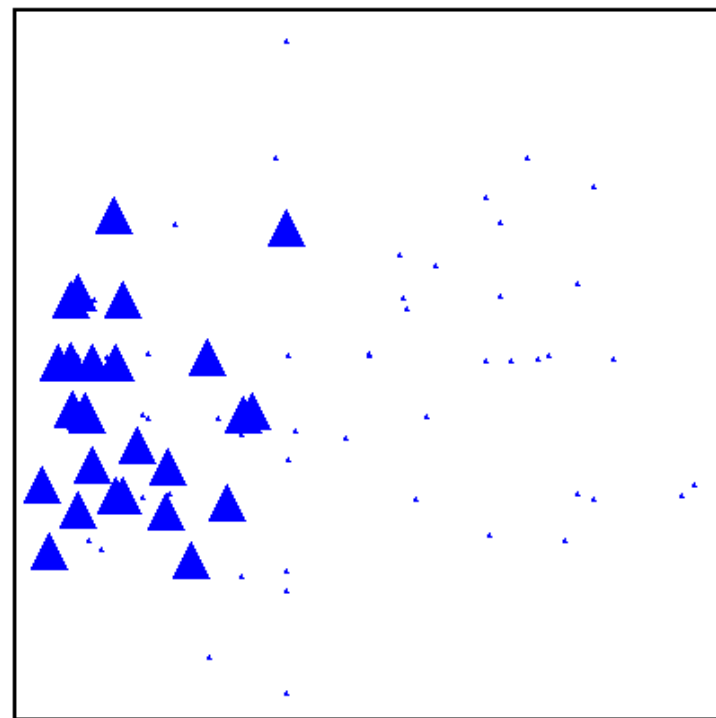


JunExc  
Axis 1  
 $r = .589$   $\tau = .474$   
Axis 2  
 $r = .144$   $\tau = .137$



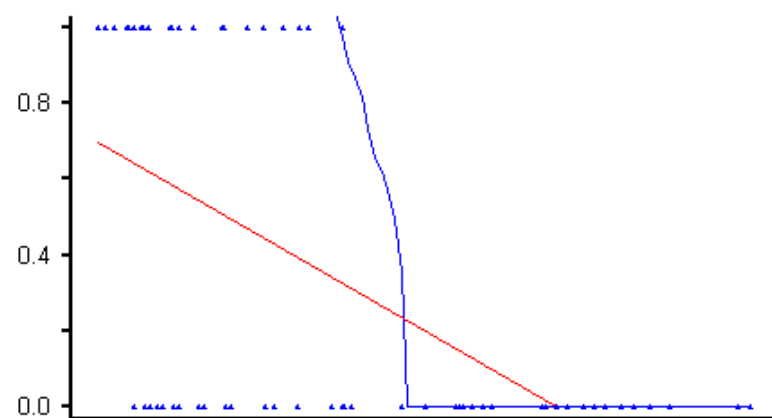


Axis 2

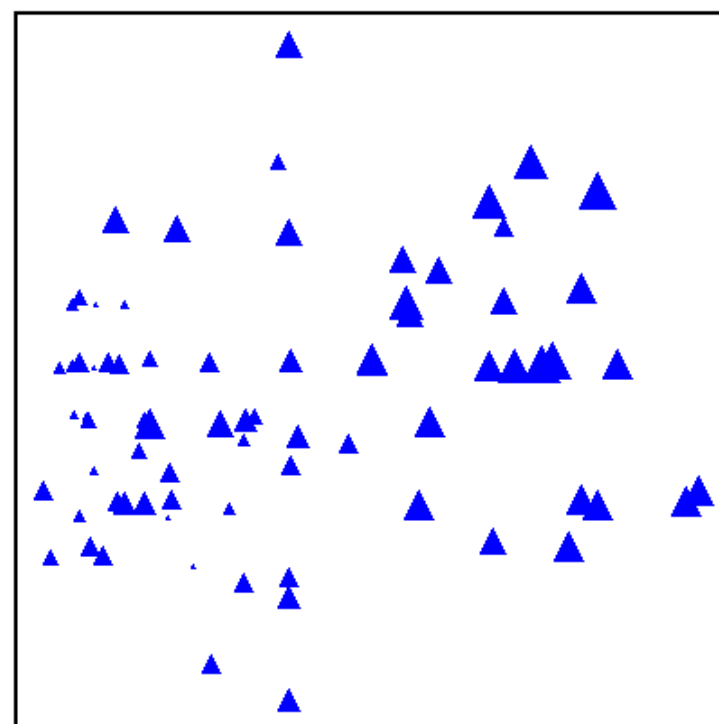
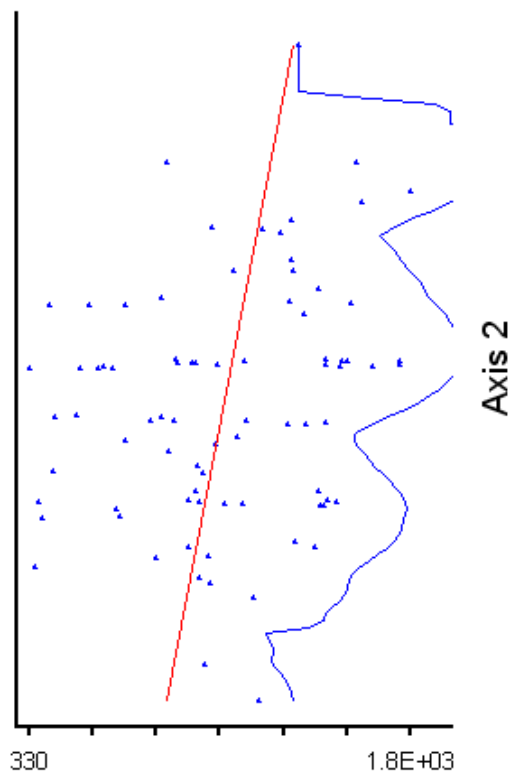


Axis 1

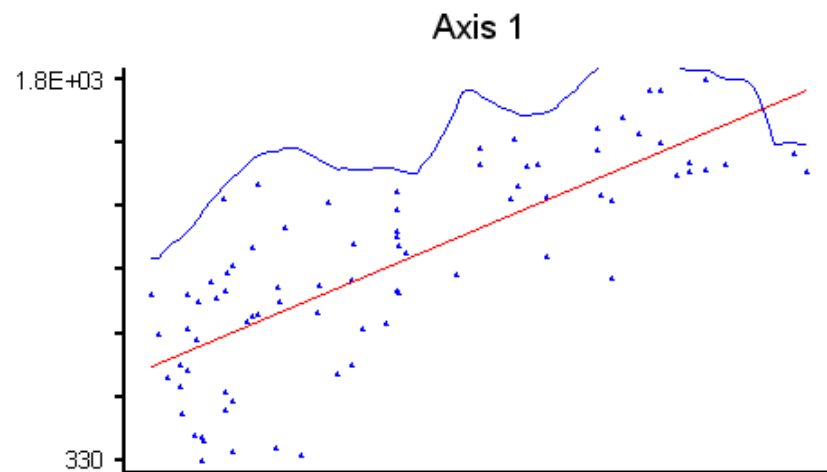
PisTer  
Axis 1  
 $r = -.589$   $\tau = -.521$   
Axis 2  
 $r = -.070$   $\tau = -.081$

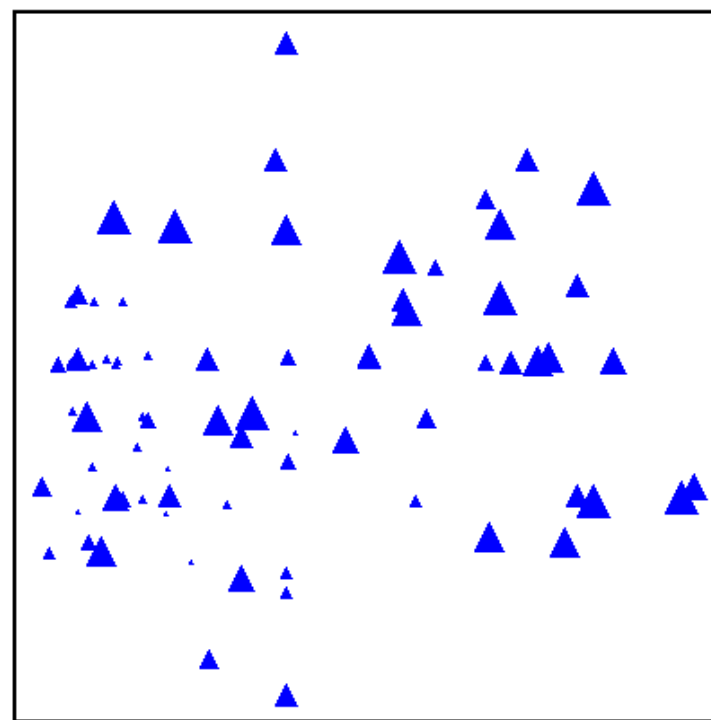
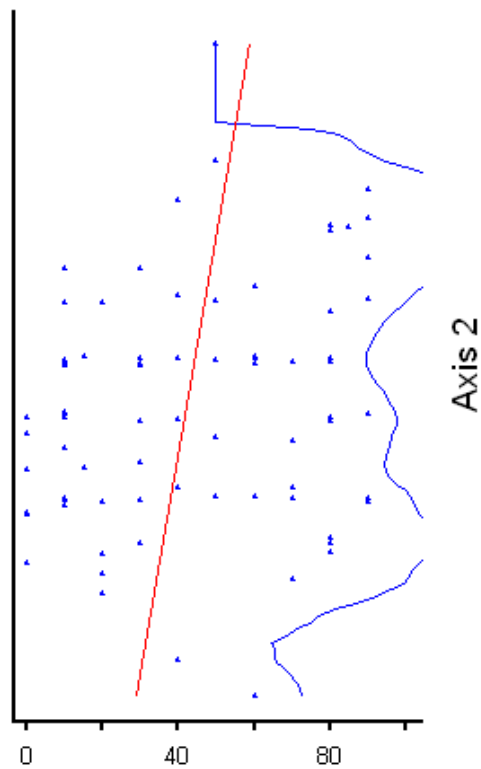






yukslt  
Axis 1  
 $r = .782$   $\tau = .590$   
Axis 2  
 $r = .235$   $\tau = .154$

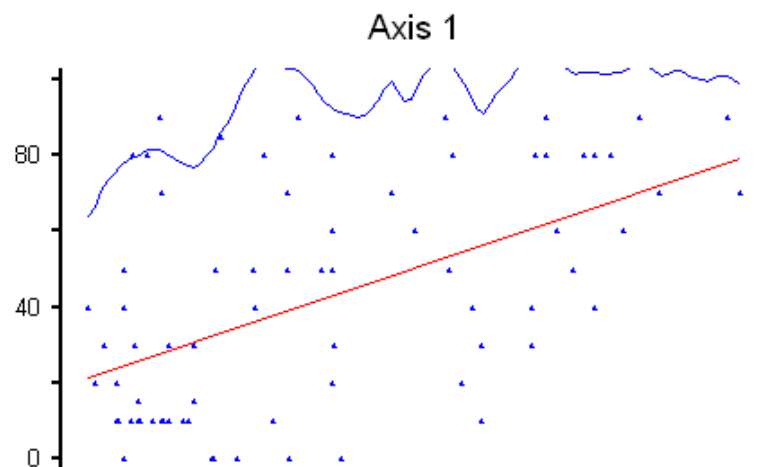


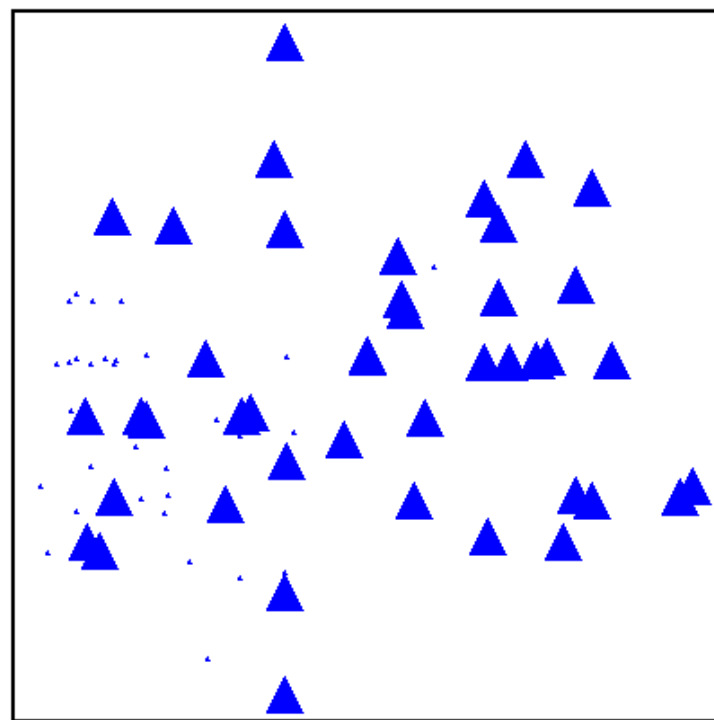
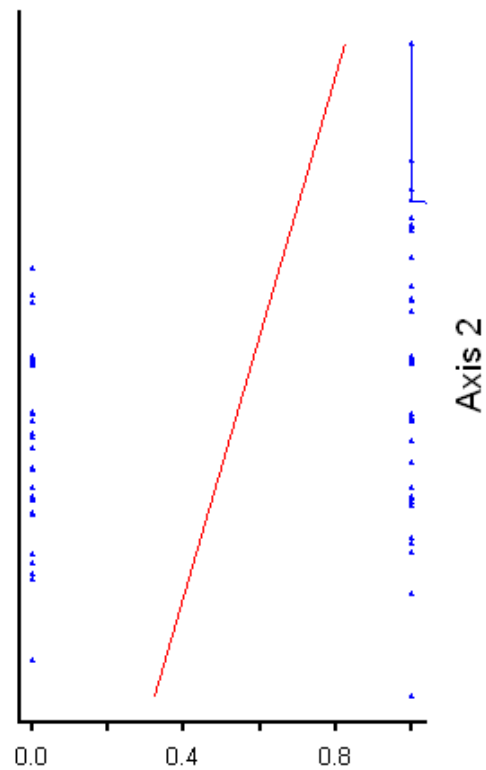


yuztas

Axis 1  
 $r = .544$   $\tau = .354$

Axis 2  
 $r = .185$   $\tau = .159$



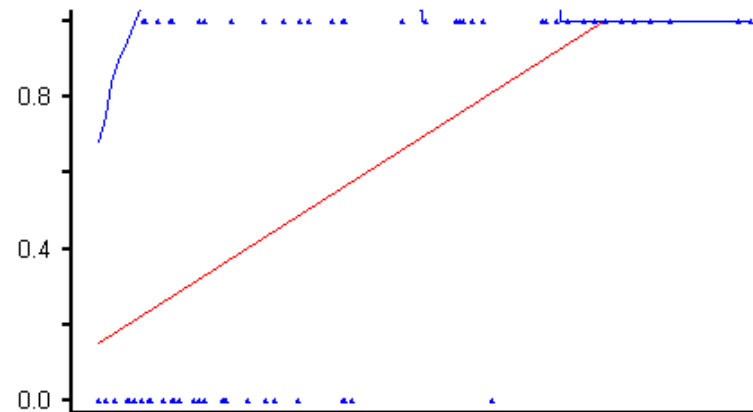


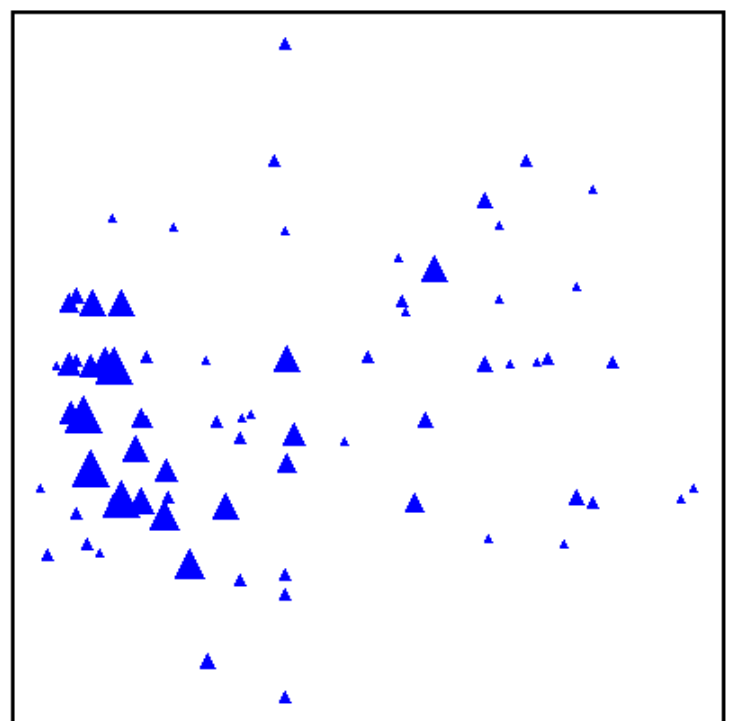
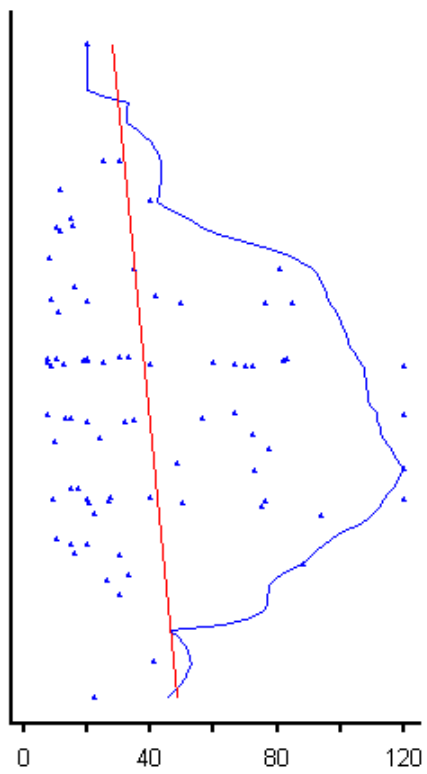
Axis 1

krctas

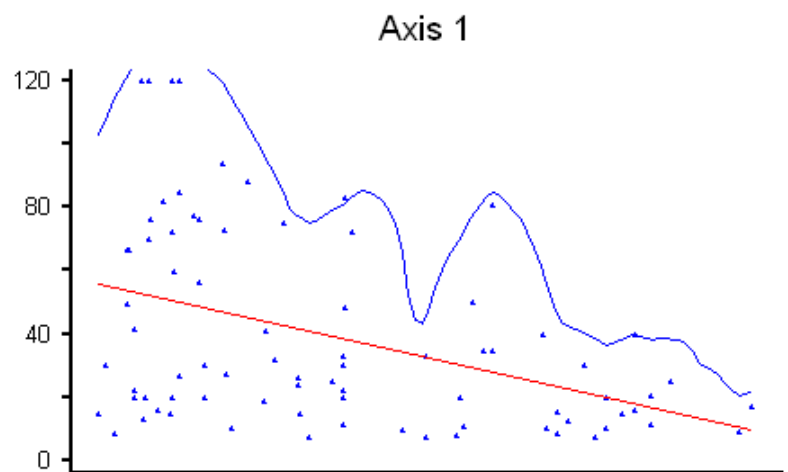
Axis 1  
r = .617 tau = .510

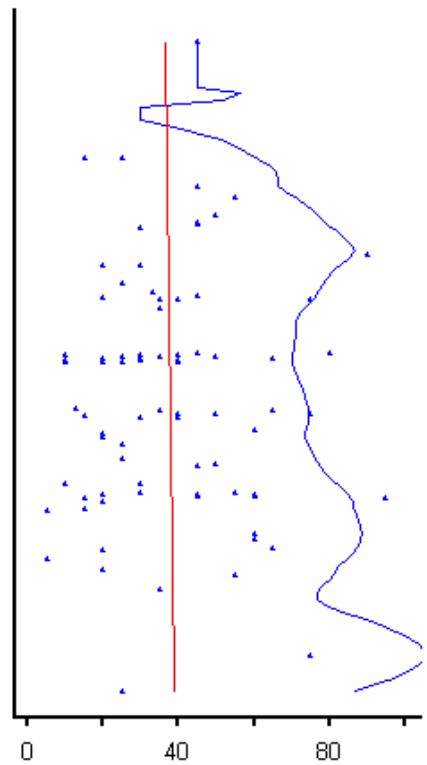
Axis 2  
r = .186 tau = .143



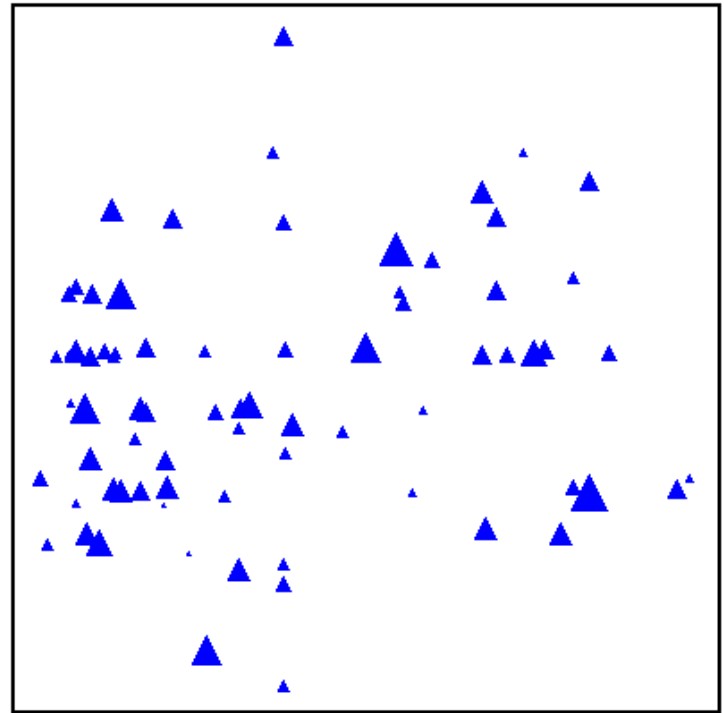


topder  
Axis 1  
 $r = -.420$   $\tau = -.245$   
Axis 2  
 $r = -.121$   $\tau = -.117$

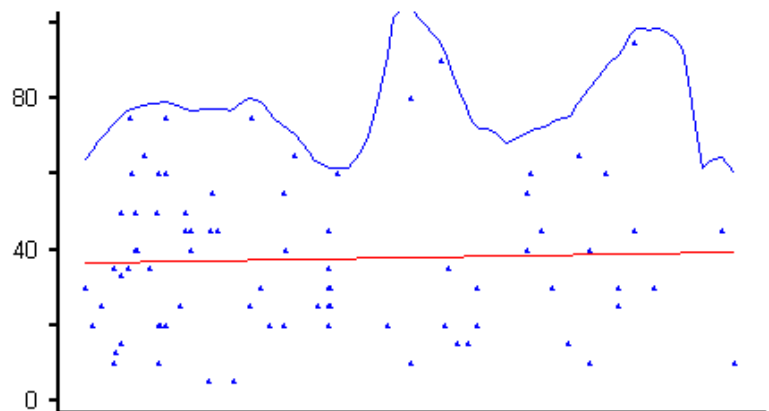




Axis 2



Axis 1



egim  
Axis 1  
r = .035 tau = .018  
Axis 2  
r = -.023 tau = .011

File Edit Modify Data Summary Ordination Graph Groups Window Options Help

Main - VVM\_PCORD5\_Q.WK1

	q	q	q	q	q	q	q
	ArbAnd	BerCra	CedLib	CelGlb	CisSal	CotNum	CotCoc
80	ornek						
42	bitki						
10a	0	0	0	1	0	1	0
20a	0	0	0	0	0	0	0
30a	0	0	0	0	0	1	0
40a	0	0	0	0	0	0	0
50a	0	0	0	0	0	0	0
60a	0	0	0	0	0	0	0
70a	0	0	0	0	0	0	0
80a	0	0	0	0	0	0	0
90a	0	0	0	0	0	0	0
100a	0	0	0	0	0	0	0
110a	0	0	1	0	0	1	0
120a	0	0	0	0	0	1	0
130a	0	1	0	0	0	1	0

Graph - GRAPHROW.GPH

	0.84568	0.29763	0.52537
10a	0.84568	0.29763	0.52537
20a	0.50000	0.51750	0.92237
30a	0.50000	0.52119	0.79006
40a	0.12500	0.30123	0.85272
50a	0.37531	0.00000	0.71533
60a	0.25510	0.05558	0.69894
70a	0.30642	0.17942	0.92539
80a	0.09184	0.22091	0.95813
90a	0.37463	0.18821	0.76767
100a	0.19531	0.30532	0.92751
110a	0.54784	0.67232	0.61489
120a	0.68679	0.24147	0.61725
130a	0.80281	0.23374	0.59762
140a	0.15432	0.30148	0.61007
150a	0.60289	0.65466	0.52699
160a	0.37753	0.51742	0.52325
170a	1.00000	0.31985	0.48506

Open Second Matrix

Konum: grupanalizi

- cluster\_jw\_dort.wk1
- cluster\_jw\_uc.wk1
- twinspan\_1\_indikatör\_3\_ayrim.wk1
- twinspan\_3\_indikatör\_3\_ayrim.wk1
- twinspan\_5\_indikatör\_3\_AYRIM.wk1

Doğya adı: cluster\_jw\_dort

Doğya türü: Lotus 1-2-3 (\*.wk1)

Result - RESULT.TXT

\*\*\*\*\* Output from Graph \*\*\*\*\*

PC-ORD Version 4.0  
12.01.2014, 16:11

Coefficients of determination for the correlations between ordination distances and distances in the original n-dimensional space:

Axis	Increment	Cumulative
1	.369	.369
2	.060	.429
3	.060	.489

Number of entities = 80  
Number of entity pairs used in correlation = 3160  
Distance measure for ORIGINAL distance: Sorensen (Bray-Curtis)

Main - VVM\_PCORD5\_Q.WK1

	q	q	q	q	q	q	q
	ArbAnd	BerCra	CedLib	CelGlb	CisSal	CotNum	CotCog
80	ornek						
42	bitki						
10a	0	0	0	1	0	1	0
20a	0	0	0	0	0	0	0
30a	0	0	0	0	0	1	0
40a	0	0	0	0	0	0	0
50a	0	0	0	0	0	0	0
60a	0	0	0	0	0	0	0
70a	0	0	0	0	0	0	0
80a	0	0	0	0	0	0	0
90a	0	0	0	0	0	0	0
100a	0	0	0	0	0	0	0
110a	0	0	1	0	0	1	0
120a	0	0	0	0	0	1	0
130a	0	1	0	0	0	1	0

- Graph Ordination
- Cluster Dendrogram
- Species-area Curves
- NMS Scree Plot

Graph - GRAPHROW.GPH

	0.84568	0.29763	0.52537
80			
10a	0.84568	0.29763	0.52537
20a	0.50000	0.51750	0.92237
30a	0.50000	0.52119	0.79006
40a	0.12500	0.30123	0.85272
50a	0.37531	0.00000	0.71533
60a	0.25510	0.05558	0.69894
70a	0.30642	0.17942	0.92539
80a	0.09184	0.22091	0.95813
90a	0.37463	0.18821	0.76767
100a	0.19531	0.30532	0.92751
110a	0.54784	0.67232	0.61489
120a	0.68679	0.24147	0.61725
130a	0.80281	0.23374	0.59762
140a	0.15432	0.30148	0.61007
150a	0.60289	0.65466	0.52699
160a	0.37753	0.51742	0.52325
170a	1.00000	0.31985	0.48506

Second - CLUSTER\_JW\_DORT.WK1

	sinif	Cluster
80	ornek	
1	sinif	
	c	
oa1	1	
oa2	2	
oa3	1	
oa4	3	
oa5	3	
oa6	3	
oa7	3	
oa8	3	
oa9	3	
oa10	3	
oa11	2	
oa12	1	
oa13	1	
oa14	3	

Result - RESULT.TXT

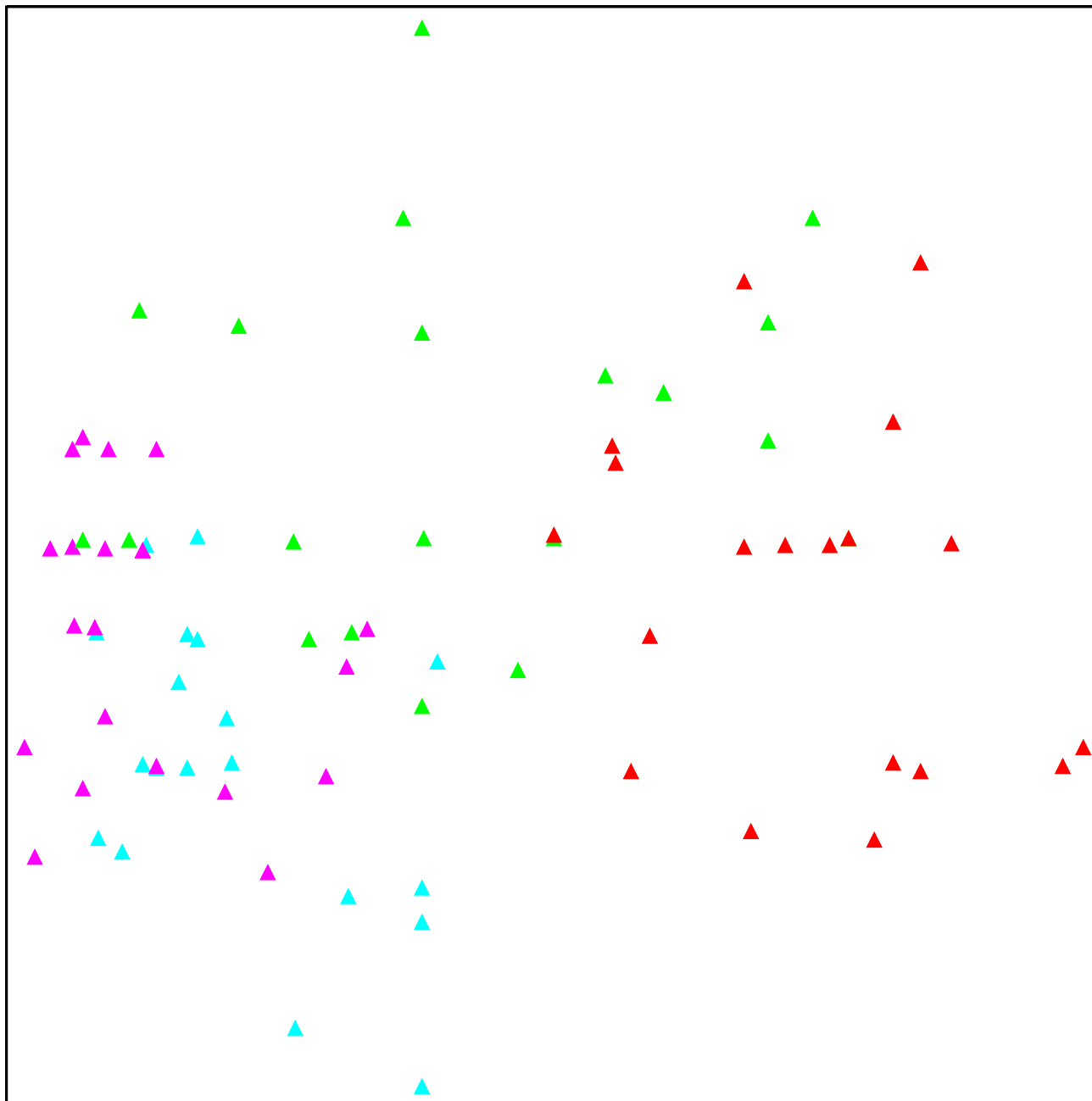
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***** Output from Graph *****
PC-ORD Version 4.0
12.01.2014, 16:11

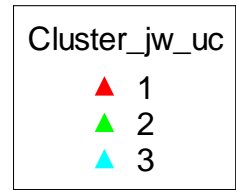
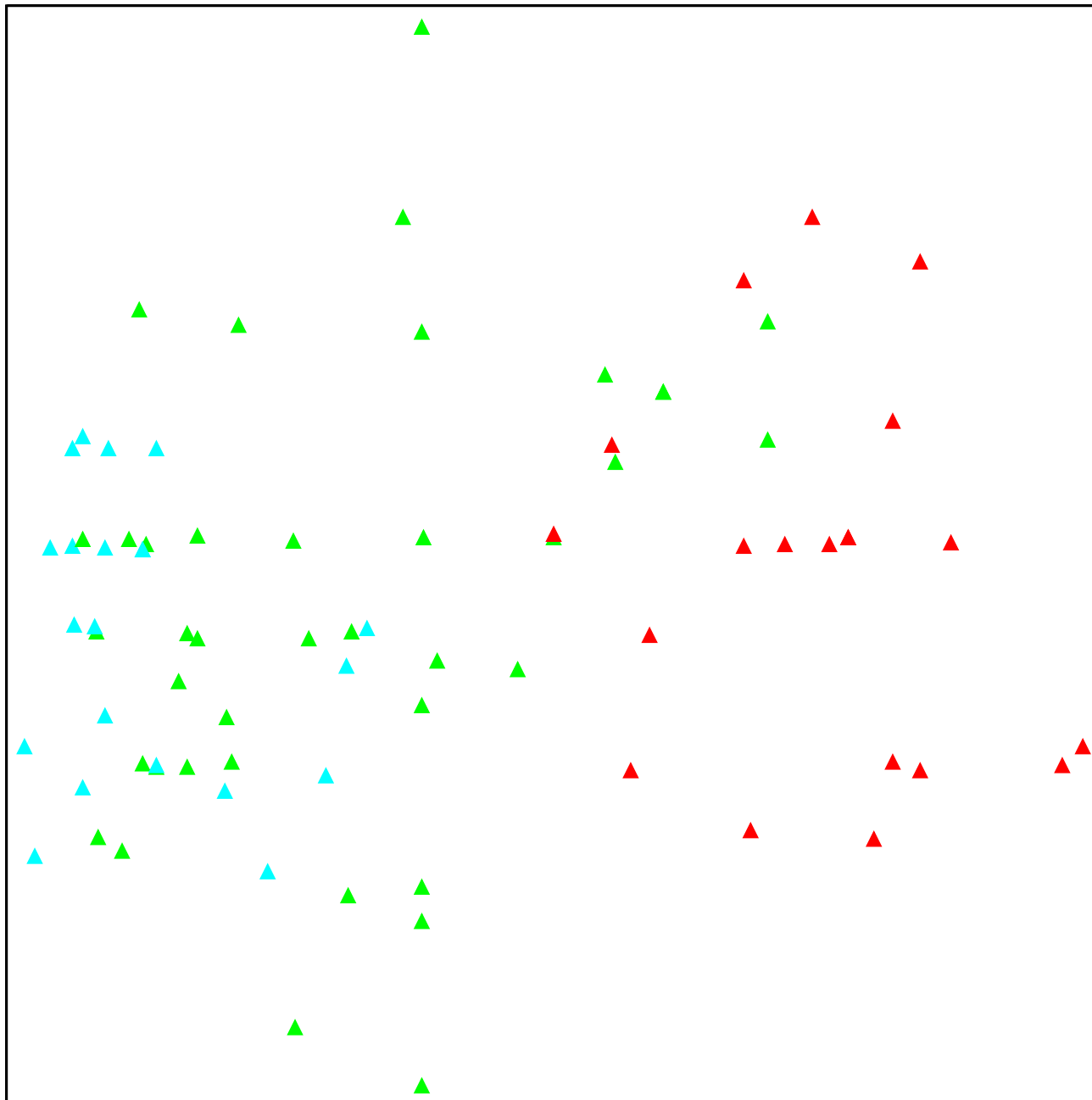
Coefficients of determination for the correlations between ordination
distances and distances in the original n-dimensional space:

                R Squared
Axis  Increment  Cumulative
  1      .369     .369
  2      .060     .429
  3      .060     .489

Number of entities = 80
Number of entity pairs used in correlation = 3160
Distance measure for ORIGINAL distance: Sorensen (Bray-Curtis)
    
```







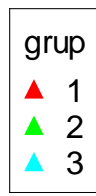
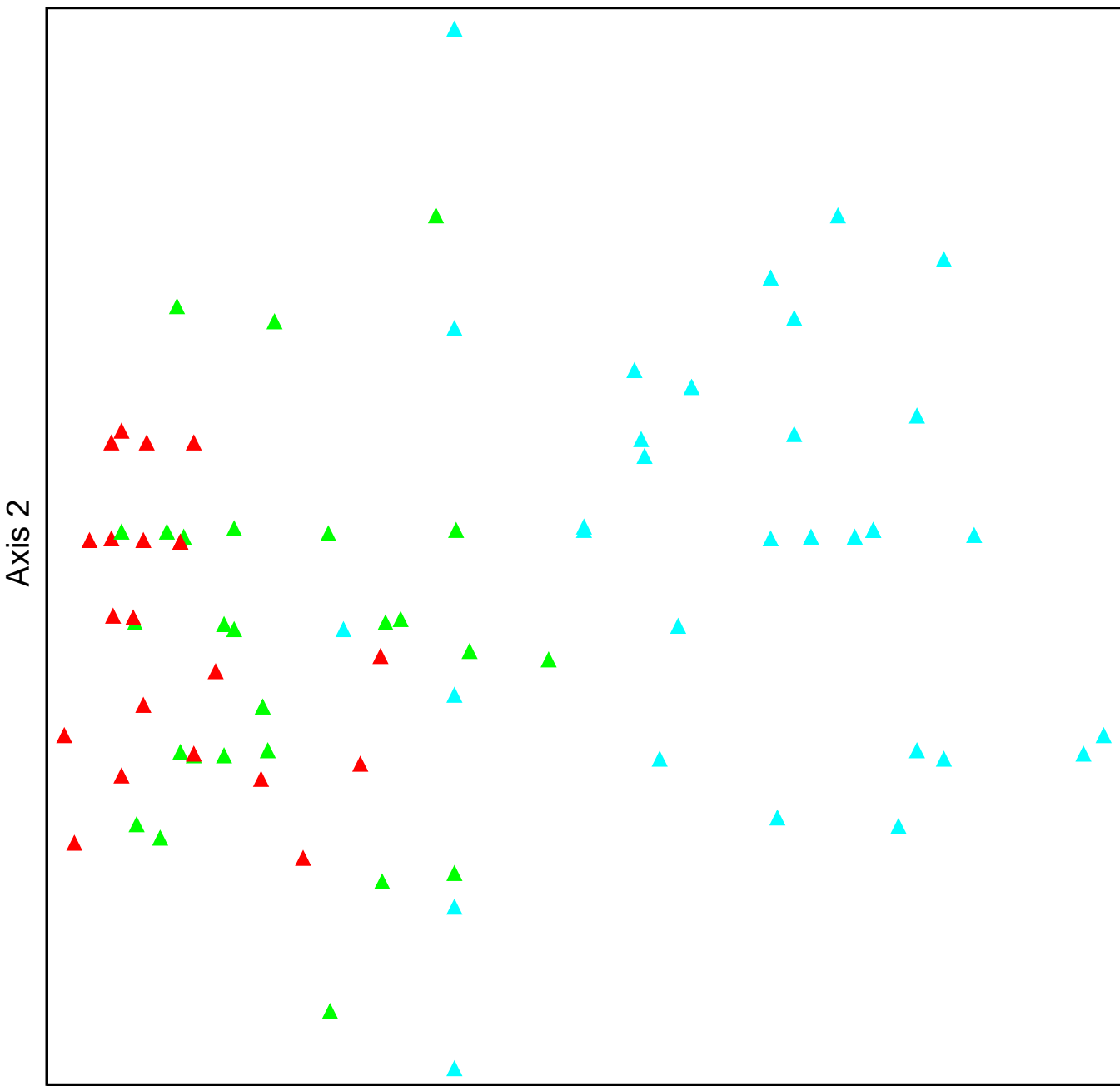
**BerCra**  
**CedLib**  
**CotNum**  
**DapOle**  
**JunExc**  
**PhlArm**  
**PruDiv**  
**RosCan**  
**SorUmb**



**JasFru**  
**PhlGra**  
**QueCoc**



**ArbAnd**  
**CisSal**  
**CotCog**  
**CraMon**  
**FonPhi**  
**MryCom**  
**NerOle**  
**OleOle**  
**PalSpi**  
**PhyLat**  
**PinBru**  
**PisTer**  
**PlaOri**  
**QueIx**  
**StyOff**  
**VitAgn**



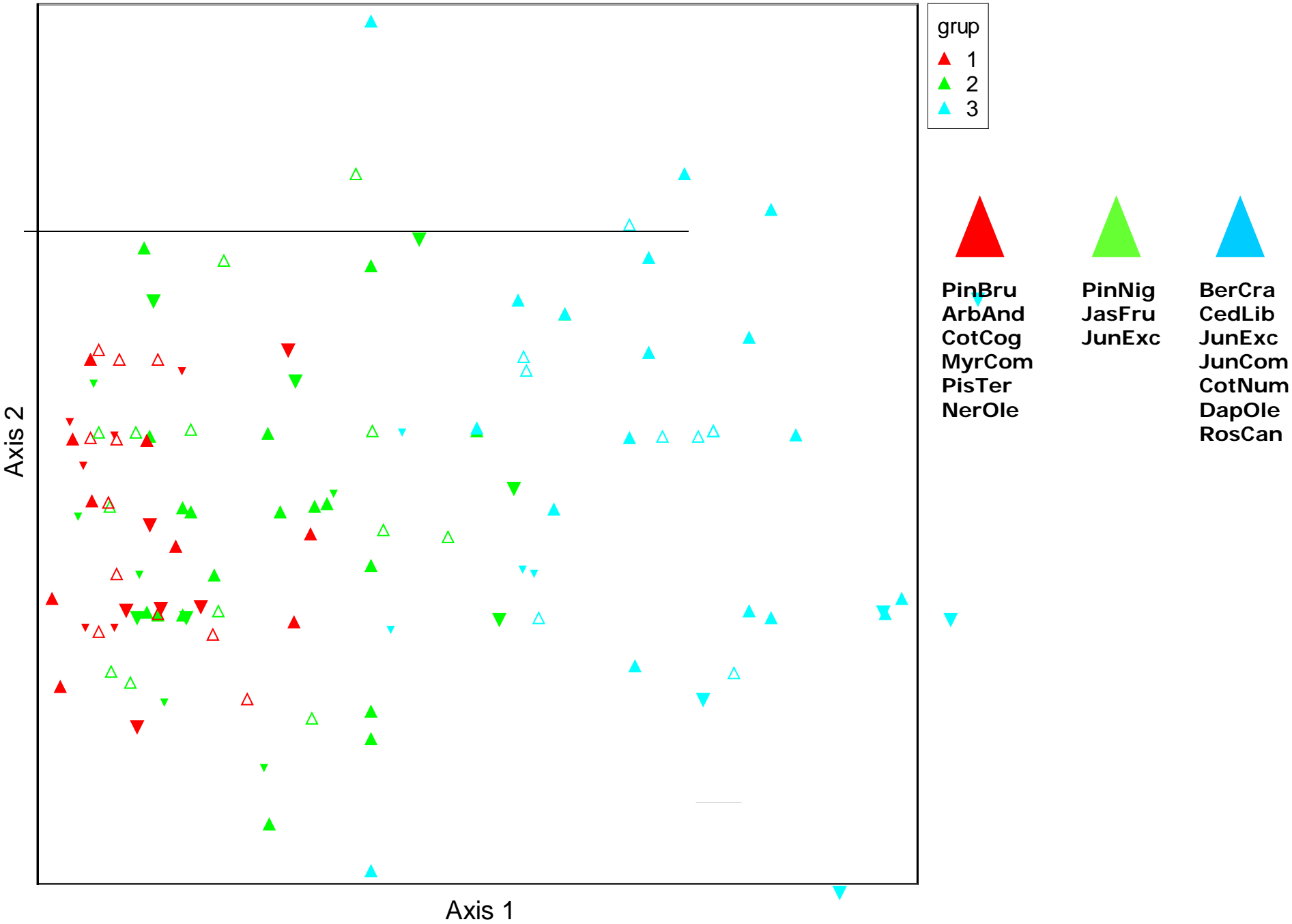
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**ArbAnd**  
**MyrCom**  
**PisTer**  
**NerOle**

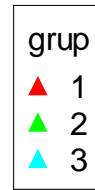
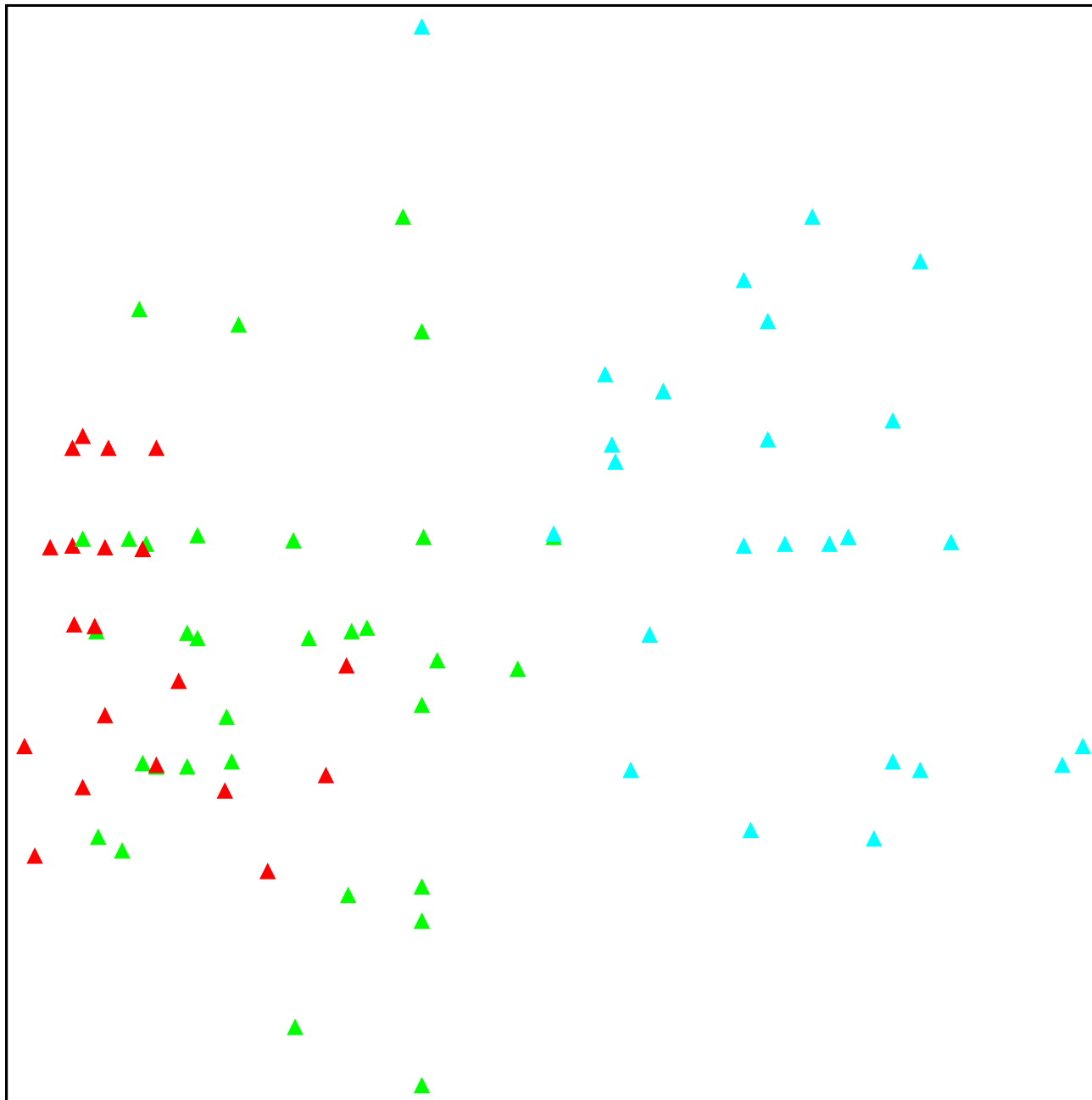


**PinNig**  
**JasFru**



**BerCra**  
**CedLib**  
**JunExc**  
**CotNum**





**ArbAnd**  
**CotCog**  
**MryCom**  
**CisSal**  
**NerOle**  
**PinBru**  
**PisTer**  
**QueIix**  
**VitAgn**

**CraOri**  
**JasFru**  
**JunExc**  
**PinNig**

**BerCra**  
**CedLib**  
**CotNum**  
**JunCom**  
**JunExc**

Axis 1

Axis 2



13-19 Ocak 2014/ ANTALYA

# Teşekkür ederim