



13-19 Ocak 2014/ ANTALYA

## Uyum analizi (RA) PC-ORD Uygulaması

Correspondance Analysis (CA)

**Eğitmen: Yrd. Doç. Dr. Mehmet Güvenç NEGİZ**  
**SDÜ Sütçüler Prof.Dr. Hasan Gürbüz MYO**

# Vejetasyon Çevre İlişkileri - Analitik Değerlendirmeler



13-19 Ocak 2014/ ANTALYA

PC-ORD

File Edit Modify Data Summary Ordination Graph Groups Window Options Help

Open... Main Matrix F7  
Close... Second Matrix F8  
Save As... Graph File F9  
Append Results F4 Result File F10  
Import Matrix  
Export Matrix...  
Delete File  
Switch Matrix...  
Graph Selection  
Memory Requirements  
Print...  
Print Setup...  
Font...  
Dos Shell  
Exit

Open Main Matrix

Dosya adı: VVM\_P~2.WK1 Klasör: d:\...pcordd~1\antaly~1

Tamam  
İptal  
Yardım  
Ağ...

Listenecek Dosya Türü: \*.wk1 (Lotus 1-2-3) Sürücü: d:

PC-ORD

Main - VVM\_P-2.WK1

	örnek							
	ArbAnd	BerCra	CedLib	CelGlb	CisSal	CotNum	CotDog	Ci
80	0	0	0	1	0	1	0	0
82	0	0	0	0	0	0	0	0
10a	0	0	0	0	0	0	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
120a	0	0	0	0	0	1	0	0
130a	0	1	0	0	0	1	0	0

# Vejetasyon Çevre İlişkileri - Analitik Değerlendirmeler



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PC-ORD

File Edit Modify Data Summary Ordination Graph Groups Window Options Help

Open... Main Matrix F7  
Close... Second Matrix F8  
Save As... Graph File F9  
Append Results F4 Result File F10  
Import Matrix  
Export Matrix...  
Delete File  
Switch Matrix...  
Graph Selection  
Memory Requirements  
Print...  
Print Setup...  
Font...  
Dos Shell  
Exit

	CedLib	CelGlb	CisSal	CotNum	CotCog	Cz
	0	1	0	1	0	0
	0	0	0	0	0	0
	0	0	0	1	0	0
	0	0	0	0	0	0
	0	0	0	0	0	1
	0	0	0	0	0	0
	0	0	0	0	0	0
	0	0	0	0	0	0
	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
140a	0	0	0	0	0	0

# Vejetasyon Çevre İlişkileri - Analitik Değerlendirmeler



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PC-ORD

File Edit Modify Data Summary Ordination Graph Groups Window Options Help

Main - VVM\_P~2.WK1

	ornek							
	ArbAnd	BerCra	CedLib	CelGlb	CisSal	CotNum	CotCog	CraOri
80								
42								
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

Second - CVM\_NEW.WK1

	ornek							
	yukslt	radinx	egim	yuztas	topder	kum	toz	kil
80								
20								
oa1	1462	0.0669872	95	90	20.5	61.8608	29.6638	8.4753
oa2	1545	0.982962	10	60	7.1875	29.8227	34.0253	36.151
oa3	1485	0.0669872	80	60	32.8125	73.6378	19.7716	6.5905
oa4	1089	0.933012	60	30	26.48	17.6568	23.2249	59.118
oa5	1224	0.982962	25	60	22.04	16.1992	23.0451	60.755
oa6	1010	0.0669872	75	40	41.12	6.81018	14.4961	78.693
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	17.675
oa9	990	0.629409	20	20	33.12	22.7328	23.197	54.070

PC-ORD

File Edit Modify Data Summary Ordination Graph Groups Window Options Help

Main - VVM\_P~2.WK1

- Bray-Curtis
- DCA (DECORANA)
- NMS
- PCA
- RA**
- CCA

RA Setup

Downweight rare species

OK Cancel Help

RA

Descriptive title for results:

OK Cancel Help

# Vejetasyon Çevre İlişkileri - Analitik Değerlendirmeler



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File Edit Modify Data Summary Ordination Graph Groups Window Options Help

	q	q	q	q	q	q	q	q
	CelGlb	CisSal	CotNum	CotCog	CraOri	CraMon	DapOle	DapSer
10a	1	0	1	0	0	0	1	0
20a	0	0	0	0	0	0	0	0
30a	0	0	1	0	0	0	0	0
40a	0	0	0	0	0	0	0	0
50a	0	0	0	0	1	0	1	0
60a	0	0	0	0	0	0	0	0
70a	0	0	0	0	0	0	1	0
80a	0	0	0	0	0	0	0	0
90a	0	0	0	0	0	0	1	0

10a	135.94420	-144.14320	-31.42730
20a	33.91149	-95.49866	25.71965
30a	187.41670	-138.69000	-54.43560
40a	-11.37948	-63.38906	96.10078
50a	25.48363	-61.87358	97.62743
60a	-12.30483	-81.84863	77.21384
70a	7.57990	-56.99589	96.86150
80a	-21.54223	-63.30951	116.32540
90a	-11.67360	-47.87929	78.36672
100a	-2.78417	-52.14486	58.22860
110a	191.03510	43.41805	-36.09476
120a	110.45980	-74.69057	-67.64724
130a	132.33390	-75.26316	-38.13084
140a	4.57298	-85.58360	79.71072
150a	30.33619	-76.29360	-29.26285
160a	-7.22381	-54.36941	1.30842
170a	201.56400	-59.80967	-80.41770

Eksen Değerleri

	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

```

***** Reciprocal Averaging (RA) *****
PC-ORD, Version 3.17
5 Jan 2014, 21:51

Number of non-zero data items:      675

No downweighting
No rescaling

----- Axis 1 -----
.1486342000 = residual at iteration  0
.0166961300 = residual at iteration  1
.0002279925 = residual at iteration  2
    
```

# Vejetasyon Çevre İlişkileri - Analitik Değerlendirmeler



13-19 Ocak 2014/ ANTALYA

PC-ORD - [Result - RESULT.FIL]  
File Edit Modify Data Summary Ordination Graph Groups

Number of non-zero data items: 675

No downweighting  
No rescaling

----- Axis 1 -----

```
.1486342000 = residual at iteration 0  
.0166961300 = residual at iteration 1  
.0002279925 = residual at iteration 2  
.0000027945 = residual at iteration 3  
.0000001269 = residual at iteration 4  
.2098623000 = residual at iteration 5  
.0042733410 = residual at iteration 6  
.0000641559 = residual at iteration 7  
.0000009090 = residual at iteration 8  
.0000000564 = residual at iteration 9  
.5838783000 = eigenvalue
```



% 58

----- Axis 2 -----

```
.1060527000 = residual at iteration 0  
.0242254800 = residual at iteration 1  
.0019523380 = residual at iteration 2  
.0000971011 = residual at iteration 3  
.0000079701 = residual at iteration 4  
.0000004350 = residual at iteration 5  
.0000003248 = residual at iteration 6  
.0000001255 = residual at iteration 7  
.0000000637 = residual at iteration 8  
.3249599000 = eigenvalue
```



% 32

% 25



----- Axis 3 -----

```
.0902068100 = residual at iteration 0  
.0149580900 = residual at iteration 1  
.0017655450 = residual at iteration 2  
.0003175504 = residual at iteration 3
```

PC-ORD - [Result - RESULT.FIL]  
File Edit Modify Data Summary Ordination Graph Groups W

```
.0008604278 = residual at iteration 13  
.0002423278 = residual at iteration 14  
.0000464545 = residual at iteration 15  
.0000141422 = residual at iteration 16  
.0000029221 = residual at iteration 17  
.0000008997 = residual at iteration 18  
.0000001930 = residual at iteration 19  
.0000001210 = residual at iteration 20  
.0000001117 = residual at iteration 21  
.0393032000 = residual at iteration 22  
.0187191300 = residual at iteration 23  
.0028284800 = residual at iteration 24  
.0008314198 = residual at iteration 25  
.0001585598 = residual at iteration 26  
.0000493141 = residual at iteration 27  
.0000095028 = residual at iteration 28  
.0000029601 = residual at iteration 29  
.0000005684 = residual at iteration 30  
.0000001799 = residual at iteration 31  
.0000001290 = residual at iteration 32  
.0601740100 = residual at iteration 33  
.0098239540 = residual at iteration 34  
.0033765260 = residual at iteration 35  
.0004671367 = residual at iteration 36  
.0001584720 = residual at iteration 37  
.0000231044 = residual at iteration 38  
.0000078841 = residual at iteration 39  
.0000011569 = residual at iteration 40  
.0000004023 = residual at iteration 41  
.0000000795 = residual at iteration 42  
.2477163000 = eigenvalue
```

# Vejetasyon Çevre İlişkileri - Analitik Değerlendirmeler



13-19 Ocak 2014/ ANTALYA

PC-ORD

File Edit Modify Data Summary Ordination Graph Groups Window Options Help

Main - VVM\_P-2.WK1

Graph Ordination

	q	q	q	q	q	q	q	q
	CelGlb	CisSal	CotNum	CotCog	CraOri	CraMon	DapOle	DapSer
10a	1	0	1	0	0	0	1	0
20a	0	0	0	0	0	0	0	0
30a	0	0	1	0	0	0	0	0
40a	0	0	0	0	0	0	0	0
50a	0	0	0	0	1	0	1	0
60a	0	0	0	0	0	0	0	0
70a	0	0	0	0	0	0	1	0
80a	0	0	0	0	0	0	0	0
90a	0	0	0	0	0	0	1	0

Graph - GRAPHROW.FIL

```

80
10a      135.94420  -144.14320  -31.42730
20a      33.91149   -95.49866   25.71965
30a      187.41670  -138.69000  -54.43560
40a     -11.37948   -63.38906   96.10078
50a      25.48363   -61.87358   97.62743
60a     -12.30483   -81.84863   77.21384
70a       7.57990   -56.99589   96.86150
80a     -21.54223   -63.30951  116.32540
90a     -11.67360   -47.87929   78.36672
100a     -2.78417   -52.14486   58.22860
110a     191.03510   43.41805   -36.09476
120a     110.45980  -74.69057   -67.64724
130a     132.33390  -75.26316   -38.13084
140a       4.57298   -85.58360   79.71072
150a     30.33619   -76.29360   -29.26285
160a     -7.22381   -54.36941    1.30842
170a    201.56400   -59.80967   -80.41770
    
```

Second - CVM\_NEW.WK1

	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

Result -

```

***** Reciprocal Averaging (RA) *****
PC-ORD, Version 3.17
5 Jan 2014, 21:51

Number of non-zero data items:      675

No downweighting
No rescaling

----- Axis 1 -----

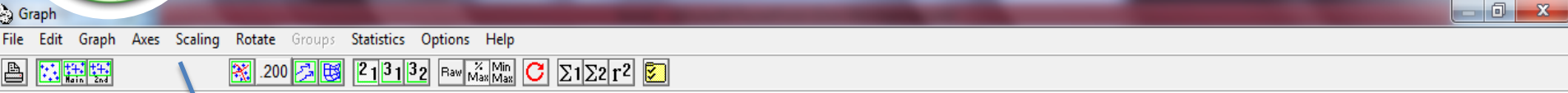
.1486342000 = residual at iteration  0
.0166961300 = residual at iteration  1
.0002279925 = residual at iteration  2
    
```

Main:VVM\_P-2.WK1 Second:CVM\_NEW.WK1 Graph:GRAPHROW.FIL Result: F4 Append Results

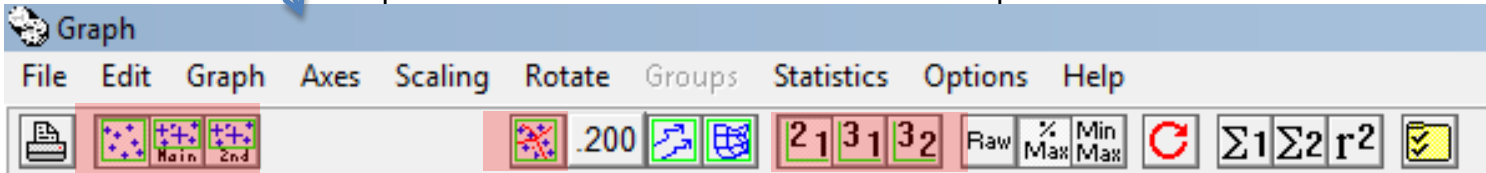
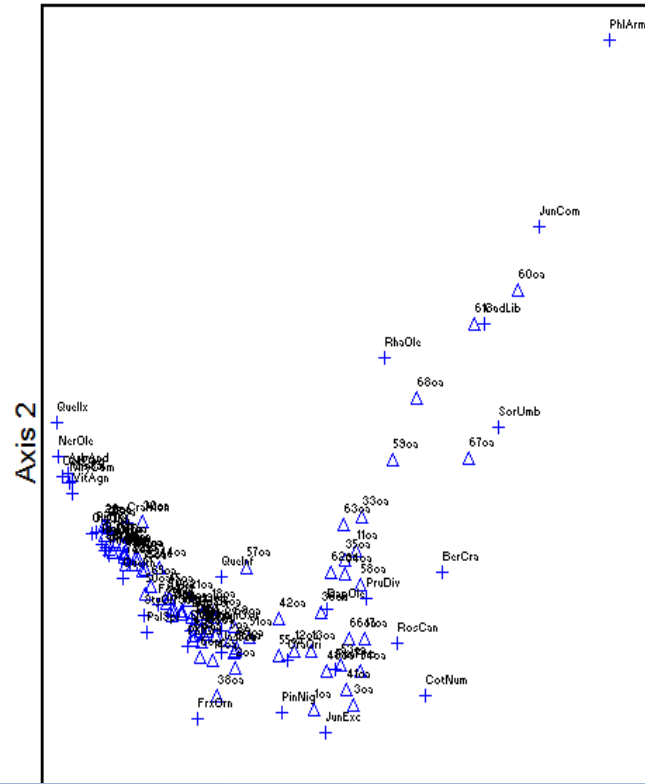
# Vejetasyon Çevre İlişkileri - Analitik Değerlendirmeler



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Simple scatterplot

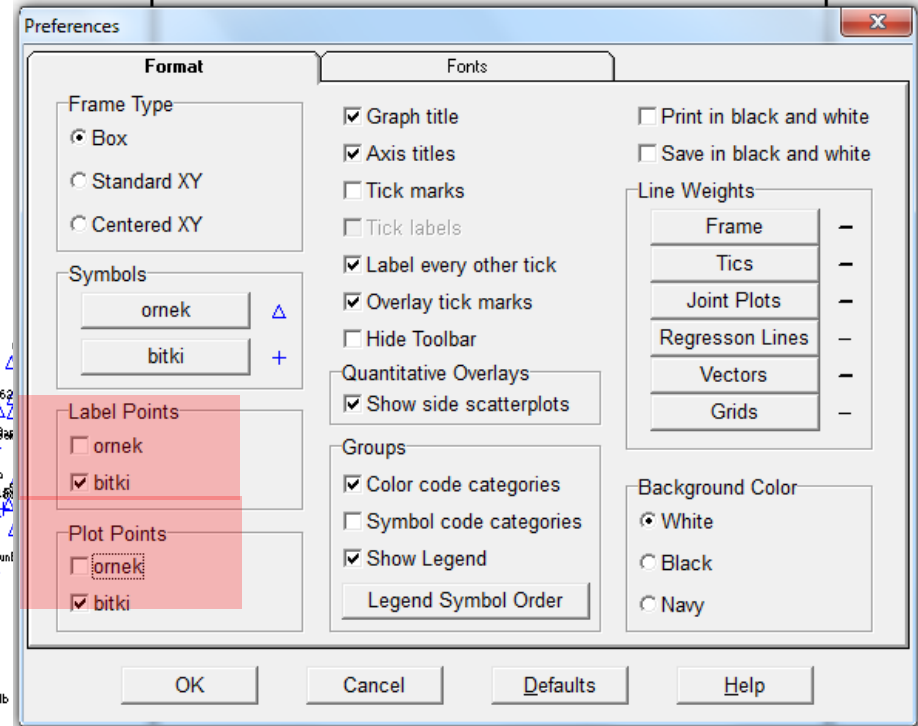
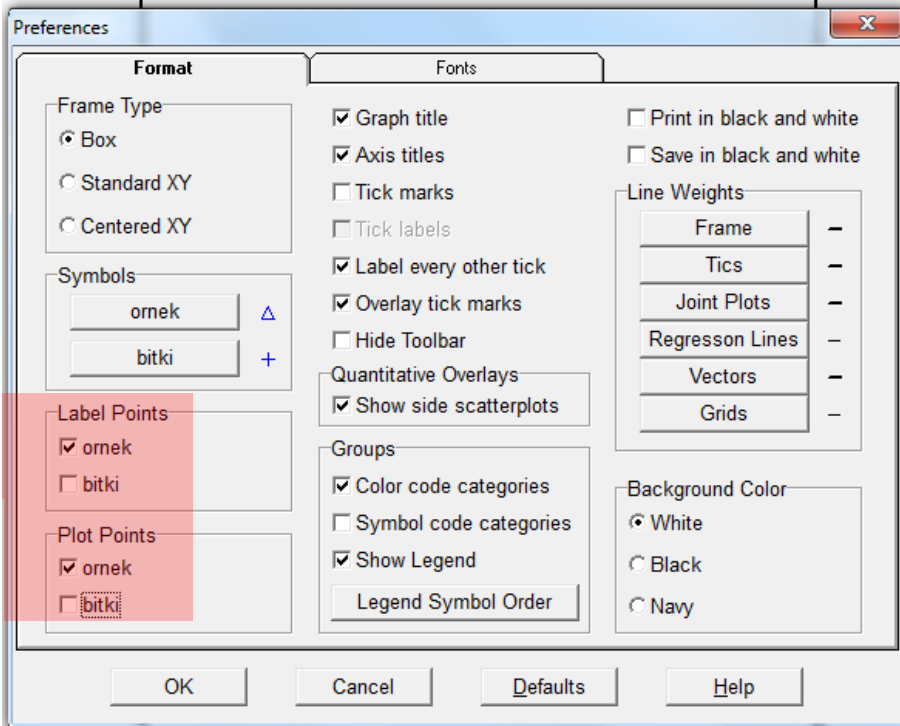
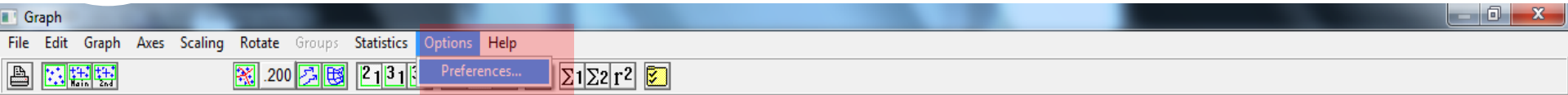




# Vejetasyon Çevre İlişkileri - Analitik Değerlendirmeler



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# Vejetasyon Çevre İlişkileri - Analitik Değerlendirmeler



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Graph

File Edit Graph Axes Scaling Rotate Groups Statistics Options Help

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

Graph

File Edit Graph Axes Scaling Rotate Groups Statistics Options Help

21 31 32 Raw %Min Max

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	-.616	.379	-.609	.319	.102	.449	-.268	.072	-.260
BerCra	.627	.393	.496	.061	.004	-.043	-.175	.031	-.136
CedLib	.567	.322	.415	.488	.238	.334	.285	.081	.181
CelGlb	.090	.008	.128	-.318	.101	-.311	.047	.002	.045
CisSal	-.518	.268	-.504	.261	.068	.374	-.182	.033	-.170
CotNum	.470	.221	.367	-.193	.037	-.190	-.421	.177	-.361
CotCog	-.390	.152	-.382	.191	.037	.271	-.139	.019	-.133
CraOri	.107	.012	.139	-.122	.015	-.121	.250	.062	.242
CraMon	-.299	.089	-.286	.142	.020	.223	-.196	.038	-.178
DapOle	.298	.089	.259	-.032	.001	-.095	-.046	.002	-.075
DapSer	-.296	.088	-.231	-.087	.008	.025	-.288	.083	-.200
FonPhl	-.417	.174	-.341	-.023	.001	.079	.110	.012	.097
FrxOrn	-.074	.006	-.045	-.140	.020	-.133	.009	.000	.006
JasFru	-.085	.007	-.020	-.136	.019	-.065	.094	.009	.104
JunCom	.542	.293	.353	.514	.264	.317	-.061	.004	-.057
JunExc	.297	.088	.300	-.384	.148	-.370	-.461	.213	-.383
JunFoe	.259	.067	.220	-.241	.058	-.251	-.394	.156	-.299
JunOxy	-.196	.038	-.100	-.189	.036	-.087	.037	.001	.046
MryCom	-.398	.158	-.393	.193	.037	.277	-.191	.037	-.184
NerOle	-.346	.120	-.345	.195	.038	.259	-.162	.026	-.166
OleOle	-.326	.106	-.306	.102	.010	.177	-.056	.003	-.047
PalSpi	-.296	.088	-.218	-.078	.006	-.008	.066	.004	.076
PhlArm	.559	.312	.339	.644	.415	.339	.362	.131	.223
PhlGra	-.295	.087	-.168	-.181	.033	-.118	.430	.185	.393
PhyLat	-.611	.373	-.557	.165	.027	.302	-.139	.019	-.113
PinBru	-.726	.527	-.663	.168	.028	.334	-.089	.008	-.061
PinNig	.135	.018	.200	-.328	.108	-.307	.255	.065	.214
PisTer	-.637	.405	-.594	.209	.044	.352	-.170	.029	-.152
PlaOri	-.345	.119	-.312	.094	.009	.171	-.045	.002	-.039
PruDiv	.357	.127	.316	-.003	.000	-.017	-.045	.002	-.006
QueCer	-.127	.016	-.090	-.057	.003	-.005	-.045	.002	-.039
QueCoc	-.396	.157	-.235	-.166	.027	-.042	.377	.142	.358
QueIlx	-.292	.085	-.295	.202	.041	.264	-.228	.052	-.231

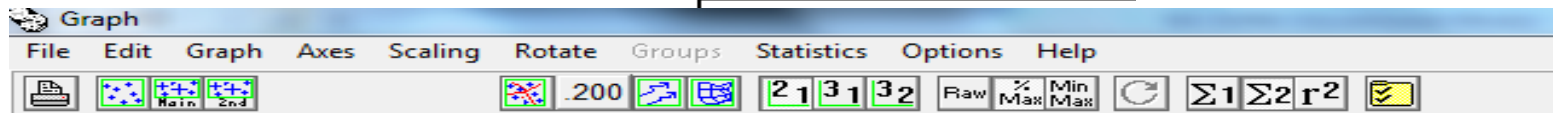
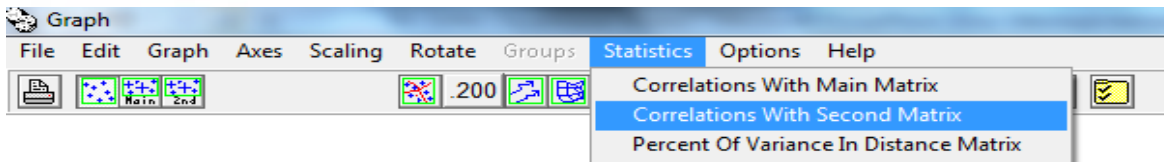
Axis 2

Axis 1

# Vejetasyon Çevre İlişkileri - Analitik Değerlendirmeler



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\*\*\*\*\* Output from Graph \*\*\*\*\*  
PC-ORD Version 3.17  
08.01.2014, 20:27

Pearson and Kendall Correlations with Ordination Axes N= 80

Axis:	r	1	tau	r	2	tau	r	3	tau
		r-sq		r-sq			r-sq		
yukslt	.868	.754	.745	-.054	.003	-.253	-.021	.000	.015
radinx	-.006	.000	.013	.197	.039	.090	.240	.057	.173
egim	.087	.008	.080	-.298	.089	-.190	-.057	.003	-.014
yuztas	.473	.224	.367	-.226	.051	-.246	-.145	.021	-.065
topder	-.442	.195	-.280	.157	.025	.166	-.052	.003	.040
kum	.321	.103	.174	.099	.010	.073	-.061	.004	-.084
toz	.095	.009	.125	-.164	.027	-.145	-.360	.130	-.195
kil	-.381	.145	-.218	-.049	.002	.005	.194	.037	.126
pH	.037	.001	.007	-.041	.002	-.055	-.358	.128	-.239
kirec	-.222	.049	-.156	.115	.013	.181	-.110	.012	-.046
orgmad	.308	.095	.152	-.168	.028	-.096	-.184	.034	-.117
yzyprz	.343	.118	.314	-.067	.004	-.156	-.111	.012	-.048
krctas	.639	.409	.542	-.075	.006	-.198	-.010	.000	-.013
konglo	-.400	.160	-.397	.230	.053	.321	-.211	.045	-.206
karsk	-.382	.146	-.279	-.098	.010	-.035	.175	.031	.175
disbky	.072	.005	.122	-.378	.143	-.382	-.094	.009	-.065
duzarz	.031	.001	-.059	.378	.143	.284	-.012	.000	-.044
ondule	-.028	.001	-.022	.019	.000	.090	-.072	.005	-.050
icbuky	-.088	.008	-.035	-.087	.008	-.051	.217	.047	.197
yamkon	-.362	.131	-.258	-.050	.003	.028	.144	.021	.131

# Vejetasyon Çevre İlişkileri - Analitik Değerlendirmeler



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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	<b>.868</b>	.754	.745	-.054	.003	-.253	-.021	.000	.015
radinx	-.006	.000	.000	.197	.000	.000	.240*	.000	.173
egim	.087	.000	.000	.080	.000	.000	.080	.000	.014
yuztas	.473	.224	.224	.068	.003	.068	.068	.003	.065
topder	-.442	.193	.193	.068	.003	.068	.068	.003	.040
kum	.321	.103	.103	.068	.003	.068	.068	.003	.084
toz	.095	.000	.000	.068	.003	.068	.068	.003	.195
kil	-.381	.143	.143	.068	.003	.068	.068	.003	.126
pH	.037	.000	.000	.068	.003	.068	.068	.003	.239
kirec	-.222	.043	.043	.068	.003	.068	.068	.003	.046
orgmad	.308	.093	.093	.068	.003	.068	.068	.003	.117
yzyprz	.343	.118	.118	.068	.003	.068	.068	.003	.048
krctas	.639	.403	.403	.068	.003	.068	.068	.003	
konglo	-.400	.160	.160	.068	.003	.068	.068	.003	
karsk	-.382	.143	.143	.068	.003	.068	.068	.003	
disbky	.072	.000	.000	.068	.003	.068	.068	.003	
duzarz	.031	.000	.000	.068	.003	.068	.068	.003	
ondule	-.028	.000	.000	.068	.003	.068	.068	.003	
icbuky	-.088	.000	.000	.068	.003	.068	.068	.003	
yamkon	-.362	.131	.131	.068	.003	.068	.068	.003	

	A	B	C	D	E	F	G	H	I	J	K
1	eksen1	eksen2	eksen3	yukslt	radinx	egim	yuztas	topder	kum	toz	
2	oa1	135.9442	-144.143	-31.4272	1462	0.066987	95	90	20.50	61.86	29.6
3	oa2	33.91151	-95.4986	95.71966	1545	0.982963	10	60	7.19	29.82	34.0
4	oa3	187.4167	-138.69	-54.4355	1485	0.066987	80	60	32.81	73.64	19.7
5	oa4	-11.3795	-63.389	96.10082	1065	0.933013	60	30	26.48	17.66	23.2
6	oa5	25.48364	-61.8736	97.62746	1224	0.982963	25	60	22.04	16.20	23.0
7	oa6	-12.3048	-81.8486	77.21385	1010	0.066987	75	40	41.12	6.81	14.5
8	oa7	7.5799	-56.9959	96.86152	1030	0.982963	55	75	26.04	25.14	14.5
9	oa8	-21.5422	-63.3094	116.3254	1028	0.982963	65	80	16.74	70.05	12.2
10	oa9	-11.6736	-47.8793	78.36674	990	0.62941	20	20	33.12	22.53	23.2
11	oa10	-2.78416	-52.1449	58.22864	950						
12	oa11	191.0351	43.41806	-36.0947	1350	0.0					
13	oa12	110.4599	-74.6906	-67.6472	1365	0.0					
14	oa13	132.3339	-75.2632	-38.1308	1440	0					
15	oa14	4.57299	-85.5836	79.71078	1160	0					
16	oa15	30.33621	-76.2936	-29.2628	1122	0.0					
17	oa16	-7.2238	-54.3694	1.30844	1170	0					
18	oa17	201.564	-59.8097	-80.4177	1457						
19	oa18	1.06174	-25.3761	37.64374	1007	0					
20	oa19	-10.6785	-31.7622	-13.2667	1140	0					
21	oa20	-12.4545	-52.0756	8.98983	1056	0.0					
22	oa21	-27.3104	-14.9262	14.70534	895	0.0					
23	oa22	-85.2258	22.33751	-1.59207	874	0					
24	oa23	-123.398	50.73427	-24.0171	407	0					
25	oa24	-101.283	27.63744	-10.036	514	0					
26	oa25	-112.079	41.22474	-24.0742	618						
27	oa26	-132.671	72.0759	-46.2739	682	0					

		eksen1	eksen2	eksen3	yukslt
eksen1	Pearson Correlation	1	,205	-,017	<b>,868**</b>
	Sig. (2-tailed)		,068	,983	,000
	N	80	80	80	80
eksen2	Pearson Correlation	,205	1	,141	-,054
	Sig. (2-tailed)	,068		,211	,634
	N	80	80	80	80
eksen3	Pearson Correlation	-,017	,141	1	-,021
	Sig. (2-tailed)	,883	,211		,857
	N	80	80	80	80
yukslt	Pearson Correlation	,868**	-,054	-,021	1
	Sig. (2-tailed)	,000	,634	,857	
	N	80	80	80	80
radinx	Pearson Correlation	-,006	,197	,240*	,113
	Sig. (2-tailed)	,957	,080	,032	,320
	N	80	80	80	80

# Vejetasyon Çevre İlişkileri - Analitik Değerlendirmeler

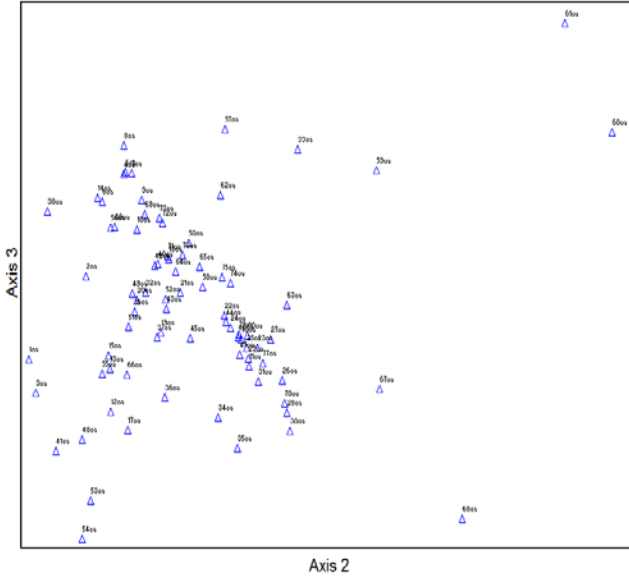
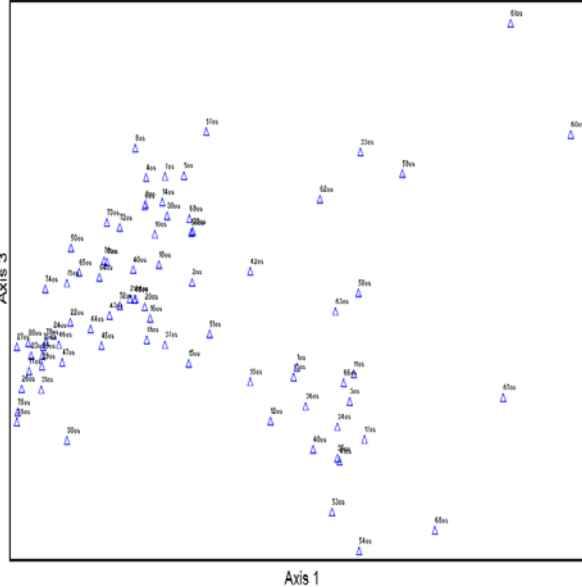
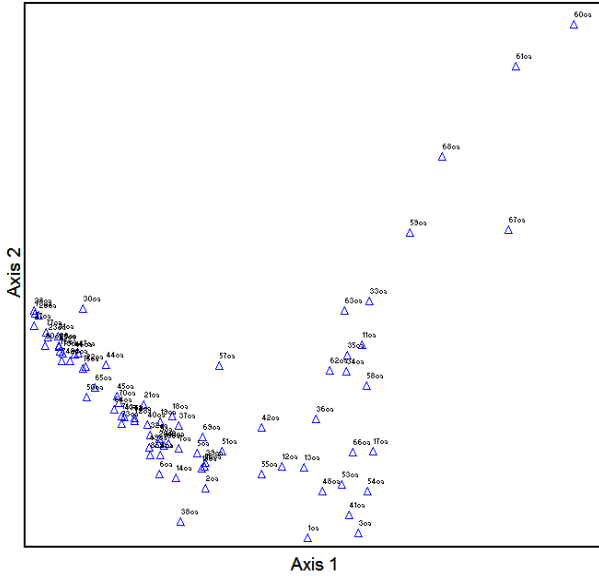
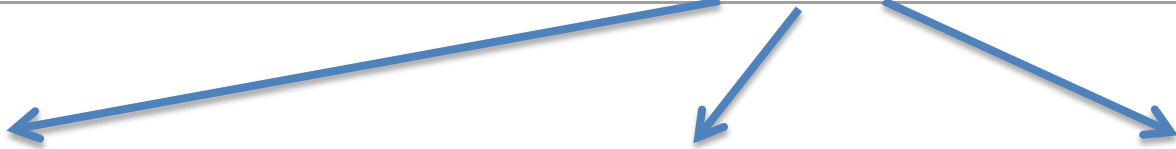


13-19 Ocak 2014/ ANTALYA

Graph

File Edit Graph Axes Scaling Rotate Groups Statistics Options Help

Graph toolbar showing various icons and settings. The 'Statistics' section is highlighted, showing '2 1 3 1 3 2' and 'Raw % Min Max' options. The 'yükslt' variable is selected.



# Vejetasyon Çevre İlişkileri - Analitik Değerlendirmeler

13-19 Ocak 2014/ ANTALYA

Graph

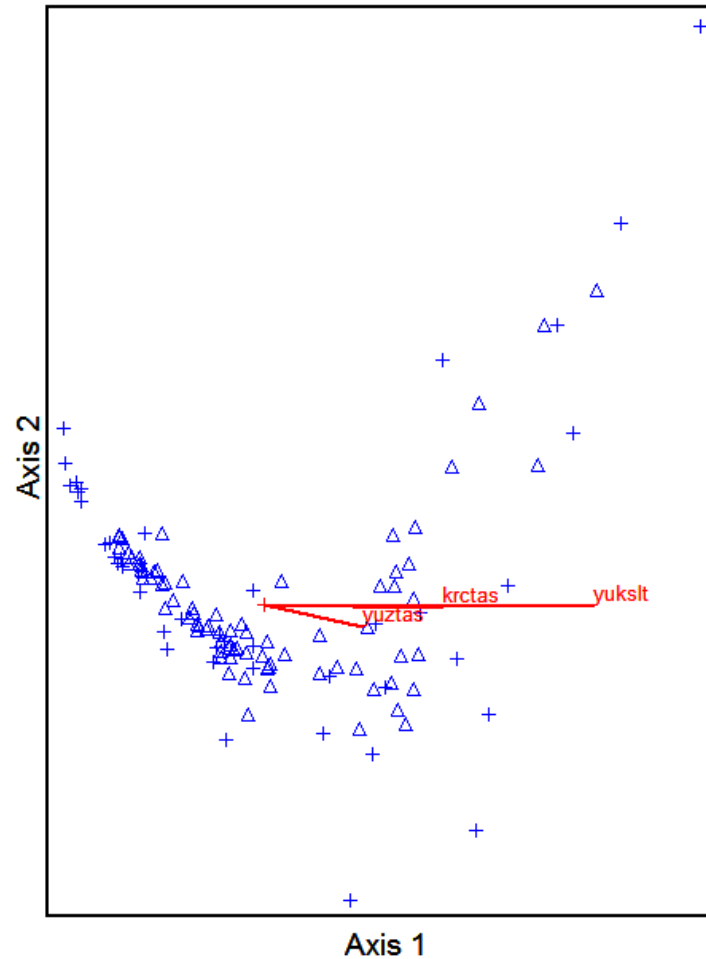
File Edit Graph Axes Scaling Rotate Groups Statistics Options Help

yukslt

.200

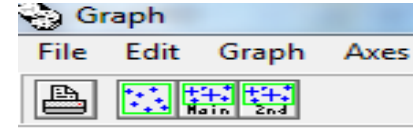
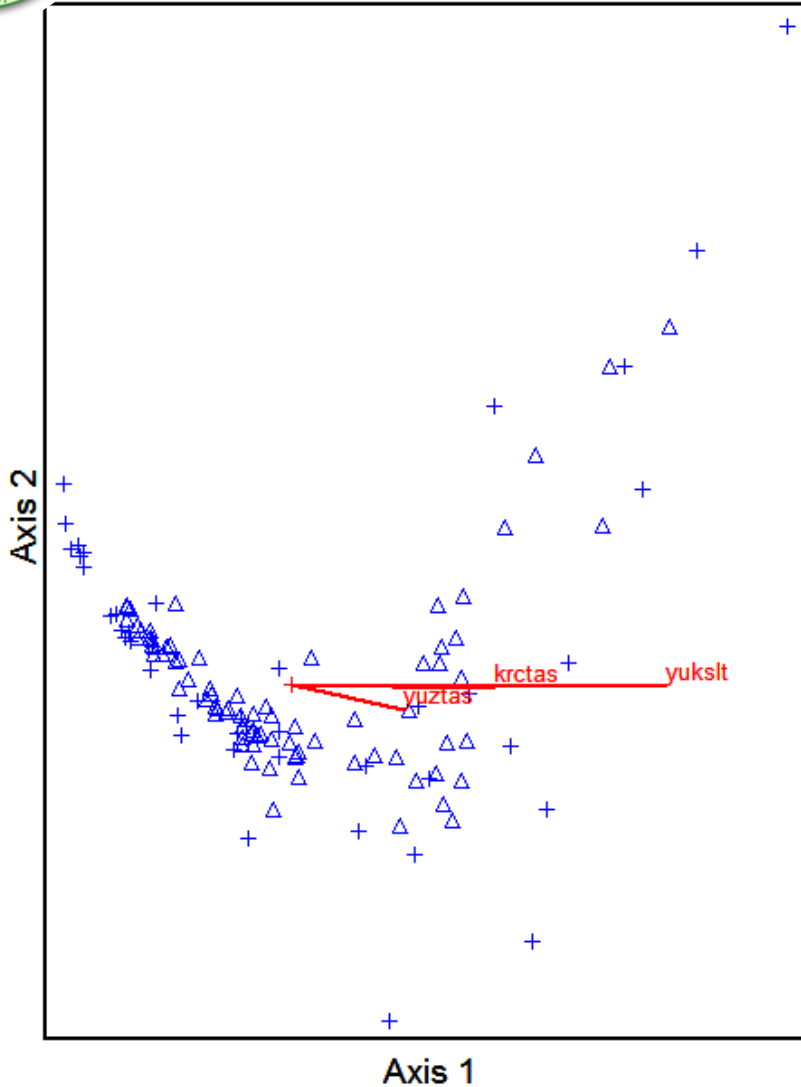
2 1 3 1 3 2

Raw % Max Min Max  $\Sigma 1$   $\Sigma 2$   $r^2$



# Vejetasyon Çevre İlişkileri - Analitik Değerlendirmeler

13-19 Ocak 2014/ ANTALYA



```
*****  
PC-ORD Version 3.1  
08.01.2014, 20:27
```

Pearson and Kendal

Axis:

	r
yukslt	.868
radinx	-.006
egim	.087
yuztas	.473
topder	-.442
kum	.321
toz	.095
kil	-.381
pH	.037
kirec	-.222
orgmad	.308
yzyprz	.343
krctas	.639
konglo	-.400
karsk	-.382
disbky	.072
duzarz	.031
ondule	-.028
icbuky	-.088
yamkon	-.362

# Vejetasyon Çevre İlişkileri - Analitik Değerlendirmeler

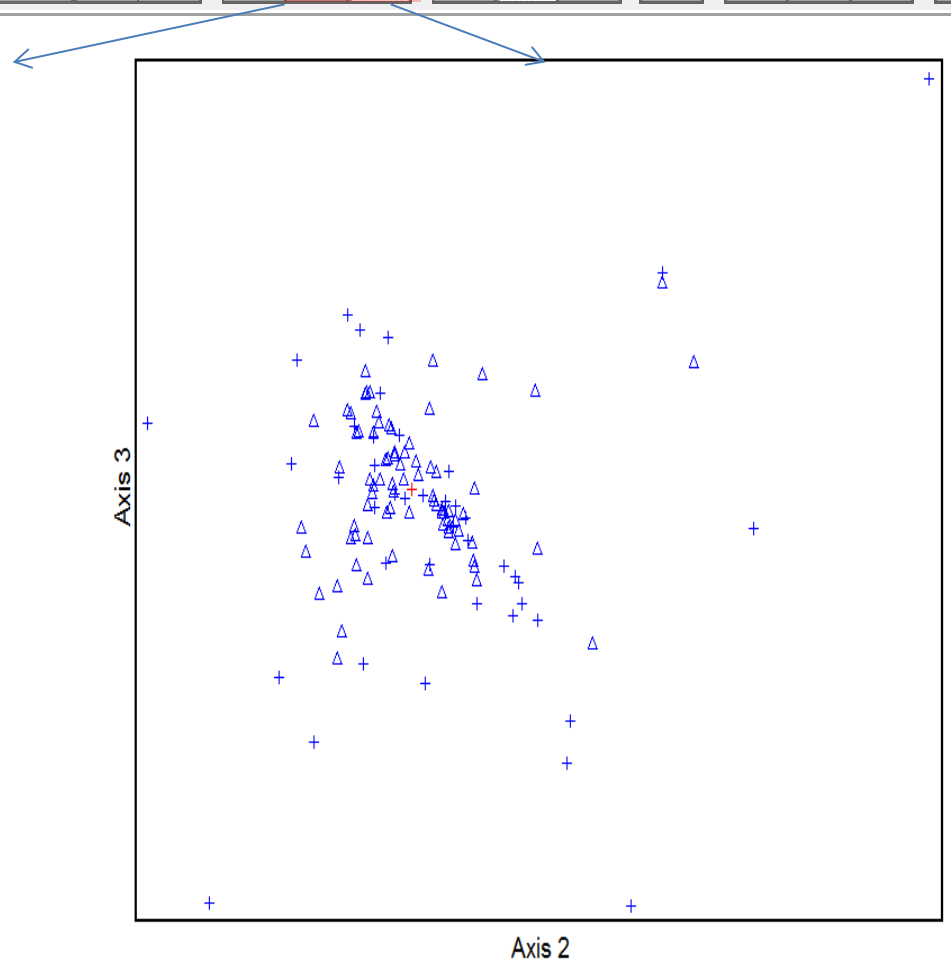
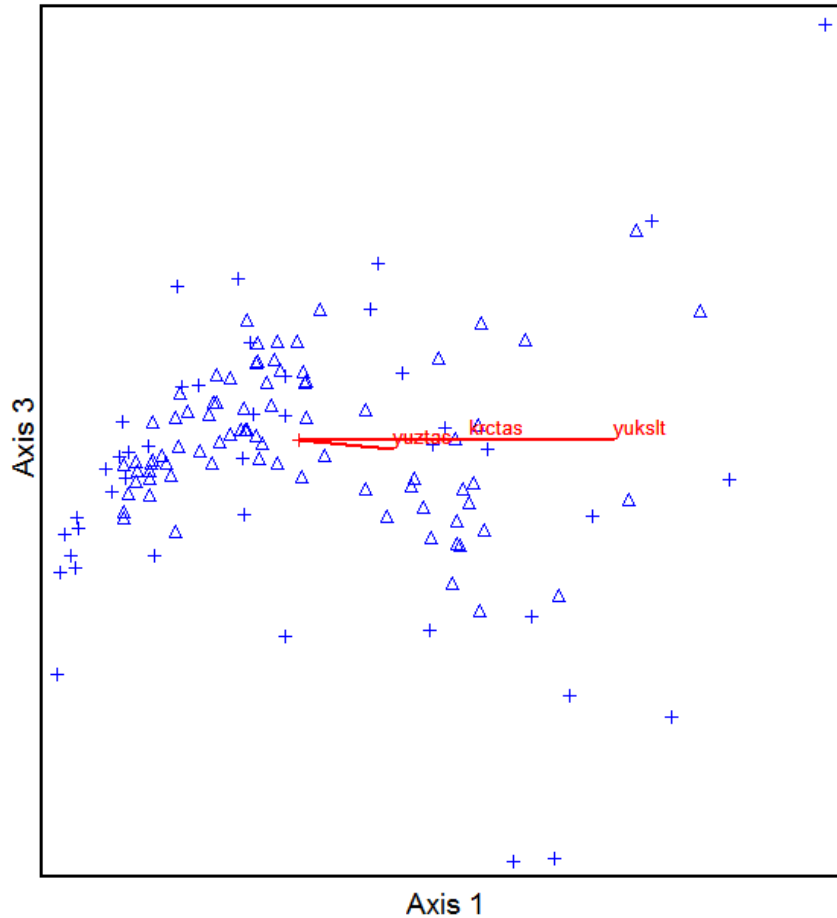


13-19 Ocak 2014/ ANTALYA

Graph

File Edit Graph Axes Scaling Rotate Groups Statistics Options Help

Graph toolbar showing various icons and settings. The variable 'yukslt' is selected. The 'Statistics' section shows '2 1 3 1 3 2' with '3 1 3 2' highlighted in red. Other options include 'Raw', '% Max', 'Min Max', and summary statistics  $\Sigma 1$ ,  $\Sigma 2$ ,  $r^2$ .

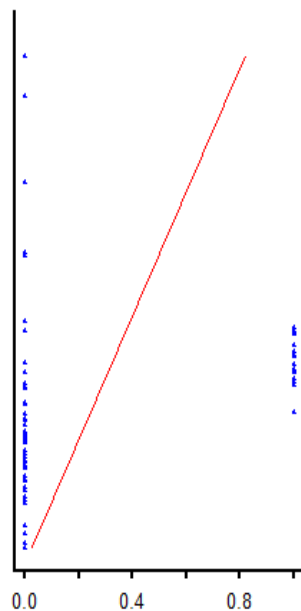
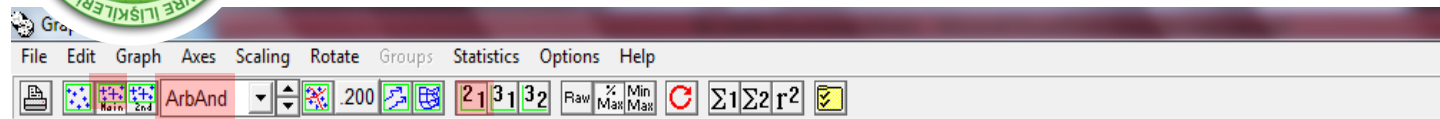




# Vejetasyon Çevre İlişkileri - Analitik Değerlendirmeler

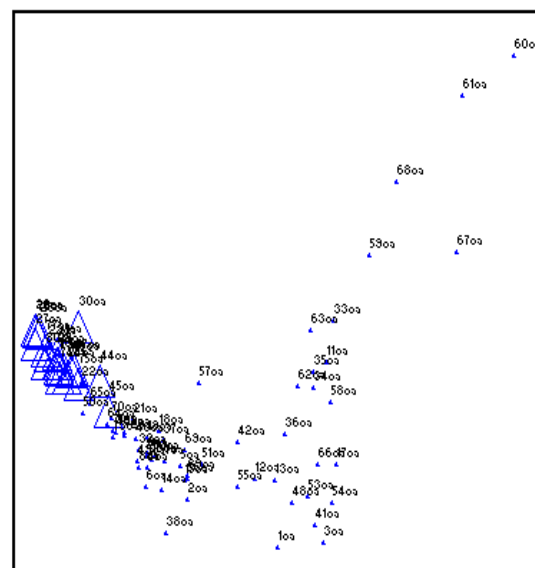


13-19 Ocak 2014/ ANTALYA

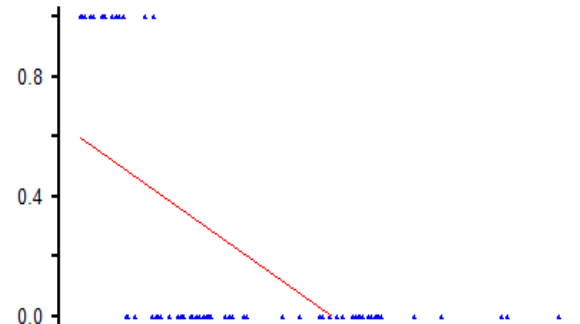


ArbAnd  
Axis 1  
 $r = -.616$   $\tau = -.609$   
Axis 2  
 $r = .319$   $\tau = .449$

Axis 2



Axis 1



Axis:

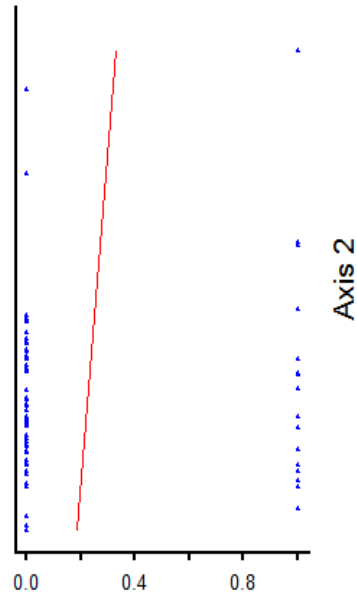
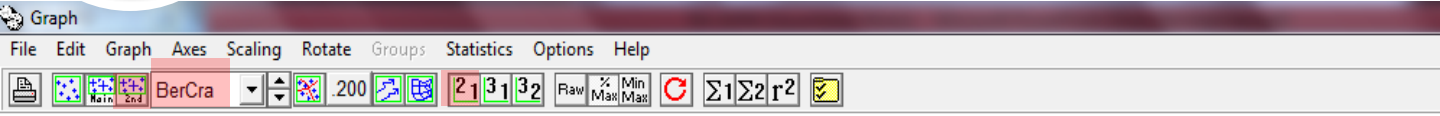
r

ArbAnd	<b>-.616</b>
BerCra	.627
CedLib	.567
CelGlb	.090
CisSal	-.518
CotNum	.470
CotCog	-.390
CraOri	.107
CraMon	-.299
DapOle	.298
DapSer	-.296
FonPhl	-.417
FrXOrn	-.074
JasFru	-.085
JunCom	.542
JunExc	.297
JunFoe	.259
JunOxy	-.196
MryCom	-.398
NerOle	-.346
OleOle	-.326
PalSpi	-.296
PhlArm	.559
PhlGra	-.295
PhyLat	-.611
PinBru	-.726
PinNig	.135
PisTer	-.637
PlaOri	-.345
PruDiv	.357
QueCer	-.127
QueCoc	-.396
QueIlx	-.292

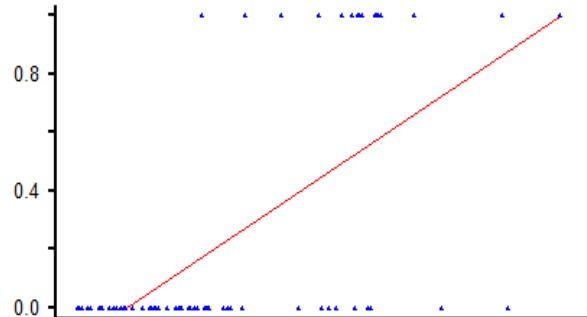
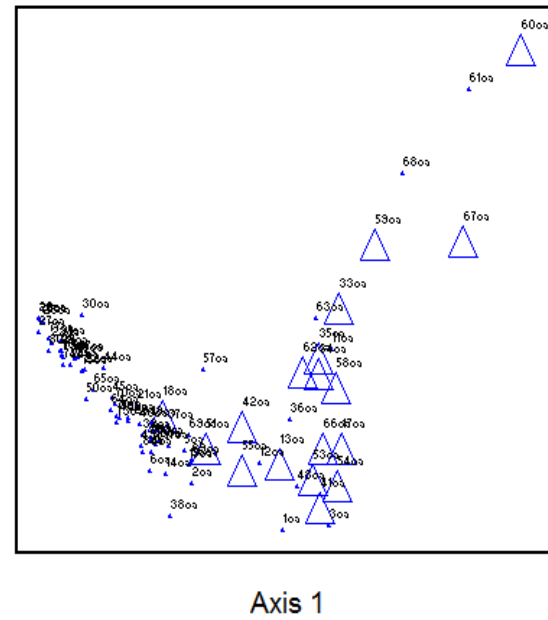
# Vejetasyon Çevre İlişkileri - Analitik Değerlendirmeler



13-19 Ocak 2014/ ANTALYA



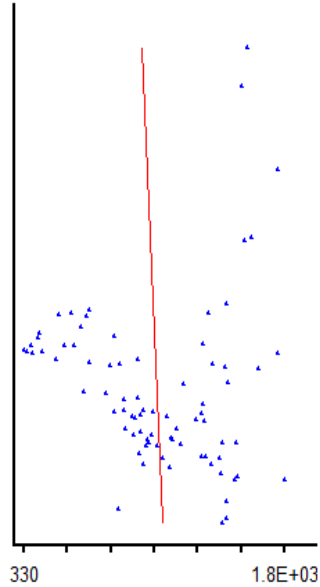
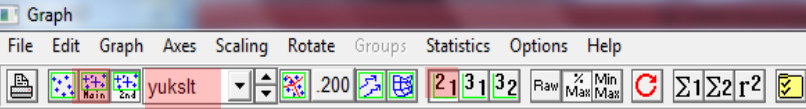
BerCra  
 Axis 1  
 $r = .627$   $\tau = .496$   
 Axis 2  
 $r = .061$   $\tau = -.043$



Axis :	r
ArbAnd	-.616
BerCra	.627
CedLib	.567
CelGlb	.090
CisSal	-.518
CotNum	.470
CotCog	-.390
CraOri	.107
CraMon	-.299
DapOle	.298
DapSer	-.296
FonPhl	-.417
FrXOrn	-.074
JasFru	-.085
JunCom	.542
JunExc	.297
JunFoe	.259
JunOxy	-.196
MryCom	-.398
NerOle	-.346
OleOle	-.326
PalSpi	-.296
PhlArm	.559
PhlGra	-.295
PhyLat	-.611
PinBru	-.726
PinNig	.135
PisTer	-.637
PlaOri	-.345
PruDiv	.357
QueCer	-.127
QueCoc	-.396
QueIlx	-.292

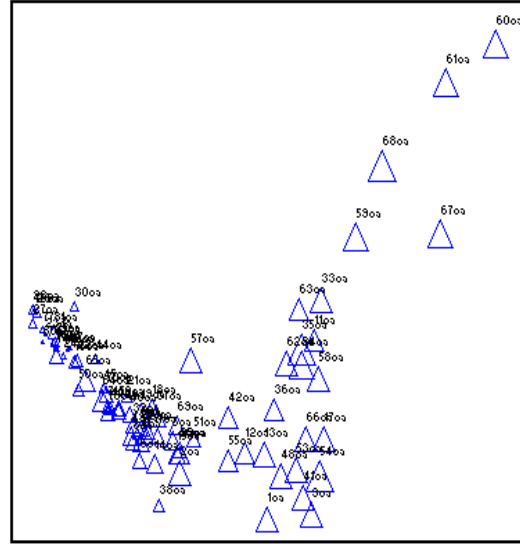
# Vejetasyon Çevre İlişkileri - Analitik Değerlendirmeler

13-19 Ocak 2014/ ANTALYA

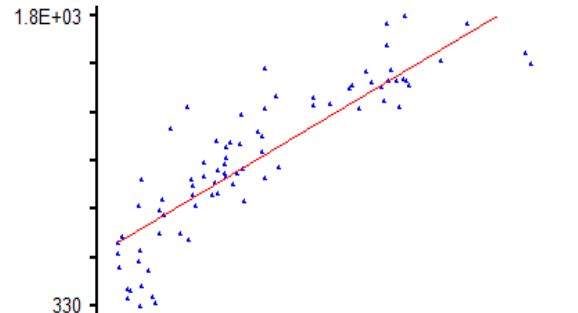


Axis 2

yukslt  
Axis 1  
 $r = .868$   $\tau = .745$   
Axis 2  
 $r = -.054$   $\tau = -.253$



Axis 1



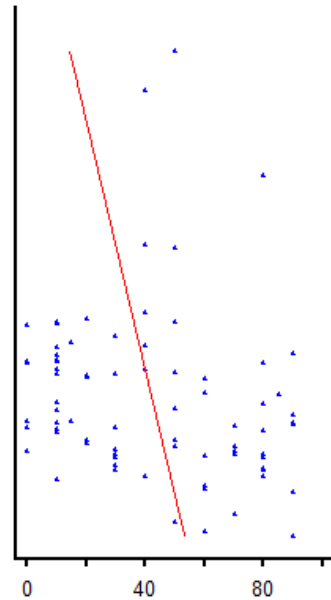
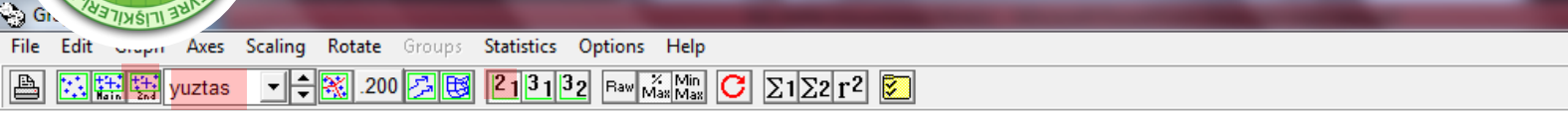
Axis:

r

yukslt	.868
radinx	-.006
egim	.087
yuztas	.473
topder	-.442
kum	.321
toz	.095
kil	-.381
pH	.037
kirec	-.222
orgmad	.308
zyyprz	.343
krctas	.639
konglo	-.400
karsk	-.382
disbky	.072
duzarz	.031
ondule	-.028
icbuky	-.088
yamkon	-.362

# Vejetasyon Çevre İlişkileri - Analitik Değerlendirmeler

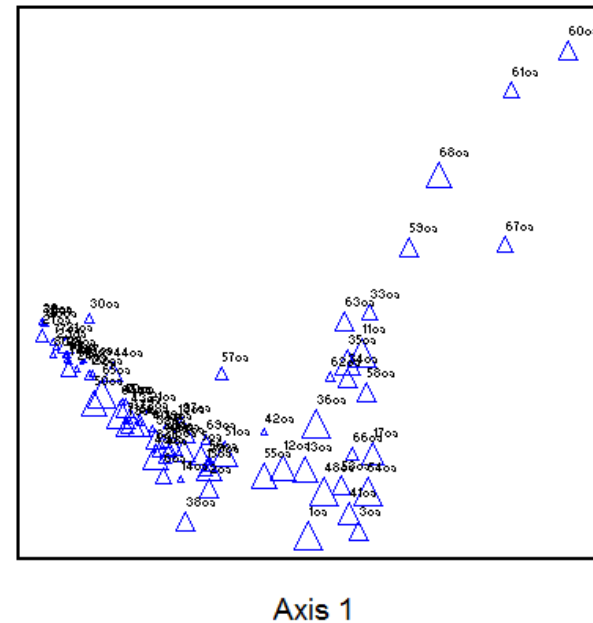
13-19 Ocak 2014/ ANTALYA



yuztas

Axis 1  
r = .473 tau = .367  
Axis 2  
r = -.226 tau = -.246

Axis 2



Axis 1

80

40

0

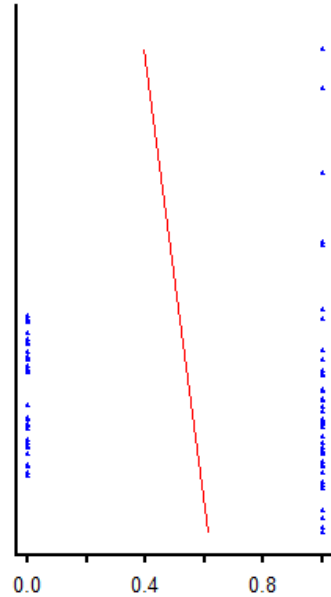
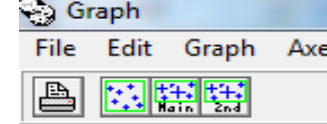
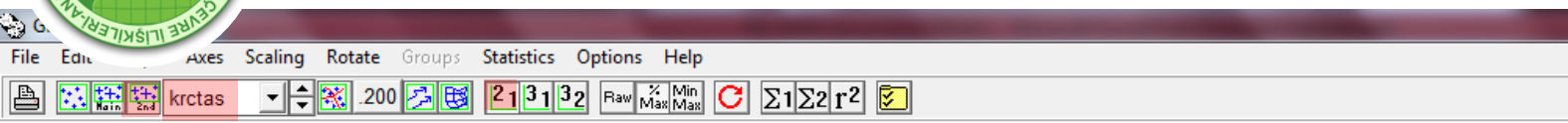
Axis:

r

yukslt	.868
radinx	-.006
egim	.087
yuztas	.473
topder	-.442
kum	.321
toz	.095
kil	-.381
pH	.037
kirec	-.222
orgmad	.308
zyyprz	.343
krctas	.639
konglo	-.400
karsk	-.382
disbky	.072
duzarz	.031
ondule	-.028
icbuky	-.088
yamkon	-.362

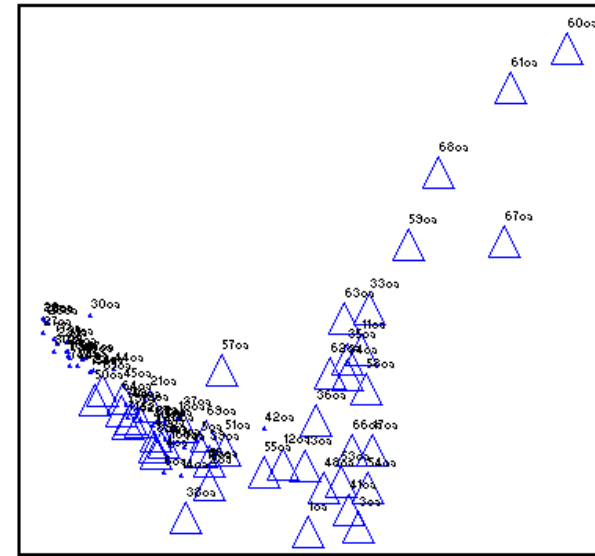
# Vejetasyon Çevre İlişkileri - Analitik Değerlendirmeler

13-19 Ocak 2014/ ANTALYA

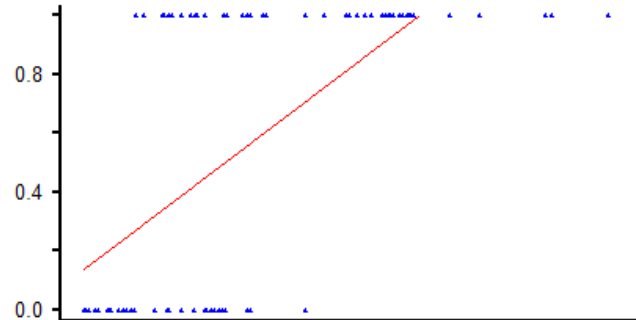


krctas  
Axis 1  
 $r = .639$   $\tau = .542$   
Axis 2  
 $r = -.075$   $\tau = -.198$

Axis 2



Axis 1



\*\*\*\*\*  
PC-ORD Version 3.  
08.01.2014, 20:27

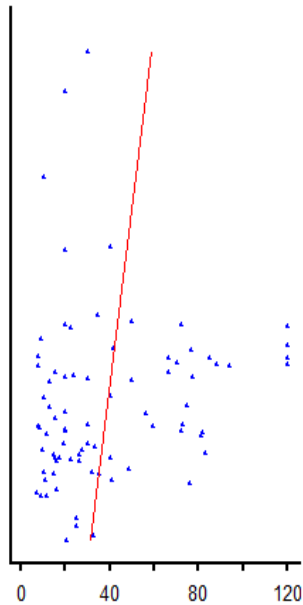
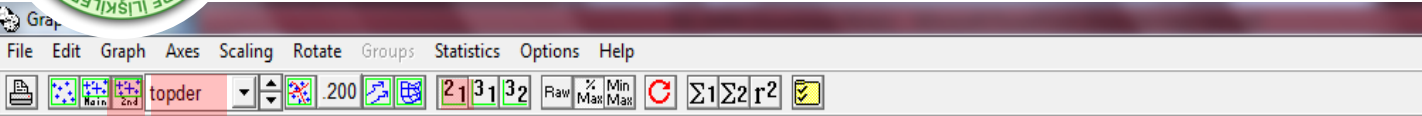
Pearson and Kendal

Axis:

	r
yukslt	.868
radinx	-.006
egim	.087
yuztas	.473
topder	-.442
kum	.321
toz	.095
kil	-.381
pH	.037
kirec	-.222
orgmad	.308
zyyprz	.343
krctas	.639
konglo	-.400
karsk	-.382
disbky	.072
duzarz	.031
ondule	-.028
icbuky	-.088
yamkon	-.362

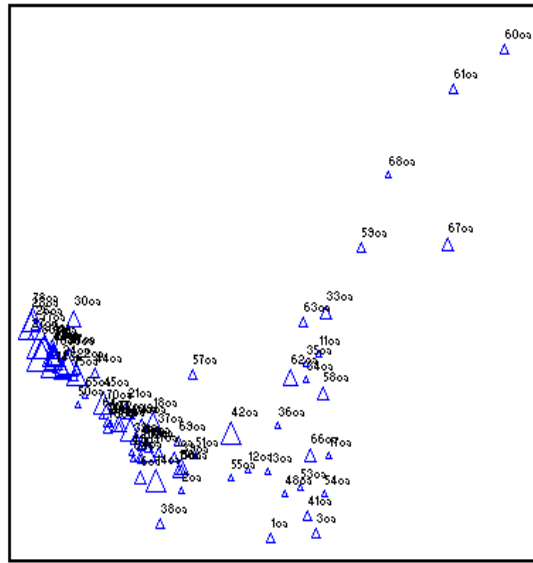
# Vejetasyon Çevre İlişkileri - Analitik Değerlendirmeler

13-19 Ocak 2014/ ANTALYA

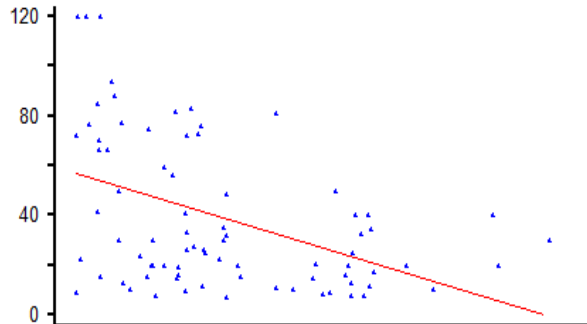


topder  
Axis 1  
 $r = -.442$   $\tau = -.280$   
Axis 2  
 $r = .157$   $\tau = .166$

Axis 2



Axis 1



Axis:	r
yukslt	.868
radinx	-.006
egim	.087
yuztas	.473
topder	<b>-.442</b>
kum	.321
toz	.095
kil	-.381
pH	.037
kirec	-.222
orgmad	.308
yzyprz	.343
krctas	.639
konglo	-.400
karsk	-.382
disbky	.072
duzarz	.031
ondule	-.028
icbuky	-.088
yamkon	-.362

# Vejetasyon Çevre İlişkileri - Analitik Değerlendirmeler

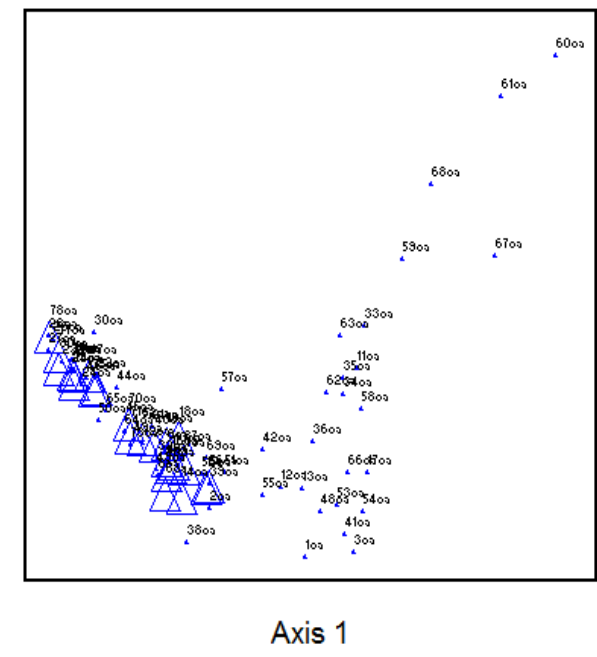
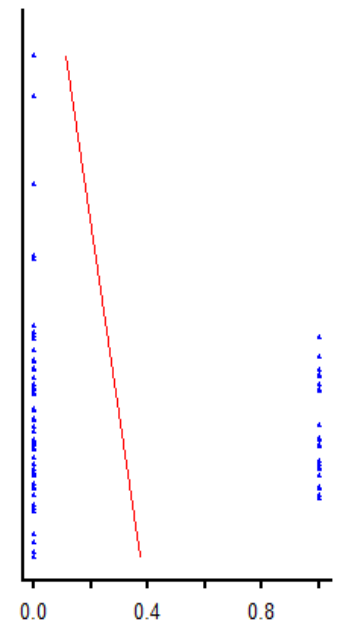
13-19 Ocak 2014/ ANTALYA



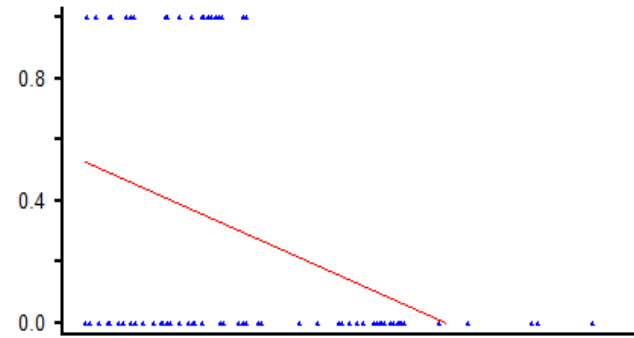
File Edit View Axes Scaling Rotate Groups Statistics Options Help  
karsk .200 21 31 32 Raw % Min Max

Axis:

r



yukslt	.868
radinx	-.006
egim	.087
yuztas	.473
topder	-.442
kum	.321
toz	.095
kil	-.381
pH	.037
kirec	-.222
orgmad	.308
zyyprz	.343
krctas	.639
konglo	-.400
karsk	<b>-.382</b>
disbky	.072
duzarz	.031
ondule	-.028
icbuky	-.088
yamkon	-.362



# Vejetasyon Çevre İlişkileri - Analitik Değerlendirmeler



13-19 Ocak 2014/ ANTALYA



İlk işlemlerin ardından Cluster, Twinspan ve Birliktelik gruplarını doğrudan çağırırız...

PC-ORD

File Edit Modify Data Summary Ordination Graph Groups Window Options Help

Open... Main Matrix F7  
Close... Second Matrix F8  
Save As... Graph File F9  
Append Results F4 Result File F10  
Import Matrix  
Export Matrix...  
Delete File  
Switch Matrix...  
Graph Selection  
Memory Requirements  
Print...  
Print Setup...  
Font...  
Dos Shell  
Exit

Graph - GRAPHROW.FIL

	q	q	q	q
10a	135.94420	-144.14320	-31.42730	
20a	33.91149	-95.49866	25.71965	
30a	187.41670	-138.69000	-54.43560	
40a	-11.37948	-63.38906	96.10078	
50a	25.48363	-61.87358	97.62743	

Open Second Matrix

Dosya adı: CLUSTE~1.WK1  
Klasör: d:\...pcorrd~1\grupan~1

CLUSTE~1.WK1  
CLUSTE~2.WK1  
TWINSP~1.WK1  
TWINSP~2.WK1  
TWINSP~3.WK1

Listelenecek Dosya Türü: \*.wk1 (Lotus 1-2-3)  
Sürücü: d:

Second - CVM\_NEW.WK1

	q	q	q	q	q
80	ornek				
20	degisken				
	yukselt	radinx	egim	yuztas	top
oa1	1462	0.0669872	95	90	20.
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

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	-.616	.379	-.609	.319	.102	.449	-.268	.072	-.260
BerCra	.627	.393	.496	.061	.004	-.043	-.175	.031	-.136
CedLib	.567	.322	.415	.488	.238	.334	.285	.081	.181
CelGlb	.090	.008	.128	-.318	.101	-.311	.047	.002	.045
CisSal	-.518	.268	-.504	.261	.068	.374	-.182	.033	-.170

Main:VVM\_P~2.WK1 Second:CVM\_NEW.WK1 Graph:GRAPHROW.FIL Result: F4 Append Results



# Vejetasyon Çevre İlişkileri - Analitik Değerlendirmeler



13-19 Ocak 2014/ ANTALYA

PC-ORD Version 3.17

File Edit Modify Data Summary Ordination **Graph** Groups Window Options Help

Main - VVM\_P-2.WK1 **Graph Ordination** Graph - GRAPHROW.FIL

	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

Second - CLUSTE-1.WK1

	Cluster_
oa1	1
oa2	2
oa3	1
oa4	3
oa5	3
oa6	3
oa7	3
oa8	3
oa9	3

Graph - GRAPHROW.FIL

	10a	20a	30a	40a	50a	60a	70a	80a	90a	100a	110a	120a	130a	140a	150a	160a	170a
10a	135.94420	-144.14320	-31.42730														
20a	33.91149	-95.49866	25.71965														
30a	187.41670	-138.69000	-54.43560														
40a	-11.37948	-63.38906	96.10078														
50a	25.48363	-61.87358	97.62743														
60a	-12.30483	-81.84863	77.21384														
70a	7.57990	-56.99589	96.86150														
80a	-21.54223	-63.30951	116.32540														
90a	-11.67360	-47.87929	78.36672														
100a	-2.78417	-52.14486	58.22860														
110a	191.03510	43.41805	-36.09476														
120a	110.45980	-74.69057	-67.64724														
130a	132.33390	-75.26316	-38.13084														
140a	4.57298	-85.58360	79.71072														
150a	30.33619	-76.29360	-29.26285														
160a	-7.22381	-54.36941	1.30842														
170a	201.56400	-59.80967	-80.41770														

Result - RESULT.FIL

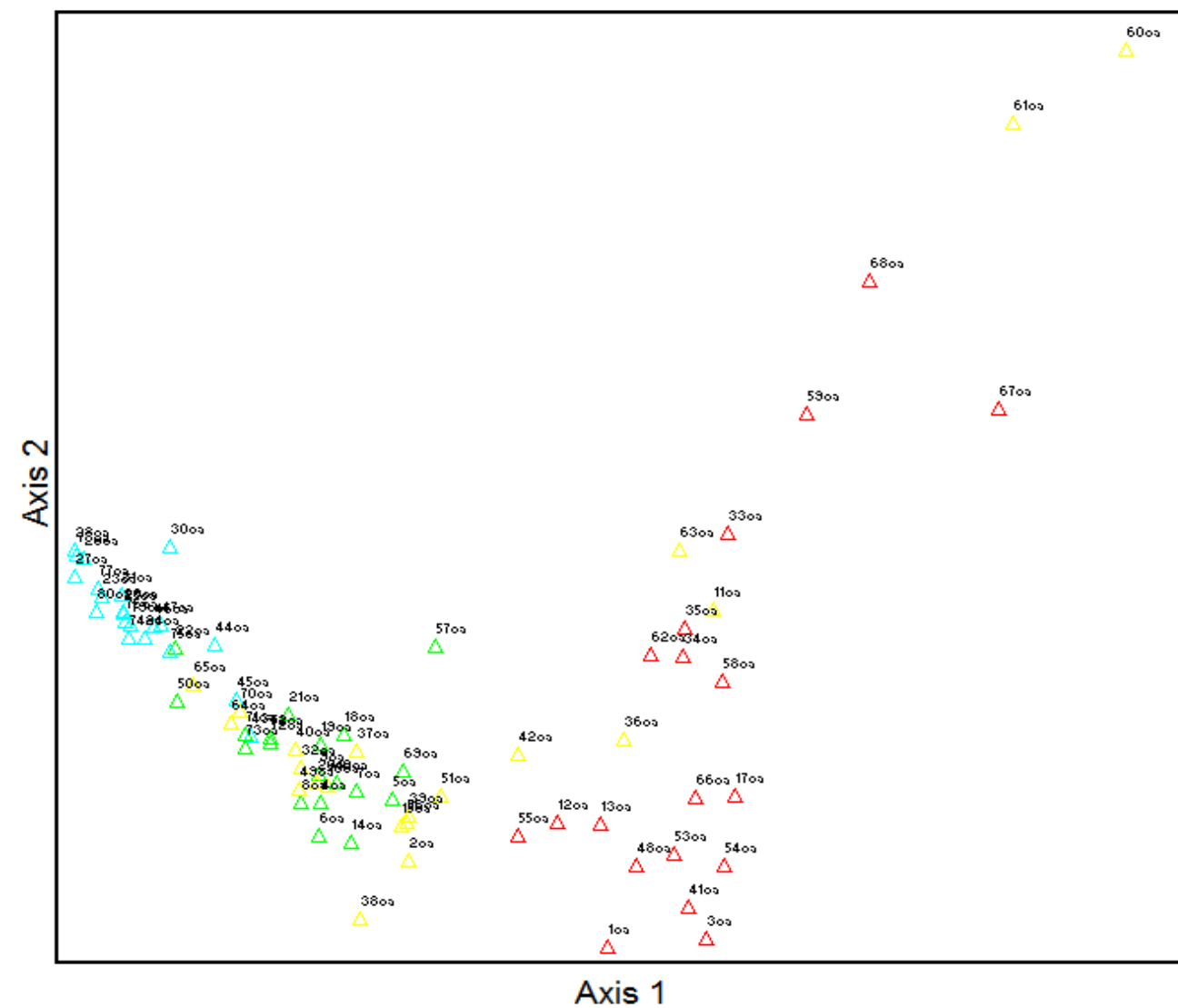
```

***** Output from Graph *****
PC-ORD Version 3.17
08.01.2014, 22:41

Pearson and Kendall Correlations with Ordination Axes  N= 80

Axis:
      r      1      2      3
      r      r-sq  tau  r      r-sq  tau  r      r-sq  tau
ArbAnd  -.616  .379  -.609  .319  .102  .449  -.268  .072  -.260
BerCra  .627  .393  .496  .061  .004  -.043  -.175  .031  -.136
CedLib  .567  .322  .415  .488  .238  .334  .285  .081  .181
CelGlb  .090  .008  .128  -.318  .101  -.311  .047  .002  .045
CisSal  -.518  .268  -.504  .261  .068  .374  -.182  .033  -.170
    
```

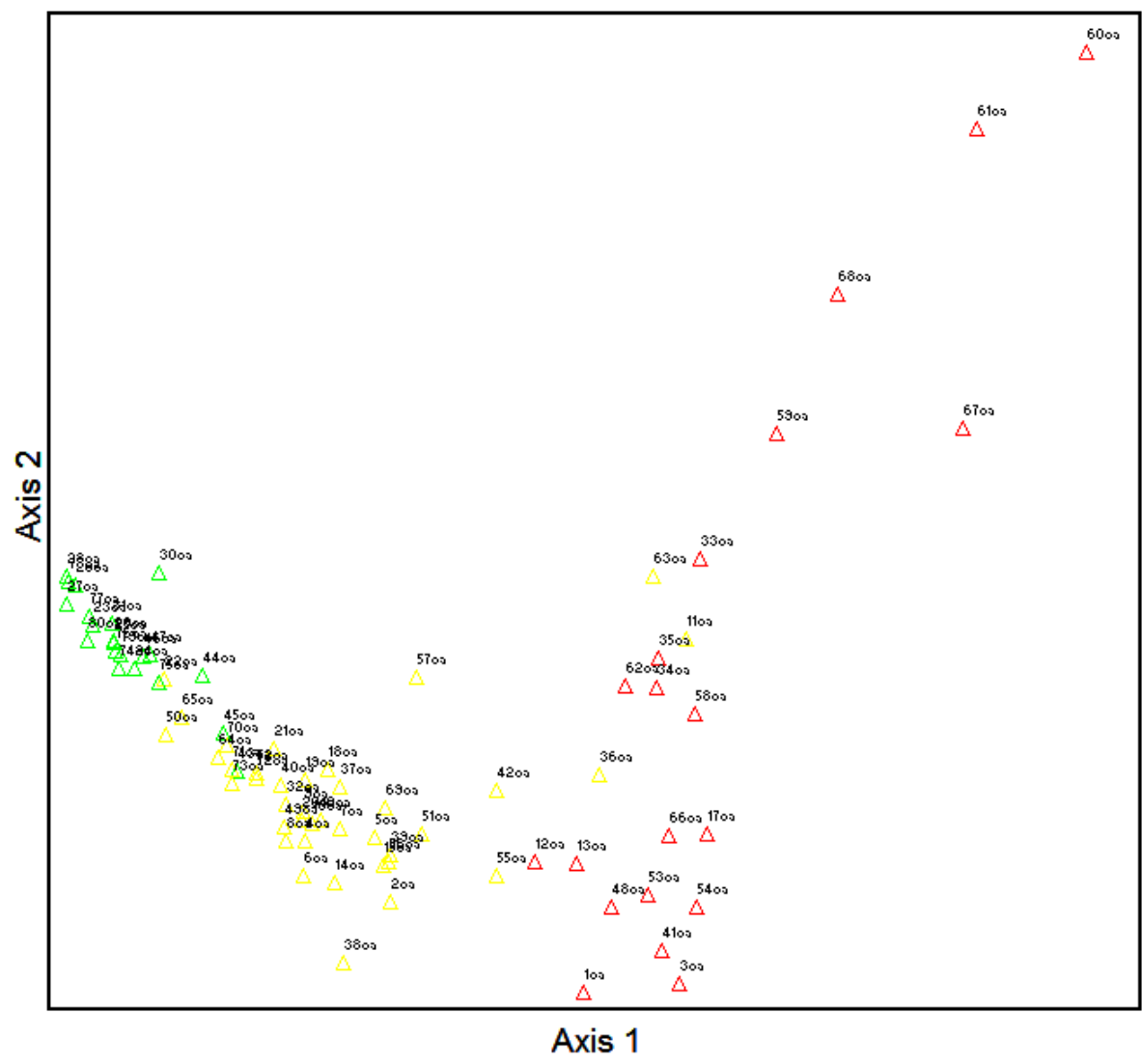
Main:VVM\_P-2.WK1 Second:CLUSTE-1.WK1 Graph:GRAPHROW.FIL Result: F4 Append Result



Cluster\_jw\_dort

- ▲ 1
- ▲ 2
- ▲ 3
- ▲ 4

<span style="color: red;">▲</span>	<span style="color: yellow;">▲</span>	<span style="color: green;">▲</span>	<span style="color: cyan;">▲</span>
BerCra	JasFru	FonPhl	ArbAnd
CedLib	QueCoc	PhlGra	CisSal
CotNum		PinNig	CraMon
DapOle		StyOff	MryCom
JunExc			NerOle
JunFoe			OleOle
PruDiv			PhyLat
RosCan			PinBru
			PisTer
			Quellx



Cluster\_jw\_uc

- 1
- 2
- 3



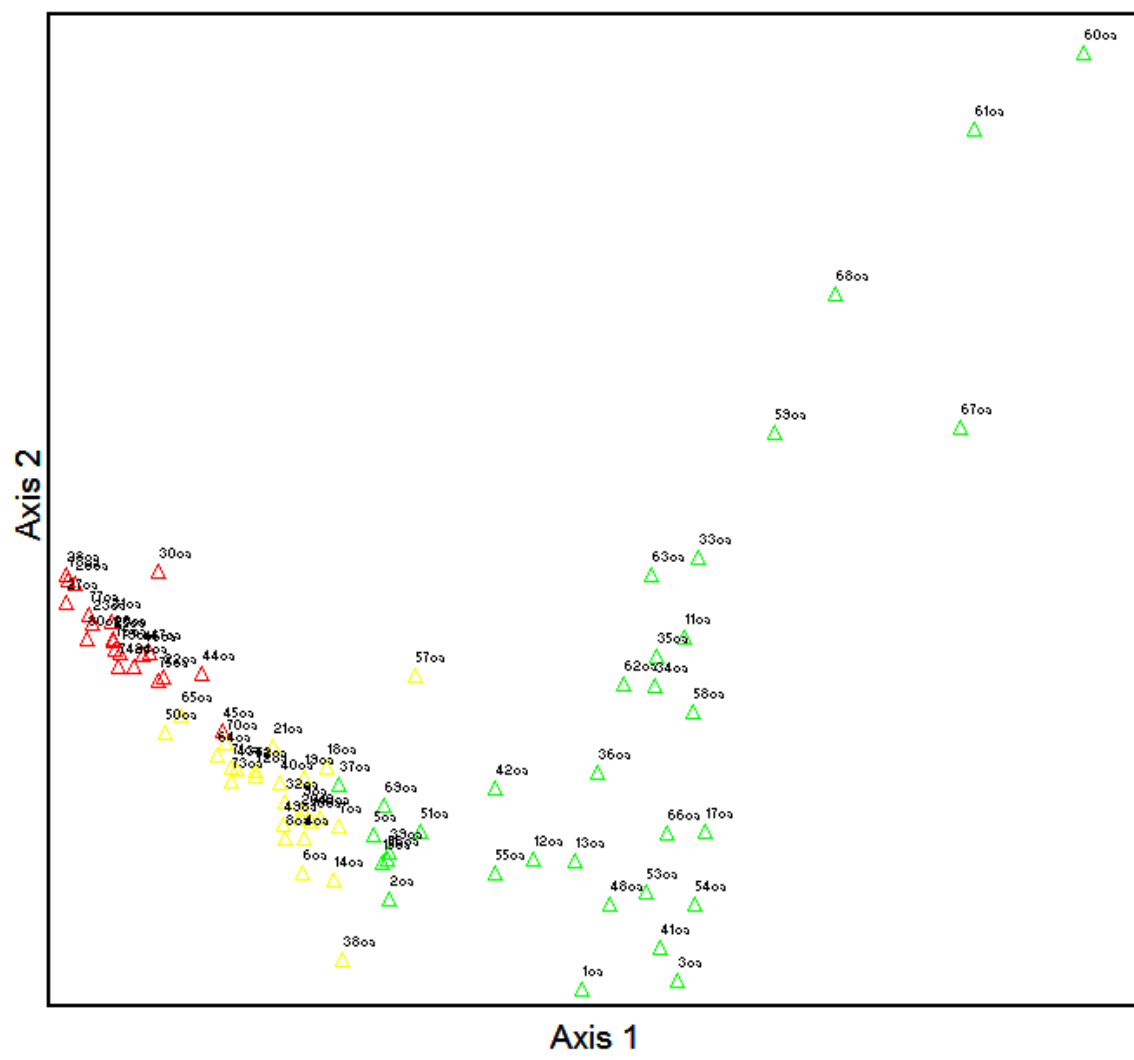
- BerCra
- CedLib
- CotNum
- DapOle
- JunExc
- PhlArm
- PruDiv
- RosCan
- SorUmb



- JasFru
- PhlGra
- QueCoc



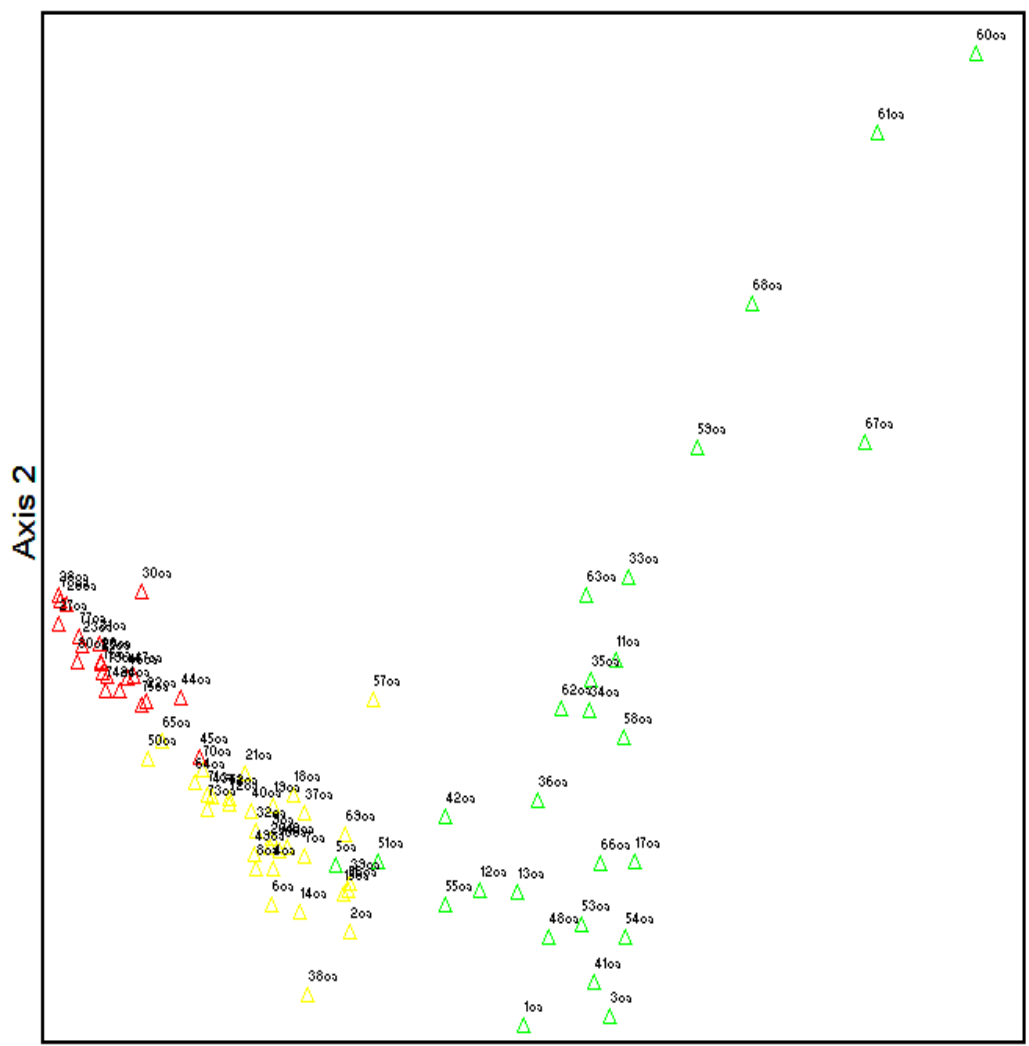
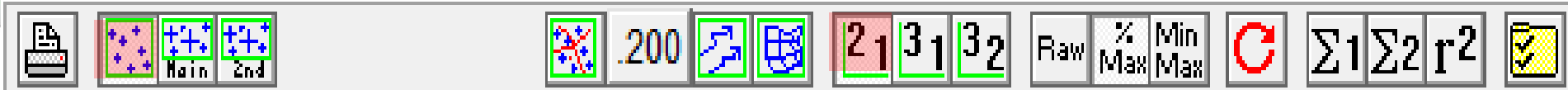
- ArbAnd
- CisSal
- CotCog
- CraMon
- FonPhl
- MryCom
- NerOle
- OleOle
- PalSpi
- PhyLat
- PinBru
- PisTer
- PlaOri
- Quellx
- StyOff
- VitAgri



grup  
 ▲ 1  
 ▲ 2  
 ▲ 3

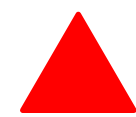
TWINSpan 1  
 Indikator

- |                                                |                  |                                      |
|------------------------------------------------|------------------|--------------------------------------|
|                                                |                  |                                      |
| PinBru<br>ArbAnd<br>MyrCom<br>PisTer<br>NerOle | PinNig<br>JasFru | BerCra<br>CedLib<br>JunExc<br>CotNum |

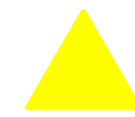


grup  
 ▲ 1  
 ▲ 2  
 ▲ 3

TWINSpan 3  
 indikator



PinBru  
 ArbAnd  
 CotCog  
 MyrCom  
 PisTer  
 NerOle

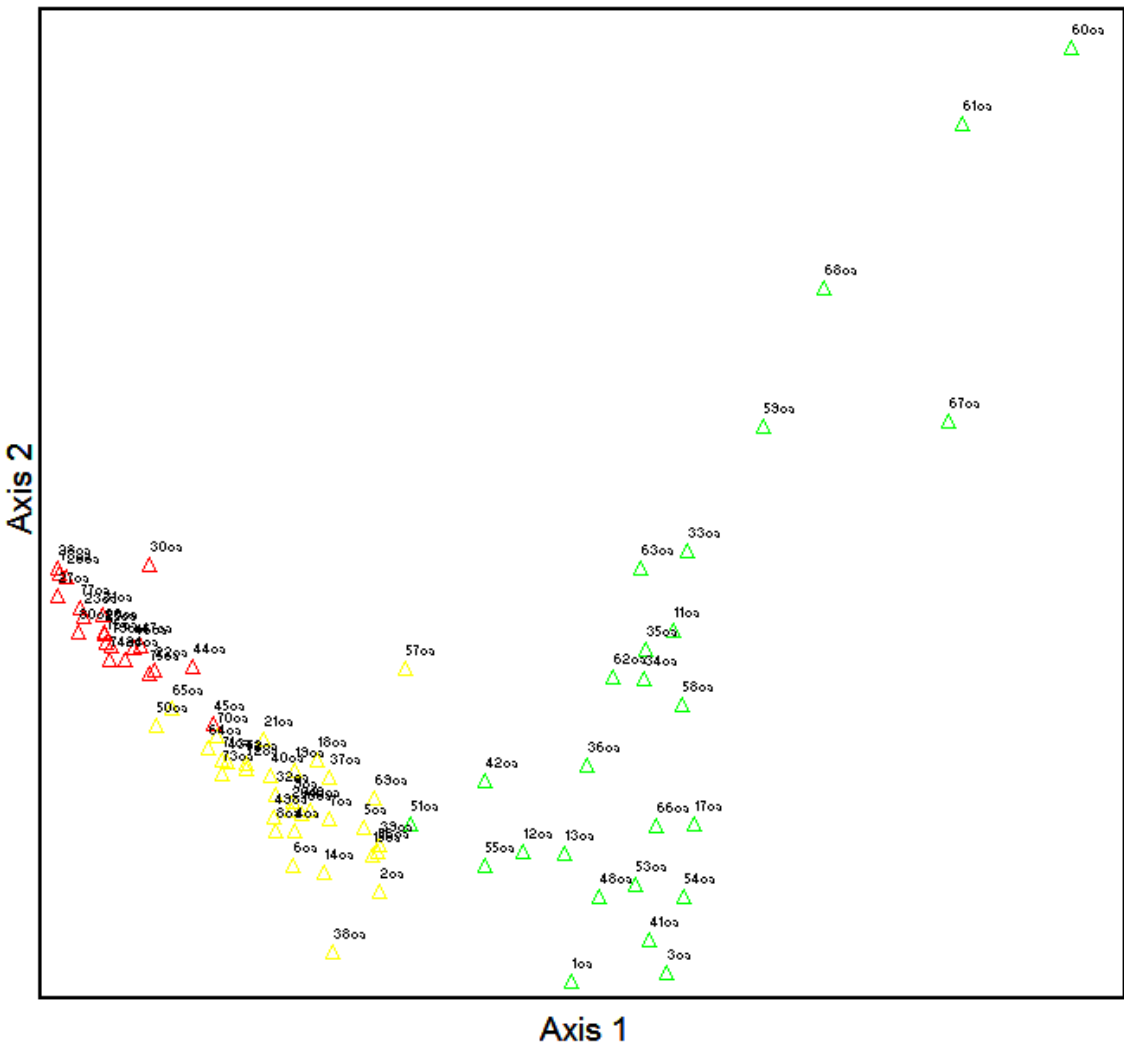


PinNig  
 JasFru  
 JunExc



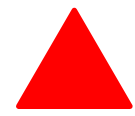
BerCra  
 CedLib  
 JunExc  
 JunCom  
 CotNum  
 DapOle  
 RosCan

21 31 32

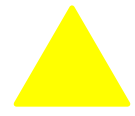


grup  
 ▲ 1  
 ▲ 2  
 ▲ 3

TWINSpan 5  
 Indikator



ArbAnd  
 CotCog  
 MryCom  
 CisSal  
 NerOle  
 PinBru  
 PisTer  
 Quellx  
 VitAgn

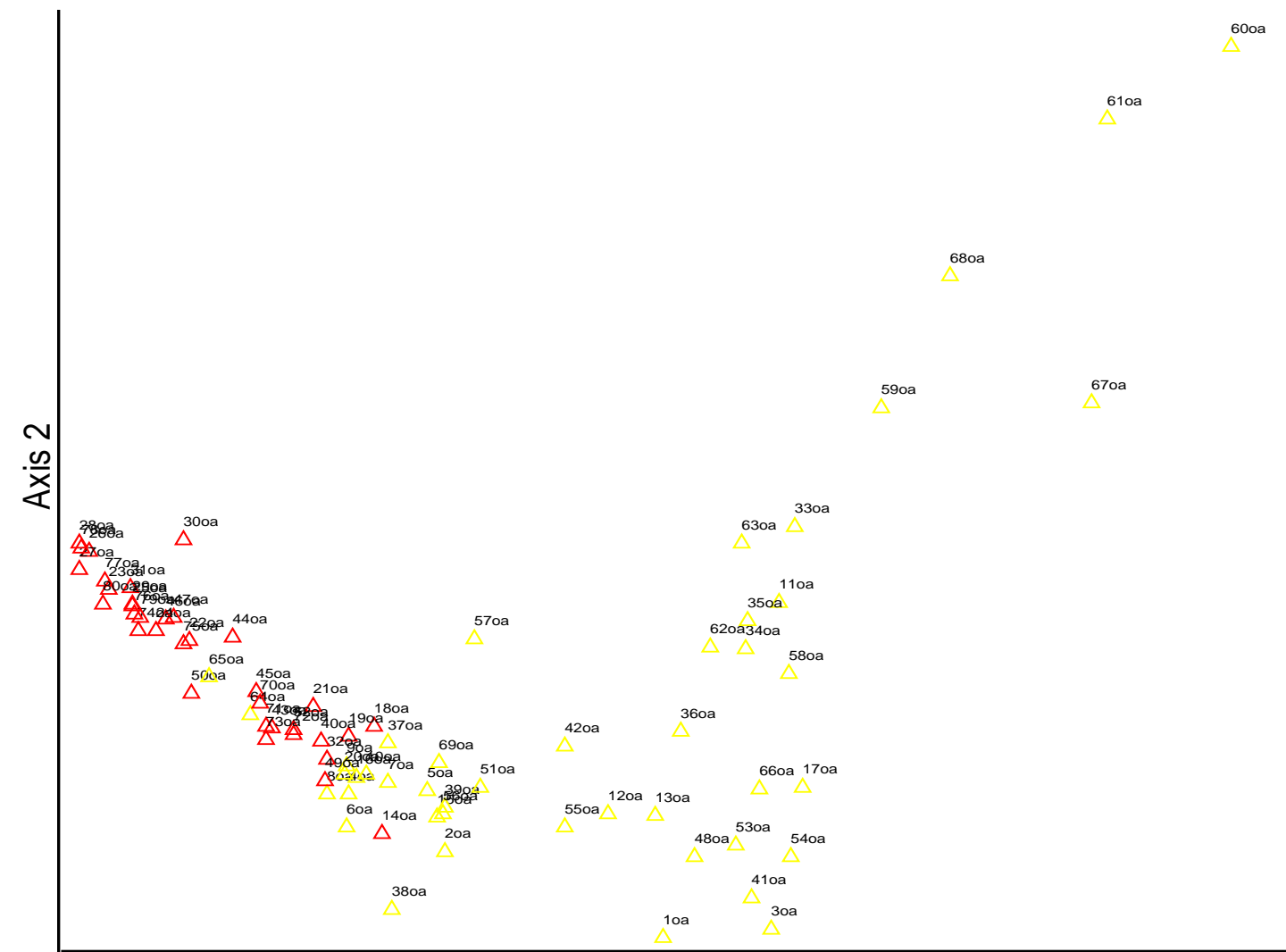


CraOri  
 JasFru  
 JunExc  
 PinNig



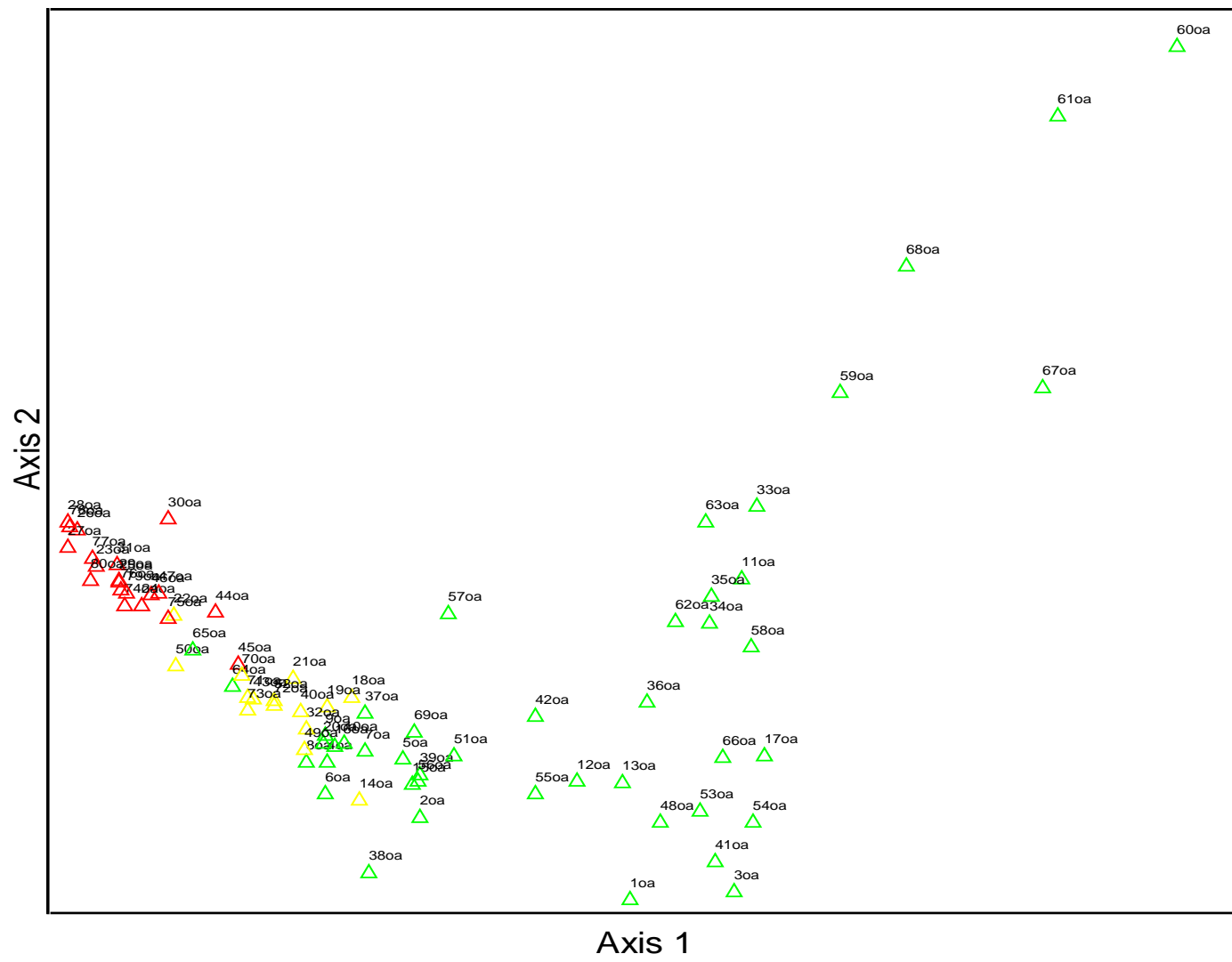
BerCra  
 CedLib  
 CotNum  
 JunCom  
 JunExc

Graph toolbar with icons for printing, zooming (Main, End), a .200 scale indicator, pan and zoom tools, coordinate boxes (21, 31, 32), Raw, % Max, Min Max, refresh, and statistical functions (Σ1, Σ2, r²).



Birlikte\_jw\_iki  
△ 1  
△ 2  
**Birliktelik 2'li ayırım**

Graph toolbar containing icons for printing, zooming (Main, 2nd), a .200 scale indicator, navigation (Home, Back), data series selection (21, 31, 32), Raw, % Max, Min Max, refresh, and statistical functions (Σ1, Σ2, r²).

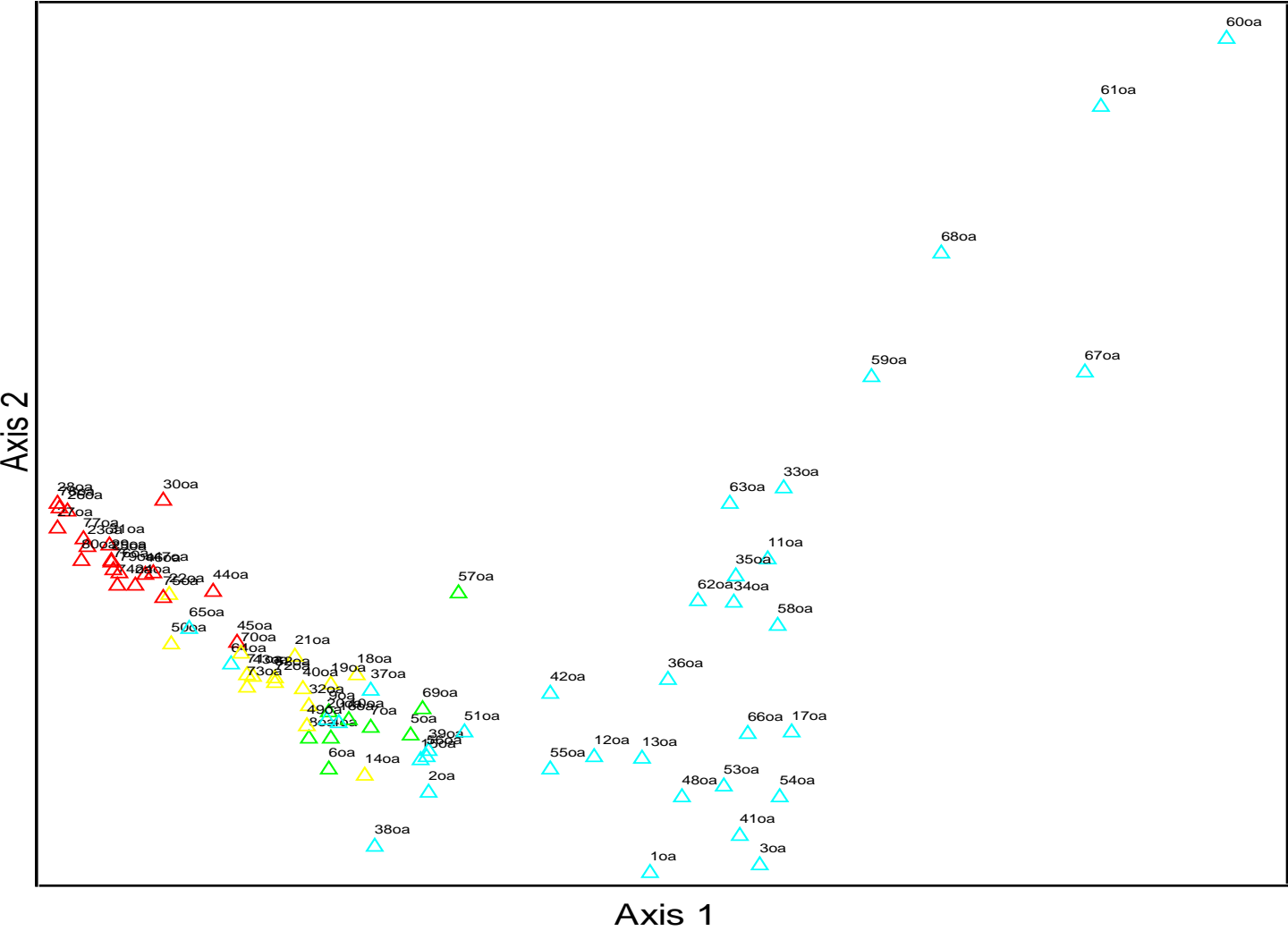


Birlikte\_jw\_uc  
▲ 1  
▲ 2  
▲ 3

Birliktelik 3'lü ayırım



Graph toolbar icons: Print, Main, End, .200, Rotate, Zoom, 21, 31, 32, Raw, % Max, Min Max, Refresh, Statistics, Legend.

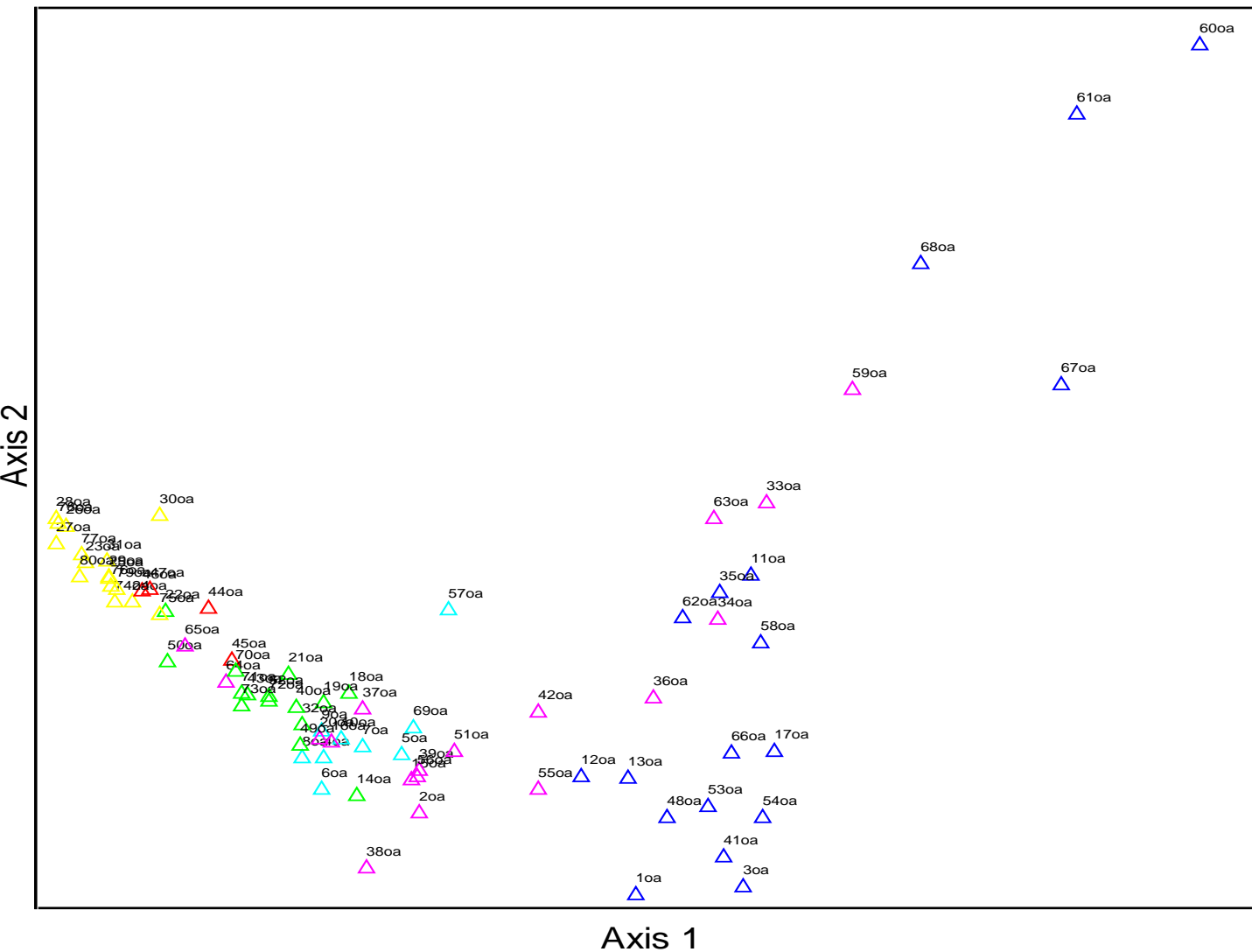


birlikte\_jw\_dort

- △ 1
- △ 2
- △ 3
- △ 4

Birliktelik 4'lü ayırım

Graph toolbar with icons for file operations, zooming (Main, End), a .200 scale indicator, navigation (Home, End), statistical values (21, 31, 32), Raw, % Max, Min Max, a refresh icon, and summation symbols ( $\Sigma 1$ ,  $\Sigma 2$ ,  $r^2$ ).



**Birlikte\_jw\_alti**

- 1 (Red triangle)
- 2 (Yellow triangle)
- 3 (Green triangle)
- 4 (Cyan triangle)
- 5 (Magenta triangle)
- 6 (Blue triangle)

**Birliktelik6'lı ayırım**



13-19 Ocak 2014/ ANTALYA

# TEŞEKKÜRLER

