

Pairwise methods comparison tables for post-hoc tests when there are significant differences.

i	hypothesis	$PNeme$	$PHolm$	$PShaf$
1	PAM_Euclidean vs Spectral_Euclidean	0	0	0
2	PAM_Euclidean vs Spectral_Manhattan	0	0	0
3	PAM_Euclidean vs Spectral_Minkowski	0	0	0
4	PAM_Euclidean vs DIANA_Manhattan	0	0	0
5	Agglomerative_Canberra vs Spectral_Euclidean	0	0	0
6	Spectral_Euclidean vs PAM_Minkowski	0	0	0
7	Agglomerative_Canberra vs Spectral_Manhattan	0.000001	0.000001	0.000001
8	Agglomerative_Canberra vs Spectral_Minkowski	0.000001	0.000001	0.000001
9	Spectral_Canberra vs Spectral_Euclidean	0.000002	0.000002	0.000002
10	DIANA_Canberra vs Spectral_Euclidean	0.000003	0.000003	0.000003
11	PAM_Canberra vs Spectral_Euclidean	0.000004	0.000003	0.000003
12	Spectral_Manhattan vs PAM_Minkowski	0.000005	0.000005	0.000005
13	PAM_Minkowski vs Spectral_Minkowski	0.000007	0.000006	0.000006
14	PAM_Euclidean vs Agglomerative_Manhattan	0.000016	0.000014	0.000014
15	PAM_Euclidean vs DIANA_Minkowski	0.000035	0.000031	0.000031
16	Spectral_Canberra vs Spectral_Manhattan	0.000045	0.000039	0.000039
17	Spectral_Canberra vs Spectral_Minkowski	0.000056	0.000049	0.000043
18	DIANA_Canberra vs Spectral_Manhattan	0.000056	0.000049	0.000043
19	PAM_Canberra vs Spectral_Manhattan	0.000065	0.000056	0.00005
20	DIANA_Canberra vs Spectral_Minkowski	0.00007	0.000059	0.000054
21	PAM_Canberra vs Spectral_Minkowski	0.000082	0.000068	0.000063
22	PAM_Euclidean vs Agglomerative_Minkowski	0.000088	0.000073	0.000068
23	Agglomerative_Canberra vs DIANA_Manhattan	0.000103	0.000084	0.000079
24	Agglomerative_Euclidean vs Spectral_Euclidean	0.000138	0.000111	0.000106
25	DIANA_Manhattan vs PAM_Minkowski	0.000436	0.000349	0.000334
26	Agglomerative_Euclidean vs Spectral_Manhattan	0.00171	0.001354	0.001311
27	Agglomerative_Euclidean vs Spectral_Minkowski	0.002084	0.001632	0.001598
28	Spectral_Canberra vs DIANA_Manhattan	0.002705	0.002097	0.002074
29	DIANA_Canberra vs DIANA_Manhattan	0.003284	0.002517	0.002517
30	PAM_Canberra vs DIANA_Manhattan	0.003732	0.00283	0.00283
31	DIANA_Euclidean vs Spectral_Euclidean	0.00481	0.003608	0.003247
32	Agglomerative_Canberra vs Agglomerative_Manhattan	0.012849	0.00953	0.008673
33	PAM_Euclidean vs PAM_Manhattan	0.012849	0.00953	0.008673
34	Spectral_Euclidean vs PAM_Manhattan	0.016295	0.011814	0.010999
35	Agglomerative_Canberra vs DIANA_Minkowski	0.02313	0.016577	0.015613
36	Agglomerative_Manhattan vs PAM_Minkowski	0.040808	0.028906	0.027546
37	DIANA_Euclidean vs Spectral_Manhattan	0.040808	0.028906	0.027546
38	DIANA_Euclidean vs PAM_Euclidean	0.040808	0.028906	0.027546
39	Agglomerative_Canberra vs Agglomerative_Minkowski	0.045606	0.031164	0.030784
40	DIANA_Euclidean vs Spectral_Minkowski	0.048197	0.032533	0.032533
41	Agglomerative_Euclidean vs DIANA_Manhattan	0.056821	0.037881	0.037407
42	DIANA_Minkowski vs PAM_Minkowski	0.070569	0.046458	0.046458
43	PAM_Manhattan vs Spectral_Manhattan	0.119621	0.077753	0.077753
44	Agglomerative_Minkowski vs PAM_Minkowski	0.132619	0.085097	0.079572
45	PAM_Manhattan vs Spectral_Minkowski	0.139598	0.088412	0.083759
46	Spectral_Canberra vs Agglomerative_Manhattan	0.17104	0.1069	0.102624

Table 1: Lowest adjusted p -values (AMI measure) of clustering methods for all datasets

i	hypothesis	p_{Neme}	p_{Holm}	p_{Shaf}
1	PAM_Euclidean vs Spectral_Manhattan	0	0	0
2	PAM_Euclidean vs Spectral_Minkowski	0	0	0
3	PAM_Euclidean vs Spectral_Euclidean	0	0	0
4	PAM_Euclidean vs DIANA_Manhattan	0.000035	0.000035	0.000031
5	Spectral_Manhattan vs PAM_Minkowski	0.000048	0.000047	0.000042
6	PAM_Euclidean vs Agglomerative_Minkowski	0.000088	0.000085	0.000077
7	PAM_Minkowski vs Spectral_Minkowski	0.000148	0.000141	0.00013
8	PAM_Euclidean vs Agglomerative_Manhattan	0.000214	0.000201	0.000187
9	Spectral_Euclidean vs PAM_Minkowski	0.000761	0.00071	0.000666
10	PAM_Canberra vs Spectral_Manhattan	0.002535	0.002345	0.002218
11	Spectral_Canberra vs PAM_Euclidean	0.003501	0.003209	0.003063
12	PAM_Euclidean vs DIANA_Minkowski	0.003732	0.00339	0.003266
13	PAM_Canberra vs Spectral_Minkowski	0.006575	0.005918	0.005754
14	DIANA_Canberra vs Spectral_Manhattan	0.007913	0.007056	0.006924
15	PAM_Manhattan vs Spectral_Manhattan	0.007913	0.007056	0.006924
16	Agglomerative_Canberra vs Spectral_Manhattan	0.011396	0.009972	0.009972
17	DIANA_Euclidean vs Spectral_Manhattan	0.016295	0.014122	0.012493
18	DIANA_Canberra vs Spectral_Minkowski	0.019432	0.016679	0.014898
19	PAM_Manhattan vs Spectral_Minkowski	0.019432	0.016679	0.014898
20	PAM_Canberra vs Spectral_Euclidean	0.025953	0.021844	0.019897
21	Agglomerative_Canberra vs Spectral_Minkowski	0.027483	0.022903	0.02107
22	DIANA_Euclidean vs Spectral_Minkowski	0.038591	0.031837	0.029586
23	Agglomerative_Euclidean vs PAM_Euclidean	0.045606	0.037245	0.034964
24	DIANA_Manhattan vs PAM_Minkowski	0.063349	0.051207	0.048567
25	DIANA_Canberra vs Spectral_Euclidean	0.070569	0.056455	0.054103
26	Spectral_Euclidean vs PAM_Manhattan	0.070569	0.056455	0.054103
27	Agglomerative_Canberra vs Spectral_Euclidean	0.097089	0.076053	0.074435
28	Agglomerative_Minkowski vs PAM_Minkowski	0.119621	0.092706	0.091709
29	DIANA_Euclidean vs Spectral_Euclidean	0.132619	0.101675	0.101675

Table 2: Lowest adjusted p -values (Jaccard measure) of clustering methods for all datasets

i	hypothesis	p_{Neme}	p_{Holm}	p_{Shaf}
1	Agglomerative_Canberra vs Spectral_Euclidean	0.000025	0.000025	0.000025
2	Agglomerative_Canberra vs Spectral_Manhattan	0.000399	0.000396	0.000349
3	Agglomerative_Canberra vs Spectral_Minkowski	0.000975	0.000959	0.000853
4	PAM_Euclidean vs Spectral_Euclidean	0.001088	0.001061	0.000952
5	Agglomerative_Canberra vs DIANA_Manhattan	0.001213	0.001172	0.001061
6	Agglomerative_Euclidean vs Spectral_Euclidean	0.008672	0.008311	0.007588
7	PAM_Euclidean vs Spectral_Manhattan	0.011627	0.011046	0.010174
8	Spectral_Euclidean vs PAM_Minkowski	0.022628	0.021308	0.019799
9	PAM_Euclidean vs Spectral_Minkowski	0.024834	0.023178	0.02173
10	PAM_Euclidean vs DIANA_Manhattan	0.029865	0.027625	0.026132
11	Agglomerative_Canberra vs DIANA_Minkowski	0.029865	0.027625	0.026132
12	Agglomerative_Euclidean vs Spectral_Manhattan	0.07281	0.066136	0.063709
13	PAM_Canberra vs Spectral_Euclidean	0.111492	0.100343	0.097555
14	Agglomerative_Euclidean vs Spectral_Minkowski	0.143079	0.127578	0.125194

Table 3: Lowest adjusted p -values (AMI measure) of clustering methods for 2 crops

i	hypothesis	p_{Neme}	p_{Holm}	p_{Shaf}
1	PAM_Euclidean vs Spectral_Manhattan	0.000626	0.000626	0.000626
2	PAM_Euclidean vs Spectral_Minkowski	0.001864	0.001849	0.001631
3	Agglomerative_Canberra vs Spectral_Manhattan	0.007856	0.007725	0.006874
4	PAM_Euclidean vs Spectral_Euclidean	0.01055	0.010286	0.009231
5	Spectral_Manhattan vs PAM_Minkowski	0.017064	0.016495	0.014931
6	Agglomerative_Canberra vs Spectral_Minkowski	0.020607	0.019748	0.018031
7	PAM_Minkowski vs Spectral_Minkowski	0.042923	0.040777	0.037558
8	PAM_Canberra vs Spectral_Manhattan	0.051297	0.048305	0.044885
9	PAM_Euclidean vs Agglomerative_Minkowski	0.051297	0.048305	0.044885
10	Spectral_Canberra vs PAM_Euclidean	0.079369	0.073417	0.069448
11	Agglomerative_Canberra vs Spectral_Euclidean	0.094167	0.08632	0.082396
12	PAM_Canberra vs Spectral_Minkowski	0.121221	0.110109	0.106068

Table 4: Lowest adjusted p -values (Jaccard measure) of clustering methods for 2 crops

i	hypothesis	p_{Neme}	p_{Holm}	p_{Shaf}
1	PAM_Euclidean vs Spectral_Minkowski	0.000782	0.000782	0.000782
2	PAM_Euclidean vs Spectral_Manhattan	0.001864	0.001849	0.001631
3	PAM_Euclidean vs Spectral_Euclidean	0.002304	0.002266	0.002016
4	PAM_Euclidean vs DIANA_Manhattan	0.007856	0.00766	0.006874
5	PAM_Euclidean vs Agglomerative_Manhattan	0.024834	0.024006	0.02173
6	DIANA_Canberra vs Spectral_Minkowski	0.029865	0.028621	0.026132
7	PAM_Minkowski vs Spectral_Minkowski	0.051297	0.048733	0.044885
8	DIANA_Canberra vs Spectral_Manhattan	0.061178	0.057609	0.053531
9	PAM_Euclidean vs DIANA_Minkowski	0.07281	0.067956	0.063709
10	PAM_Euclidean vs Agglomerative_Minkowski	0.07281	0.067956	0.063709
11	DIANA_Canberra vs Spectral_Euclidean	0.07281	0.067956	0.063709
12	PAM_Canberra vs Spectral_Minkowski	0.10249	0.093095	0.089679
13	Spectral_Manhattan vs PAM_Minkowski	0.10249	0.093095	0.089679
14	Spectral_Euclidean vs PAM_Minkowski	0.121221	0.108089	0.106068

Table 5: Lowest adjusted p -values (AMI measure) of clustering methods for 3 crops

i	hypothesis	p_{Neme}	p_{Holm}	p_{Shaf}
1	PAM-R-Euclidean vs Spectral-Minkowski	0.000124	0.000124	0.000124
2	PAM_Euclidean vs Spectral_Manhattan	0.000626	0.000621	0.000548
3	PAM_Euclidean vs Spectral_Euclidean	0.007856	0.007725	0.006874
4	PAM_Minkowski vs Spectral_Minkowski	0.007856	0.007725	0.006874
5	PAM_Euclidean vs DIANA-R-Manhattan	0.007856	0.007725	0.006874
6	Spectral_Canberra vs PAM-R-Euclidean	0.011627	0.011143	0.010174
7	Spectral_Manhattan vs PAM-R-Minkowski	0.029865	0.028372	0.026132
8	PAM_Euclidean vs Agglomerative-R-Manhattan	0.029865	0.028372	0.026132
9	Agglomerative_Euclidean vs PAM-R-Euclidean	0.07281	0.067956	0.063709
10	PAM_Euclidean vs DIANA-R-Minkowski	0.10249	0.094803	0.089679

Table 6: Lowest adjusted p -values (Jaccard measure) of clustering methods for 3 crops

i	hypothesis	p_{Neme}	p_{Holm}	p_{Shaf}
1	PAM_Euclidean vs Spectral_Euclidean	0.002201	0.002201	0.002201
2	Spectral_Canberra vs Spectral_Euclidean	0.009298	0.00922	0.008136
3	PAM_Euclidean vs Spectral_Minkowski	0.009298	0.00922	0.008136
4	PAM_Euclidean vs Spectral_Manhattan	0.014034	0.013684	0.01228
5	DIANA_Canberra vs Spectral_Euclidean	0.035359	0.03418	0.030939
6	Spectral_Canberra vs Spectral_Minkowski	0.035359	0.03418	0.030939
7	Spectral_Canberra vs Spectral_Manhattan	0.051723	0.049137	0.045258
8	DIANA_Canberra vs Spectral_Minkowski	0.121149	0.114082	0.106005

Table 7: Lowest adjusted p -values (AMI measure) of clustering methods for 4 crops

i	hypothesis	p_{Neme}	p_{Holm}	p_{Shaf}
1	Agglomerative_Canberra vs Agglomerative_Manhattan	0.00156	0.00156	0.00156
2	Agglomerative_Canberra vs Agglomerative_Minkowski	0.007624	0.006353	0.003812
3	Agglomerative_Euclidean vs Agglomerative_Manhattan	0.031348	0.020898	0.015674
4	Agglomerative_Euclidean vs Agglomerative_Minkowski	0.108713	0.054357	0.054357
5	Agglomerative_Canberra vs Agglomerative_Euclidean	2.340925	0.780308	0.780308

Table 8: Lowest adjusted p -values (AMI measure) of distance measures for Agglomerative method

i	hypothesis	p_{Neme}	p_{Holm}	p_{Shaf}
1	DIANA_Canberra vs DIANA_Manhattan	0	0	0
2	DIANA_Euclidean vs DIANA_Manhattan	0	0	0
3	DIANA_Canberra vs DIANA_Minkowski	0.000268	0.000179	0.000134
4	DIANA_Euclidean vs DIANA_Minkowski	0.022371	0.011185	0.011185
5	DIANA_Manhattan vs DIANA_Minkowski	0.043462	0.014487	0.014487
6	DIANA_Canberra vs DIANA_Euclidean	1.424212	0.237369	0.237369

Table 9: Lowest adjusted p -values (AMI measure) of distance measures for DIANA method

i	hypothesis	p_{Neme}	p_{Holm}	p_{Shaf}
1	DIANA_Euclidean vs DIANA_Manhattan	0.000014	0.000014	0.000014
2	DIANA_Canberra vs DIANA_Manhattan	0.000064	0.000053	0.000032
3	DIANA_Euclidean vs DIANA_Minkowski	0.043462	0.028975	0.021731
4	DIANA_Canberra vs DIANA_Minkowski	0.108713	0.054357	0.054357
5	DIANA_Manhattan vs DIANA_Minkowski	0.247548	0.082516	0.082516
6	DIANA_Canberra vs DIANA_Euclidean	4.483572	0.747262	0.747262

Table 10: Lowest adjusted p -values (Jaccard measure) of distance measures for DIANA method

i	hypothesis	p_{Neme}	p_{Holm}	p_{Shaf}
1	PAM_Euclidean vs PAM_Manhattan	0	0	0
2	PAM_Manhattan vs PAM_Minkowski	0.001021	0.000851	0.000511
3	PAM_Canberra vs PAM_Manhattan	0.002358	0.001572	0.001179
4	PAM_Canberra vs PAM_Euclidean	0.005212	0.002606	0.002606
5	PAM_Euclidean vs PAM_Minkowski	0.011033	0.003678	0.003678
6	PAM_Canberra vs PAM_Minkowski	4.979378	0.829896	0.829896

Table 11: Lowest adjusted p -values (AMI measure) of distance measures for PAM method

i	hypothesis	p_{Neme}	p_{Holm}	p_{Shaf}
1	PAM_Euclidean vs PAM_Manhattan	0.000002	0.000002	0.000002
2	PAM_Canberra vs PAM_Euclidean	0.000104	0.000087	0.000052
3	PAM_Euclidean vs PAM_Minkowski	0.015795	0.01053	0.007897
4	PAM_Manhattan vs PAM_Minkowski	0.190118	0.095059	0.095059
5	PAM_Canberra vs PAM_Minkowski	1.184374	0.394791	0.394791

Table 12: Lowest adjusted p -values (Jaccard measure) of distance measures for PAM method

i	hypothesis	p_{Neme}	p_{Holm}	p_{Shaf}
1	Spectral_Canberra vs Spectral_Euclidean	0.000011	0.000011	0.000011
2	Spectral_Canberra vs Spectral_Minkowski	0.000661	0.000551	0.000331
3	Spectral_Canberra vs Spectral_Manhattan	0.009184	0.006123	0.004592
4	Spectral_Euclidean vs Spectral_Manhattan	0.64274	0.32137	0.32137

Table 13: Lowest adjusted p -values (AMI measure) of distance measures for Spectral method