

Supplementary Table S1. List of the pumpkin genotypes selected for the study

Sr. no.	Genotype	Source	Sr. no.	Genotype	Source
1.	Saras	KAU, Kerala	18.	GPPK69	MVRS, AAU, (Gujarat)
2.	Ambili	KAU, Kerala	19.	GPPK 90	
3.	Anand Pumpkin 1	AAU, Anand	20.	GPPK 95	
4.	Pusa Vikas	IARI, Delhi	21.	GPPK 100	
5.	Pusa Vishwas	IARI, Delhi	22.	GPPK 105	
6.	Azad Pumpkin 1	CSAUAT, Kanpur	23.	GPPK 107	
7.	Varanasi local	IIVR, Varanasi	24.	GPPK 109	
8.	Kasha Harit	IIVR, Varanasi	25.	GPPK 113	
9.	Arka Chandan	IIHR, Bangalore	26.	GPPK 115	
10.	GPPK 2	MVRS, AAU, (Gujarat)	27.	GPPK 126	
11.	GPPK 18		28.	GPPK 133	
12.	GPPK 30		29.	GPPK 139	
13.	GPPK 33		30.	GPPK 141	
14.	GPPK 48		31.	GPPK 143	
15.	GPPK 50		32.	GPPK 148	
16.	GPPK 56		33.	GPPK 150	
17.	GPPK 59		34.	GPPK 201	

Supplementary Table S2. Qualitative and quantitative analysis of genomic DNA

Sr. no.	Genotypes	Concentration of stock solution (ng/ μ L)	Preparation of working solution (30 ng/ μ L, 100 μ L)	
			Stock solution taken (μ L)	Water (nuclease free) added (μ L)
1.	Saras	788.1	3.8	96.2
2.	Ambili	1124.4	2.7	97.3
3.	Anand Pumpkin 1	1367.0	2.2	97.8
4.	Pusa Vikas	981.6	3.0	97.0
5.	Pusa Vishwas	542.7	5.5	94.5
6.	Azad Pumpkin 1	938.3	3.2	96.8
7.	Varanasi local	1200.8	2.5	97.5

8.	Kasha Harit	510.0	6.0	94.0
9.	Arka Chandan	1221.4	2.5	97.5
10.	GPPK 2	2574.9	2.0	98.0
11.	GPPK 18	1196.5	2.5	97.5
12.	GPPK 30	1937.1	1.5	98.5
13.	GPPK 33	888.4	3.4	96.6
14.	GPPK 48	847.2	3.5	96.5
15.	GPPK 50	930.0	3.2	96.8
16.	GPPK 56	1231.0	2.4	97.6
17.	GPPK 59	1343.8	2.2	97.8
18.	GPPK69	1036.5	2.9	97.1
19.	GPPK 90	1345.0	2.2	97.8
20.	GPPK 95	944.0	3.2	96.8
21.	GPPK 100	1204.0	2.5	97.5
22.	GPPK 105	1682.4	1.8	98.2
23.	GPPK 107	1633.9	1.8	98.2
24.	GPPK 109	1833.8	1.6	98.4
25.	GPPK 113	1872.9	1.6	98.4
26.	GPPK 115	1621.1	1.9	98.1
27.	GPPK 126	1944.0	1.5	98.5
28.	GPPK 133	1330.2	2.3	97.7
29.	GPPK 139	1913.7	1.6	98.4
30.	GPPK 141	2075.3	1.5	98.5
31.	GPPK 143	1945.6	1.5	98.5
32.	GPPK 148	2056.6	1.5	98.5
33.	GPPK 150	2046.0	1.5	98.5
34.	GPPK 201	1529.0	2.0	98.0

Supplementary Table S3. List of SSR primers with their sequences

Sr. No.	SSR Primers	Primer Sequences (5'-3')		T _m	Sr. No.			
1	CMTm9	F	GCCCAGAAGACAAAAGTTTCG	57.3	14	F	CCGCTCTCACCTCTTCTATG	59.4
		R	TTTTTGTGTGCGTGTGTGG	54.5		R	AGAGGTGGGAAGAGAGAAGG	59.4
2	CMTm11	F	TGGAAGGATTCTCCCACAGT	57.3	15	F	CCCTAGAATTAGTGGGCAAT	55.3
		R	TACAATTTGACGTCCGCAAG	55.6		R	TAGGCCTAAAAAGACCCAAT	53.2
3	CMTm25	F	TGAAGCTTTCAGAAATGAATGTG	55.3	16	F	AAGAATCAGAGCATGAGAATTGG	57.1
		R	CTGACGTCGCTACTCATAGCA	59.8		R	ATCTAATATGCCGCGCTCAC	57.3
4	CMTm32	F	GGGGGTTTTGTACATATGAGGA	58.4	17	F	CTCTCCCCCTCCTCCACTC	63.1
		R	CAGCCAAACCCTTCATTGAT	55.3		R	GCGTTCTGCATTGTGGAAGT	57.3
5	CMTm35	F	CATCAGGTTATTGAGTTTTACTCAGAC	60.4	18	F	TAAGTTGTGGGTGGGGAAAC	57.3
		R	TCGTCTGCCCAATAATTC	54.5		R	TCCCATCCTCTACTGTTGCAC	59.8
6	CMTm39	F	ATCTTTGTGCTTCTAACCTTTTTTC	55.9	19	F	AATACGACGGCGTTTCACTC	57.3
		R	TAAAGCTCGAAAAAGCAACC	53.2		R	CCTACAGCCGTGGATGCT	58.2
7	CMTm48	F	AAGCCTTTGGGGACCTTTAC	57.3	20	F	AGAGCCCACTGTGATGACCT	59.4
		R	TTGAAACCTTCAAACAAGAAATTG	54.2		R	ACCCACCAAATTAATGCAG	55.3
8	CMTm54	F	GTGTGGATGCAAATGGTGAG	57.3	21	F	GAAGCTGCCGGAAGTTAGC	58.8
		R	GGGAATCGAGGGTTTTGAAT	55.3		R	GGGACCACCTCTTCTCTTC	61.4
9	CMTm56	F	TTTCTCCAATGCCAATCACA	53.2	22	F	ACTTTCCGGAAGGAGTGAT	57.3
		R	CGCCGTTGAGTCAATTCAG	56.7		R	AGTGCCGCTTCAAAACAAC	55.3
10	CMTm63	F	GCAGAAGATACCGTCGGAGT	59.4	23	F	CAAATTCAGACGCTTCTTTTGG	56.5
		R	AAGGTGAACGGGAATGTGAG	57.3		R	AGAATTGAGCAAAAAGGAGATGG	57.1
11	CMTm64	F	CGCAGCAAGCTGTGAGAC	58.2	24	F	TTCGAGTTTAATTCCCTCTTCG	56.5
		R	TGAAGGAGGTAAAGCCCTCTC	59.8			CCATTTCTTTTGCCTCTCG	55.3
12	CMTm73	F	ATGCTCAGACATCCATGCAC	57.3	25		TGCCTTCCTCCCTGATCTA	57.3
		R	GCGAAAGATTACCGATGCTC	57.3			ATCAATCAGCTGTGCGTTTG	55.3
13	CMTm80	F	GGCCTAATGGGTGTGAAGA	57.3	-			
		R	AGTGGAATCCATTTGTTCGTG	55.9				

Supplementary Table S4. List of SRAP primers with their sequences

Sr. No.	SRAP Primers		Primer Sequences (5'-3')	T _m	Sr. No.	SRAP Primers		Primer Sequences (5'-3')	T _m
1	me1	F	TGAGTCCAAACCGGATA	50.4	16	me3	F	TGAGTCCAAACCGGAAT	50.4
	em1	R	GACTGCGTACGAATTAAT	49.1		em4	R	GACTGCGTACGAATTTGA	51.4
2	me1	F	TGAGTCCAAACCGGATA	50.4	17	me3	F	TGAGTCCAAACCGGAAT	50.4
	em2	R	GACTGCGTACGAATTTGC	53.7		em5	R	GACTGCGTACGAATTAAC	51.4
3	me1	F	TGAGTCCAAACCGGATA	50.4	18	me3	F	TGAGTCCAAACCGGAAT	50.4
	em3	R	GACTGCGTACGAATTGAC	53.7		em6	R	GACTGCGTACGAATTGCA	53.7
4	me1	F	TGAGTCCAAACCGGATA	50.4	19	me4	F	TGAGTCCAAACCGGACC	55.2
	em4	R	GACTGCGTACGAATTTGA	51.4		em1	R	GACTGCGTACGAATTAAT	49.1
5	me1	F	TGAGTCCAAACCGGATA	50.4	20	me4	F	TGAGTCCAAACCGGACC	55.2
	em5	R	GACTGCGTACGAATTAAC	51.4		em2	R	GACTGCGTACGAATTTGC	53.7
6	me1	F	TGAGTCCAAACCGGATA	50.4	21	me4	F	TGAGTCCAAACCGGACC	55.2
	em6	R	GACTGCGTACGAATTGCA	53.7		em3	R	GACTGCGTACGAATTGAC	53.7
7	me2	F	TGAGTCCAAACCGGAGC	55.2	22	me4	F	TGAGTCCAAACCGGACC	55.2
	em1	R	GACTGCGTACGAATTAAT	49.1		em4	R	GACTGCGTACGAATTTGA	51.4
8	me2	F	TGAGTCCAAACCGGAGC	55.2	23	me4	F	TGAGTCCAAACCGGACC	55.2
	em2	R	GACTGCGTACGAATTTGC	53.7		em5	R	GACTGCGTACGAATTAAC	51.4
9	me2	F	TGAGTCCAAACCGGAGC	55.2	24	me4	F	TGAGTCCAAACCGGACC	55.2
	em3	R	GACTGCGTACGAATTGAC	53.7		em6	R	GACTGCGTACGAATTGCA	53.7
10	me2	F	TGAGTCCAAACCGGAGC	55.2	25	me5	F	TGACTCCAAACCGGAAG	52.8
	em4	R	GACTGCGTACGAATTTGA	51.4		em1	R	GACTGCGTACGAATTAAT	49.1
11	me2	F	TGAGTCCAAACCGGAGC	55.2	26	me5	F	TGACTCCAAACCGGAAG	52.8
	em5	R	GACTGCGTACGAATTAAC	51.4		em2	R	GACTGCGTACGAATTTGC	53.7
12	me2	F	TGAGTCCAAACCGGAGC	55.2	27	me5	F	TGACTCCAAACCGGAAG	52.8
	em6	R	GACTGCGTACGAATTGCA	53.7		em3	R	GACTGCGTACGAATTGAC	53.7
13	me3	F	TGAGTCCAAACCGGAAT	50.4	28	me5	F	TGACTCCAAACCGGAAG	52.8
	em1	R	GACTGCGTACGAATTAAT	49.1		em4	R	GACTGCGTACGAATTTGA	51.4
14	me3	F	TGAGTCCAAACCGGAAT	50.4	29	me5	F	TGACTCCAAACCGGAAG	52.8
	em2	R	GACTGCGTACGAATTTGC	53.7		em5	R	GACTGCGTACGAATTAAC	51.4
15	me3	F	TGAGTCCAAACCGGAAT	50.4	30	me5	F	TGACTCCAAACCGGAAG	52.8
	em3	R	GACTGCGTACGAATTGAC	53.7		em6	R	GACTGCGTACGAATTGCA	53.7

Supplementary Table S5. Eigen value, cumulative variance and factor loading of the five major factors obtained from the PCA of 13 quantitative traits

Variable	PC 1	PC 2	PC 3	PC 4	PC 5	PC 6	PC 7	PC 8	PC 9	PC 10
Eigen value	7.11	2.95	2.43	2.17	1.89	1.67	1.45	1.28	1.17	1.05
% variance	25.39	10.52	8.68	7.74	6.75	5.95	5.19	4.56	4.17	3.76
C1	0.328	0.081	0.075	0.069	0.117	0.037	0.055	-0.067	0.107	-0.215
C2	0.337	0.076	0.070	-0.004	0.091	-0.064	0.117	-0.081	0.060	-0.200
C3	0.062	-0.190	-0.269	0.410	-0.187	-0.296	0.086	0.177	-0.033	0.075
C4	0.118	-0.226	-0.209	0.329	-0.144	-0.260	0.197	0.277	-0.120	-0.069
C5	0.028	-0.297	0.229	0.188	0.261	0.108	-0.007	0.174	0.164	0.440
C6	0.117	-0.368	0.103	-0.048	0.288	0.196	-0.086	0.202	-0.108	-0.069
C7	0.234	-0.150	0.093	-0.077	0.229	-0.032	-0.018	-0.115	0.005	0.348
C8	0.271	0.188	0.112	0.175	0.022	-0.036	0.072	-0.157	-0.267	-0.071
C9	0.234	0.185	-0.053	0.022	-0.027	0.017	-0.162	0.253	-0.177	0.209
C10	0.332	0.029	0.104	-0.076	0.068	-0.028	-0.001	0.043	0.177	-0.034
C11	0.189	0.082	0.025	0.186	0.242	-0.249	0.219	-0.109	0.128	0.292
C12	0.253	0.049	0.158	0.017	-0.294	0.224	0.184	-0.106	0.134	0.017
C13	0.310	0.168	-0.025	0.006	-0.191	0.096	0.020	0.002	0.079	0.034
C14	0.226	0.156	-0.268	-0.001	-0.008	-0.088	-0.198	0.189	-0.096	-0.008
C15	-0.181	0.242	-0.066	-0.108	0.244	-0.249	0.046	0.226	-0.025	0.129
C16	0.089	0.074	0.078	0.153	0.000	0.443	-0.179	0.514	0.153	-0.074
C17	-0.156	0.230	-0.164	0.338	0.035	0.292	-0.153	-0.167	-0.072	0.028
C18	-0.025	-0.125	-0.030	0.301	0.001	-0.123	-0.488	-0.187	0.414	-0.216
C19	-0.098	-0.056	0.342	0.184	-0.261	0.043	0.181	-0.235	-0.017	0.280
C20	0.207	0.190	-0.257	-0.093	-0.033	0.143	-0.136	-0.055	0.069	0.264
C21	-0.128	0.155	0.210	0.046	-0.102	-0.069	0.165	0.198	0.540	-0.110
C22	-0.057	0.091	0.396	0.057	-0.072	-0.332	-0.282	0.200	0.018	0.018
C23	-0.189	0.220	-0.144	0.349	0.097	0.225	-0.048	-0.106	0.051	0.276
C24	-0.064	-0.041	-0.162	0.224	0.284	0.216	0.490	0.044	0.089	-0.270
C25	-0.004	0.280	0.063	0.133	0.482	-0.208	-0.094	-0.152	0.034	-0.150
C26	-0.095	0.099	0.349	0.125	0.154	0.116	0.030	0.148	-0.413	-0.147
C27	0.051	-0.367	-0.231	-0.155	0.186	0.083	-0.118	-0.162	0.103	-0.021
C28	-0.133	0.213	-0.173	-0.293	0.075	-0.021	0.239	0.218	0.239	0.156

C1: Fruit Yield per Vine (kg), C2: Average Fruit Weight (kg), C3: Days to Opening of First Male Flower, C4: Days to Opening of First Female Flower, C5: Node Number of First Male Flower, C6: Node Number of First Female Flower, C7: Main Vine Length (m), C8: Number of Fruits per Vine, C9: Equatorial Circumference of Fruit (cm), C10: Polar Circumference of Fruit (cm), C11: Flesh Thickness (cm), C12: Number of Seeds per Fruit, C13: Seed Weight per Fruit (g), C14: Seed Index (g), C15: Soluble Sugar content from Pulp (%), C16: Ascorbic Acid content from Pulp (mg/100g), C17: β -Carotene content from Pulp (mg/100g), C18: True Protein content from Seed (%), C19: Free Amino acid content from Seed (%), C20: Oil Content (%), C21: Free Fatty Acid Content (%), C22: Soluble Sugar Content from Pulp Flour (%), C23: β -Carotene Content from Pulp Flour (mg/100g), C24: True Protein Content from Pulp Flour (%), C25: Fe content (mg/100g), C26: Zn content (mg/100g), C27: Mn content (mg/100g) and C28: Cu content (mg/100g).

Supplementary Table S6. PCA scores of 40 rice F₄ breeding lines

Genotype	PC 1	PC 2	PC 3	PC 4	PC 5	PC 6	PC 7	PC 8	PC 9	PC 10
Saras	-3.577	-0.352	-0.690	1.703	1.879	-0.344	0.964	-0.756	0.618	1.589
Ambili	-2.573	-1.867	0.747	2.562	-0.200	-0.639	-0.617	-0.170	0.644	2.941
Anand Pumpkin 1	-1.305	2.150	0.084	4.088	0.059	2.310	-2.612	-0.009	0.705	-0.088
Pusa Vikas	-3.884	-0.237	1.558	0.855	1.312	-1.889	0.011	-0.901	1.446	-1.544
Pusa Vishwas	-1.648	2.039	0.955	0.337	-1.307	0.850	0.020	-1.138	-0.769	-1.222
Azad Pumpkin 1	0.790	1.760	1.474	-0.700	-1.509	-0.328	-1.357	-0.537	-1.654	0.182
Varanasi local	-3.798	0.281	-0.449	-0.703	-1.085	-1.647	-0.594	-0.038	-1.027	0.299
Kashi Harit	-5.469	1.400	-3.066	0.599	-0.184	1.037	0.255	-2.202	-1.571	-0.287
Arka Chandan	-3.582	3.096	-1.453	-1.752	0.251	0.291	0.706	1.937	1.724	1.362
GPPK 2	-0.371	2.103	0.523	0.430	-1.393	-0.621	2.175	1.145	2.311	0.699
GPPK 18	-0.392	1.847	0.649	-0.203	2.144	-2.972	1.689	-0.797	-0.866	-1.262
GPPK 30	2.021	-0.594	-2.124	-0.903	-1.560	0.042	2.305	-0.302	0.959	0.042
GPPK 33	-0.513	-1.805	-0.215	-2.688	-0.965	0.344	-0.432	-2.436	0.600	1.140
GPPK 48	0.020	-1.240	-0.012	-1.242	2.543	-0.020	-1.100	-0.266	0.513	-0.113
GPPK 50	-2.346	-3.357	2.197	-0.669	-0.323	2.554	1.145	-0.130	-1.092	-0.150
GPPK 56	1.646	0.322	-0.097	-1.345	1.512	2.197	0.288	0.710	1.064	-1.021
GPPK 59	0.343	0.485	0.237	0.545	-0.143	-1.006	-1.341	-0.754	1.806	-2.349
GPPK69	-0.291	0.562	-1.113	-1.253	-1.173	0.473	-1.288	1.513	-0.156	0.060
GPPK 90	-2.202	0.684	-1.366	-2.865	-1.258	0.945	-0.818	0.288	-0.397	-0.243
GPPK 95	4.089	2.090	-0.531	-1.571	2.194	0.941	-0.165	-1.314	0.380	-0.091
GPPK 100	0.150	-2.275	-4.094	0.846	1.285	-1.174	-0.873	2.203	-1.577	-0.590
GPPK 105	4.834	1.265	0.094	0.784	-1.032	0.363	0.084	-1.017	-0.604	0.714
GPPK 107	1.215	-0.148	1.840	1.340	-2.522	-0.207	1.269	0.039	-0.397	-0.923
GPPK 109	1.274	1.380	1.290	-0.427	-1.815	-0.896	-1.164	1.632	0.023	-0.167
GPPK 113	1.907	1.522	-0.393	1.994	1.426	2.139	1.048	1.060	-1.371	-0.062
GPPK 115	5.052	0.761	-1.250	1.376	0.488	-1.582	1.233	-0.539	-0.817	0.642
GPPK 126	-4.300	-2.002	2.486	-0.854	1.158	0.579	1.186	1.198	-0.633	-0.793
GPPK 133	0.802	-1.267	0.769	-0.138	-1.635	-1.653	-0.242	-0.268	-0.384	0.660
GPPK 139	0.825	-2.792	-1.178	1.687	-1.305	0.314	1.501	1.094	-0.285	-1.147
GPPK 141	2.132	0.198	3.352	-0.468	1.878	0.091	-0.752	0.249	-1.002	1.402
GPPK 143	2.231	-0.606	1.852	-0.188	0.513	0.601	0.032	1.212	0.574	0.012
GPPK 148	2.369	-3.361	-1.071	0.656	-0.462	-0.305	-2.143	-0.411	1.723	-0.723
GPPK 150	3.358	-1.894	-0.969	-0.520	0.311	0.983	0.760	-1.353	0.520	0.464
GPPK 201	1.194	-0.149	-0.037	-1.311	0.921	-1.771	-1.173	1.057	-1.007	0.567

Supplementary Table S6. Jaccard's similarity coefficient for 34 genotypes of pumpkin based on molecular marker

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34
1	1.00																																	
2	0.83	1.00																																
3	0.75	0.91	1.00																															
4	0.67	0.82	0.90	1.00																														
5	0.67	0.82	0.90	0.80	1.00																													
6	0.82	0.82	0.73	0.64	0.64	1.00																												
7	0.58	0.58	0.64	0.70	0.70	0.55	1.00																											
8	0.64	0.64	0.70	0.60	0.78	0.78	0.67	1.00																										
9	0.58	0.46	0.50	0.55	0.42	0.42	0.45	0.36	1.00																									
10	0.54	0.54	0.46	0.38	0.38	0.50	0.42	0.33	0.31	1.00																								
11	0.69	0.69	0.62	0.54	0.67	0.67	0.73	0.64	0.46	0.54	1.00																							
12	0.67	0.82	0.73	0.64	0.80	0.80	0.70	0.78	0.31	0.50	0.82	1.00																						
13	0.73	0.73	0.64	0.55	0.70	0.89	0.60	0.88	0.33	0.42	0.73	0.89	1.00																					
14	0.50	0.64	0.70	0.60	0.78	0.60	0.67	0.75	0.36	0.45	0.64	0.78	0.67	1.00																				
15	0.69	0.69	0.75	0.67	0.82	0.54	0.73	0.64	0.58	0.43	0.83	0.67	0.58	0.64	1.00																			
16	0.54	0.67	0.73	0.64	0.64	0.64	0.55	0.60	0.42	0.50	0.67	0.64	0.55	0.60	0.67	1.00																		
17	0.50	0.50	0.55	0.45	0.60	0.45	0.67	0.56	0.25	0.45	0.64	0.60	0.50	0.56	0.64	0.60	1.00																	
18	0.46	0.58	0.64	0.55	0.70	0.55	0.60	0.67	0.33	0.42	0.73	0.70	0.60	0.67	0.73	0.89	0.67	1.00																
19	0.50	0.64	0.70	0.60	0.78	0.60	0.67	0.75	0.25	0.45	0.64	0.78	0.67	0.75	0.64	0.78	0.75	0.88	1.00															
20	0.58	0.58	0.50	0.55	0.55	0.42	0.60	0.36	0.45	0.42	0.58	0.55	0.45	0.50	0.58	0.31	0.50	0.33	0.36	1.00														
21	0.69	0.69	0.75	0.67	0.82	0.54	0.73	0.64	0.58	0.43	0.83	0.67	0.58	0.64	1.00	0.67	0.64	0.73	0.64	0.58	1.00													
22	0.69	0.69	0.75	0.67	0.82	0.54	0.73	0.64	0.58	0.43	0.83	0.67	0.58	0.64	1.00	0.67	0.64	0.73	0.64	0.58	1.00	1.00												
23	0.57	0.57	0.62	0.54	0.54	0.54	0.58	0.50	0.46	0.67	0.69	0.54	0.46	0.50	0.69	0.82	0.64	0.73	0.64	0.36	0.69	0.69	1.00											
24	0.50	0.50	0.43	0.46	0.46	0.46	0.64	0.42	0.38	0.58	0.75	0.58	0.50	0.42	0.62	0.58	0.55	0.64	0.55	0.50	0.62	0.62	0.75	1.00										
25	0.54	0.67	0.58	0.64	0.64	0.50	0.55	0.45	0.31	0.50	0.54	0.64	0.55	0.45	0.54	0.50	0.45	0.55	0.60	0.55	0.54	0.54	0.54	0.73	1.00									
26	0.77	0.77	0.83	0.75	0.75	0.62	0.67	0.58	0.67	0.50	0.77	0.62	0.54	0.58	0.92	0.75	0.58	0.67	0.58	0.54	0.92	0.92	0.77	0.57	0.50	1.00								
27	0.46	0.58	0.64	0.55	0.55	0.55	0.45	0.50	0.33	0.70	0.46	0.55	0.45	0.67	0.46	0.70	0.50	0.60	0.67	0.33	0.46	0.46	0.73	0.50	0.55	0.54	1.00							
28	0.67	0.67	0.73	0.64	0.64	0.64	0.70	0.60	0.42	0.50	0.67	0.64	0.55	0.60	0.67	0.64	0.78	0.55	0.60	0.55	0.67	0.67	0.67	0.46	0.38	0.75	0.55	1.00						
29	0.55	0.55	0.60	0.50	0.67	0.67	0.56	0.86	0.40	0.25	0.55	0.67	0.75	0.63	0.55	0.50	0.44	0.56	0.63	0.27	0.55	0.55	0.42	0.33	0.36	0.50	0.40	0.50	1.00					
30	0.58	0.73	0.80	0.70	0.89	0.55	0.60	0.67	0.45	0.31	0.58	0.70	0.60	0.67	0.73	0.55	0.50	0.60	0.67	0.45	0.73	0.73	0.46	0.38	0.55	0.67	0.45	0.55	0.75	1.00				
31	0.69	0.83	0.91	0.82	0.82	0.67	0.58	0.64	0.58	0.43	0.69	0.67	0.58	0.64	0.83	0.82	0.50	0.73	0.64	0.46	0.83	0.83	0.69	0.50	0.54	0.92	0.58	0.67	0.55	0.73	1.00			
32	0.54	0.67	0.73	0.64	0.80	0.50	0.55	0.60	0.55	0.29	0.67	0.64	0.55	0.60	0.82	0.64	0.45	0.70	0.60	0.42	0.82	0.82	0.54	0.46	0.50	0.75	0.42	0.50	0.67	0.89	0.82	1.00		
33	0.67	0.67	0.73	0.64	0.80	0.50	0.70	0.60	0.42	0.50	0.67	0.64	0.55	0.60	0.82	0.64	0.78	0.70	0.78	0.55	0.82	0.82	0.67	0.58	0.64	0.75	0.55	0.64	0.50	0.70	0.67	0.64	1.00	
34	0.46	0.46	0.50	0.42	0.55	0.42	0.60	0.50	0.45	0.42	0.73	0.55	0.45	0.67	0.73	0.55	0.67	0.60	0.50	0.60	0.73	0.73	0.58	0.50	0.31	0.67	0.45	0.70	0.40	0.45	0.58	0.55	0.55	1.00

