(last update: 01.12.2005)

The statistical data in the tables have been calculated using the formulas of Butler [2005; expected heterozygosity (Hexp), polymorphism information content (PIC)], Krüger et al. [1968, power of exclusion (PE)], and Jones [1972; power of discrimination (PD), power of identity (PI)]. Due to the required space, in most publications data on genotype frequencies are missing, so calculations for Hardy-Weinberg equilibrium (HWE) are impossible. Therefore we used the data given by the authors (+: HWE, -: no HWE, ?: not specified).

References:

Butler, J.M. (2005) Forensic DNA typing. Biology, technology, and genetics of STR markers. 2nd ed. Elsevier Academic press, Amsterdam etc., 489-491
Jones, D.A. (1972) Blood samples: Probability of discrimination. J. Forensic Sci. Soc. 12: 355-359
Krüger, J., Fuhrmann, E., Lichte, K.-H., Steffens, C. (1968) Zur Verwendung des Polymorphismus der sauren Erythrocytenphosphatase bei der Vaterschaftsbegutachtung. Dtsch. Z. gerichtl. Med. 64: 127-146

PENTA E

	Europe				
Population	**Bosnia** (autochthonous)	**Cyprus** (Greek)	**Germany** (Saxony-Anhalt)	**Greece** (North)	**Italy**
Ref.	(18)	(33)	(22)	(37)	(5)
n	123	1475	207	318	208
Alleles					
5	**0.0930**	**0.0550**	**0.1010**	**0.0409**	**0.0600**
6	**0.0000**	**0.0010**	**0.0000**	**0.0000**	**0.0000**
7	**0.1260**	**0.0128**	**0.1690**	**0.1399**	**0.1370**
8	**0.0240**	**0.0200**	**0.0100**	**0.0157**	**0.0330**
9	**0.0080**	**0.0110**	**0.0070**	**0.0126**	**0.0210**
10	**0.1500**	**0.0730**	**0.1040**	**0.0849**	**0.0860**
11	**0.0770**	**0.1250**	**0.1090**	**0.0912**	**0.1440**
12	**0.1300**	**0.1830**	**0.1790**	**0.1808**	**0.1700**
13	**0.1420**	**0.1210**	**0.0800**	**0.1242**	**0.1490**
14	**0.0570**	**0.0570**	**0.0510**	**0.0786**	**0.0310**
15	**0.0690**	**0.0560**	**0.0510**	**0.0597**	**0.0360**
15.3	**0.0000**	**0.0003**	**0.0000**	**0.0000**	**0.0000**
16	**0.0330**	**0.0390**	**0.0560**	**0.0487**	**0.0450**
16.3	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
16.4	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
17	**0.0490**	**0.0420**	**0.0340**	**0.0362**	**0.0280**
17.4	**0.0000**	**0.0003**	**0.0000**	**0.0000**	**0.0000**
18	**0.0240**	**0.0370**	**0.0290**	**0.0425**	**0.0240**
18.4	**0.0000**	**0..0000**	**0.0000**	**0.0000**	**0.0000**
19	**0.0040**	**0.0270**	**0.0100**	**0.0267**	**0.0140**
19.3	**0.0000**	**0.0003**	**0.0000**	**0.0000**	**0.0000**

19.4	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
20	**0.0120**	**0.0160**	**0.0070**	**0.0157**	**0.0140**
20.4	**0.0000**	**0.0003**	**0.0000**	**0.0000**	**0.0000**
21	**0.0000**	**0.0060**	**0.0000**	**0.0000**	**0.0020**
22	**0.0000**	**0.0003**	**0.0020**	**0.0000**	**0.0000**
23	**0.0000**	**0.0003**	**0.0000**	**0.0016**	**0.0000**
24	**0.0000**	**0.0000**	**0.0020**	**0.0000**	**0.0000**
25	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
29	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
Σ	*0.9980*	*0.9991*	*1.0010*	*0.9999*	*0.9940*
H(exp)	*0..8971*	*0.8989*	*0.8895*	*0.8985*	*0.8908*
PE	*0.7897*	*0.7964*	*0.7790*	*0.7961*	*0.7745*
PI	*0.0196*	*0.0185*	*0.0222*	*0.0187*	*0.0216*
PD	*0.9804*	*0.9815*	*0.9778*	*0.9813*	*0.9784*
PIC	*0.8881*	*0.8906*	*0.8795*	*0.8901*	*0.8811*
HWE	+	+	+	+	+

	Europe				
Population	**Hungary** (Central, Budapest)	**Hungary** (Romanies, Baranya county)	**Hungary** (Romanies, Debrecen region)	**Hungary** (Ashkenazim, Budapest)	**Poland** (South-East)
Ref.	(25)	(25)	(25)	(25)	(44)
n	223	206	110	178	712
Alleles					
5	**0.0670**	**0.0750**	**0.1680**	**0.1120**	**0.0709**
6	**0.0020**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
7	**0.1640**	**0.1020**	**0.0640**	**0.1120**	**0.1376**
8	**0.0040**	**0.0150**	**0.0090**	**0.0340**	**0.0169**
9	**0.0130**	**0.0390**	**0.0500**	**0.0060**	**0.0119**
10	**0.1300**	**0.0920**	**0.0680**	**0.0840**	**0.1166**
11	**0.0760**	**0.0580**	**0.0820**	**0.0590**	**0.1096**
12	**0.1610**	**0.1380**	**0.1910**	**0.1660**	**0.1355**
13	**0.1030**	**0.1020**	**0.1180**	**0.1240**	**0.1173**
14	**0.0670**	**0.1240**	**0.0680**	**0.0670**	**0.0667**
15	**0.0470**	**0.0240**	**0.0360**	**0.0220**	**0.0562**
15.3	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
16	**0.0580**	**0.0580**	**0.0540**	**0.0510**	**0.0506**
16.3	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
16.4	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
17	**0.0670**	**0.0370**	**0.0360**	**0.0200**	**0.0400**
17.4	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
18	**0.0220**	**0.1380**	**0.0320**	**0.0450**	**0.0351**

18.4	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
19	**0.0090**	**0.0000**	**0.0140**	**0.0060**	**0.0183**
19.3	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
19.4	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
20	**0.0070**	**0.0020**	**0.0000**	**0.0390**	**0.0126**
20.4	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
21	**0.0000**	**0.0000**	**0.0000**	**0.0310**	**0.0028**
22	**0.0000**	**0.0000**	**0.0090**	**0.0170**	**0.0000**
23	**0.0000**	**0.0000**	**0.0000**	**0.0060**	**0.0014**
24	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
25	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
29	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
Σ	*0.9970*	*1.0040*	*0.9990*	*1.0010*	*1.0000*
H(exp)	*0.8941*	*0.9012*	*0.8919*	*0.9074*	*0.9044*
PE	*0.7832*	*0.8036*	*0.7832*	*0.8147*	*0.8063*
PI	*0.0205*	*0.0182*	*0.0209*	*0.0157*	*0.0170*
PD	*0.9795*	*0.9818*	*0.9791*	*0.9843*	*0.9830*
PIC	*0.8847*	*0.8928*	*0.8827*	*0.9002*	*0.8965*
HWE	+	+	+	+	+

	Europe				
Population	**Portugal (pooled)**	Portugal (North)	Portugal (North)	Portugal (North)	Portugal (South)
Ref.		(8)	(11)	(34)	(12)
n	754	103	291	200	160
Alleles					
5	**0.0736**	0.0530	0.0739	0.0750	0.0844
6	**0.0000**	0.0000	0.0000	0.0000	0.0000
7	**0.1418**	0.1500	0.1512	0.1400	0.1219
8	**0.0148**	0.0100	0.0172	0.0080	0.0219
9	**0.0047**	0.0000	0.0051	0.0080	0.0031
10	**0.1034**	0.0970	0.0945	0.1100	0.1156
11	**0.1261**	0.1360	0.1220	0.1280	0.1250
12	**0.2015**	0.2330	0.1890	0.1920	0.2156
13	**0.0955**	0.1020	0.0997	0.0950	0.0844
14	**0.0592**	0.0540	0.0739	0.0580	0.0375
15	**0.0404**	0.0390	0.0447	0.0320	0.0438
15.3	**0.0000**	0.0000	0.0000	0.0000	0.0000
16	**0.0437**	0.0240	0.0361	0.0600	0.0500
16.3	**0.0000**	0.0000	0.0000	0.0000	0.0000
16.4	**0.0000**	0.0000	0.0000	0.0000	0.0000
17	**0.0372**	0.0390	0.0395	0..0350	0.0344

17.4	**0.0000**	0.0000	0.0000	0.0000	0.0000
18	**0.0184**	0.0240	0.0137	0.0220	0.0188
18.4	**0.0000**	0.0000	0.0000	0.0000	0.0000
19	**0.0204**	0.0240	0.0189	0.0120	0.0313
19.3	**0.0000**	0.0000	0.0000	0.0000	0.0000
19.4	**0.0000**	0.0000	0.0000	0.0000	0.0000
20	**0.0047**	0.0100	0.0052	0.0100	0.0063
20.4	**0.0000**	0.0000	0.0000	0.0000	0.0000
21	**0.0066**	0.0050	0.0103	0.0080	0.0031
22	**0.0013**	0.0000	0.0034	0.0050	0.0000
23	**0.0013**	0.0000	0.0017	0.0020	0.0031
24	**0.0000**	0.0000	0.0000	0.0000	0.0000
25	**0.0000**	0.0000	0.0000	0.0000	0.0000
29	**0.0000**	0.0000	0.0000	0.0000	0.0000
Σ	*0.9999*	*1.0000*	*1.0000*	*1.0000*	*1.0002*
H(exp)	*0.8886*	*0.8742*	*0.8909*	*0.8902*	*0.8865*
PE	*0.7772*	*0.7511*	*0.7811*	*0.7798*	*0.7743*
PI	*0.0223*	*0.0276*	*0.0216*	*0.0218*	*0.0228*
PD	*0.9777*	*0.9724*	*0.9784*	*0.9782*	*0.9772*
PIC	*0.8788*	*0.8624*	*0.8812*	*0.8805*	*0.8766*
HWE		+	+	+	*?*

	Europe				
Population	**Romania** (Bucharest area)	**Spain (pooled)**	Spain (Northeast)	Spain (Central-West, Extremadura)	**Turkey** (East Anatolia, Van and Agri area)
Ref.	(38)		(2)	(9)	(15)
n	139	259	207	52	116
Alleles					
5	**0.0400**	**0.0293**	0.0270	0.0385	**0.0820**
6	**0.0000**	**0.0000**	0.0000	0.0000	**0.0000**
7	**0.1370**	**0.1308**	0.1299	0.1346	**0.1550**
8	**0.0140**	**0.0118**	0.0123	0.0096	**0.0220**
9	**0.0220**	**0.0156**	0.0123	0.0288	**0.0090**
10	**0.1330**	**0.1190**	0.1078	0.1635	**0.0780**
11	**0.0900**	**0.1094**	0.1152	0.0865	**0.1590**
12	**0.1470**	**0.2347**	0.2574	0.1442	**0.1290**
13	**0.0970**	**0.1172**	0.1152	0.1250	**0.1210**
14	**0.0540**	**0.0448**	0.0392	0.0673	**0.0600**
15	**0.0680**	**0.0469**	0.0466	0.0481	**0.0560**
15.3	**0.0000**	**0.0000**	0.0000	0.0000	**0.0000**
16	**0.0500**	**0..0449**	0.0368	0.0769	**0.0560**

16.3	**0.0000**	**0.0000**	0.0000	0.0000	**0.0000**
16.4	**0.0000**	**0.0000**	0.0000	0.0000	**0.0000**
17	**0.0540**	**0.0430**	0.0466	0.0288	**0.0340**
17.4	**0.0000**	**0.0000**	0.0000	0..0000	**0.0000**
18	**0.0470**	**0.0234**	0.0245	0.0192	**0.0170**
18.4	**0.0040**	**0.0000**	0.0000	0.0000	**0.0000**
19	**0.0250**	**0.0156**	0.0147	0.0192	**0.0090**
19.3	**0.0000**	**0.0000**	0.0000	0.0000	**0.0000**
19.4	**0.0000**	**0.0000**	0.0000	0.0000	**0.0000**
20	**0.0070**	**0.0078**	0.0074	0.0096	**0.0140**
20.4	**0.0000**	**0.0000**	0.0000	0.0000	**0.0000**
21	**0.0000**	**0.0020**	0.0025	0.0000	**0.0000**
22	**0.0070**	**0.0020**	0.0025	0.0000	**0.0000**
23	**0.0040**	**0.0020**	0.0025	0.0000	**0.0000**
24	**0.0000**	**0.0000**	0.0000	0.0000	**0.0000**
25	**0.0000**	**0.0000**	0.0000	0.0000	**0.0000**
29	**0.0000**	**0.0000**	0.0000	0.0000	**0.0000**
Σ	*1.0000*	*1.0002*	*1.0004*	*0.9998*	*1.0010*
H(exp)	*0.9062*	*0.8778*	*0.8696*	*0.8944*	*0.8944*
PE	*0.8107*	*0.7588*	*0.7455*	*0.7869*	*0.7881*
PI	*0.0162*	*0.0260*	*0.0289*	*0.0204*	*0.0205*
PD	*0.9838*	*0.9740*	*0.9711*	*0.9796*	*0.9795*
PIC	*0.8988*	*0.8667*	*0.8577*	*0.8851*	*0.8851*
HWE	+		+	+	+

	America, Central	**America. South**			
Population	**Mexico** (Otomi, La Sierra Otomi-Tepehua, Hidalgo State)	**Argentina** (Buenos Aires)	**Argentina** (Buenos Aires)	**Argentina** (Chaco province)	**Argentina** (Corrientes province)
Ref.	(20)	(28)	(43)	(32)	(32)
n	83	494	143	53	40
Alleles					
5	**0.0120**	**0.0516**	**0.0350**	**0.0283**	**0.0625**
6	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
7	**0.0301**	**0.1113**	**0.1119**	**0.0660**	**0.0750**
8	**0.0602**	**0.0142**	**0.0175**	**0.0189**	**0.0375**
9	**0.0000**	**0.0071**	**0.0035**	**0.0000**	**0.0000**
10	**0.0181**	**0.0810**	**0.0944**	**0.0283**	**0.0625**
11	**0.0361**	**0.1093**	**0.1294**	**0.0660**	**0.1250**
12	**0.1385**	**0.1731**	**0.1434**	**0.2076**	**0..1750**

13	**0.1265**	**0.0972**	**0.1014**	**0.0943**	**0.0625**
14	**0.0843**	**0.0729**	**0.0455**	**0.0660**	**0.0750**
15	**0.2108**	**0.0891**	**0.0909**	**0.1887**	**0.1500**
15.3	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
16	**0.1626**	**0.0567**	**0.0594**	**0.0660**	**0.0375**
16.3	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
16.4	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
17	**0.0241**	**0.0476**	**0.0769**	**0.0755**	**0.0250**
17.4	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
18	**0.0361**	**0.0304**	**0.0210**	**0.0472**	**0.0500**
18.4	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
19	**0.0181**	**0.0162**	**0.0245**	**0.0283**	**0.0125**
19.3	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
19.4	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
20	**0.0241**	**0.0213**	**0.0175**	**0.0094**	**0.0375**
20.4	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
21	**0.0120**	**0.0111**	**0.0105**	**0.0094**	**0.0125**
22	**0.0060**	**0.0051**	**0.0140**	**0.0000**	**0.0000**
23	**0.0000**	**0.0010**	**0.0035**	**0.0000**	**0.0000**
24	**0.0000**	**0.0020**	**0.0000**	**0.0000**	**0.0000**
25	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
26	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
29	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
Σ	*0.9996*	*0.9982*	*1.0002*	***0.9999***	***1.0000***
H(exp)	*0.8776*	*0.9063*	*0.9080*	*0.8841*	*0.9006*
PE	*0.7560*	*0.8092*	*0.8139*	*0.7706*	*0.8006*
PI	*0.0266*	*0.0161*	*0.0158*	*0.0235*	*0.0179*
PD	*0.9734*	*0.9839*	*0.9842*	*0.9765*	*0.9821*
PIC	*0.8659*	*0.8989*	*0.9007*	*0.8740*	*0.8926*
HWE	+	+	+	+	+

	America. South				
Population	**Argentina** (Formosa province)	**Argentina** (Mendoza)	**Argentina** (Misiones)	**Argentina** (Patagonia, Chubut province)	**Argentina** (Patagonia, Rio Negro province)
Ref.	(32)	(28)	(32)	(31)	(31)
n	74	284	162	311	560
Alleles					
5	**0.0473**	**0.0261**	**0.0617**	**0.0306**	**0.0268**
6	**0..0068**	**0.0000**	**0.0000**	**0.0000**	**0.0009**
7	**0.1149**	**0.1144**	**0.0957**	**0.0852**	**0.0813**
8	**0.0270**	**0.0264**	**0.0340**	**0.0209**	**0.0277**

9	**0.0068**	**0.0123**	**0.0062**	**0.0032**	**0.0054**
10	**0.0473**	**0..0616**	**0.0741**	**0.0498**	**0.0545**
11	**0.0878**	**0.0951**	**0.0988**	**0.0611**	**0.0714**
12	**0.1081**	**0.1620**	**0.1759**	**0.2090**	**0.1670**
13	**0.0946**	**0.1004**	**0.0803**	**0.1077**	**0.1071**
14	**0.0878**	**0.0845**	**0.0710**	**0.0772**	**0.0732**
15	**0.1554**	**0.0898**	**0.0926**	**0.0965**	**0.1188**
15.3	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
16	**0.0541**	**0.0616**	**0.0525**	**0.0643**	**0.0571**
16.3	**0.0000**	**0.0000**	**0.0000**	**0.0016**	**0..0000**
16.4	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
17	**0.0676**	**0.0528**	**0.0494**	**0.0724**	**0.0429**
17.4	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
18	**0.0135**	**0.0423**	**0.0247**	**0.0257**	**0.0598**
18.4	**0..0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
19	**0.0203**	**0.0264**	**0.0185**	**0.0257**	**0.0330**
19.3	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
19.4	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
20	**0.0338**	**0.0194**	**0..0247**	**0.0284**	**0.0304**
20.4	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
21	**0.0203**	**0.0176**	**0.0247**	**0.0273**	**0.0286**
22	**0.0000**	**0.0070**	**0.0062**	**0.0064**	**0.0080**
23	**0.0068**	**0.0000**	**0.0093**	**0.0016**	**0..0054**
24	**0.0000**	**0.0000**	**0.0000**	**0.0048**	**0.0009**
25	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
26	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
29	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
Σ	***1.0002***	*0.9997*	*1.0003*	*0.9994*	*1.0002*
H(exp)	*0.9116*	*0.9112*	*0.9121*	*0.9023*	*0.9134*
PE	*0.8216*	*0.8206*	*0.8237*	*0.8055*	*0.8260*
PI	*0.0145*	*0.0146*	*0.0141*	*0.0168*	*0.0138*
PD	*0.9855*	*0.9854*	*0.9859*	*0.9832*	*0.9862*
PIC	*0.9049*	*0.9045*	*0.9057*	*0.8950*	*0.9071*
HWE	+	+	+	+	+

	America. South				
Population	**Argentina** (Salta province)	**Argentina** (Santa Fe)	**Argentina** (Southwest, Neuquen province)	**Brazil**	**Brazil** (Rio de Janeiro)
Ref.	(32)	(28)	(39)	(40)	(42)
n	79	529	111	4030	300
Alleles					

5	**0.0190**	**0.0510**	**0.0495**	**0.0635**	**0.0680**
6	**0.0000**	**0.0000**	**0.0000**	**0.0005**	**0.0050**
7	**0.0317**	**0.1021**	**0.0946**	**0.1244**	**0.1060**
8	**0.0127**	**0.0284**	**0.0541**	**0.0392**	**0.0560**
9	**0.0127**	**0.0113**	**0.0180**	**0.0156**	**0.0230**
10	**0.0696**	**0.0690**	**0.0541**	**0.0741**	**0.0560**
11	**0.0570**	**0.1087**	**0.0766**	**0.1184**	**0.0900**
12	**0.2089**	**0.1824**	**0.1712**	**0.1864**	**0.1630**
13	**0.1013**	**0.1011**	**0.0676**	**0.1093**	**0.1520**
14	**0.1076**	**0.0643**	**0.0495**	**0.0592**	**0.0850**
15	**0.1203**	**0.0992**	**0.0946**	**0.0619**	**0.0510**
15.3	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
16	**0.0949**	**0.0397**	**0.0495**	**0.0418**	**0.0480**
16.3	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
16.4	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
17	**0.0506**	**0.0473**	**0.0811**	**0.0438**	**0.0350**
17.4	**0.0000**	**0.0000**	**0.0000**	**0..0000**	**0.0000**
18	**0.0127**	**0.0350**	**0.0405**	**0.0238**	**0.0230**
18.4	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
19	**0.0443**	**0.0246**	**0.0360**	**0.0151**	**0.0110**
19.3	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
19.4	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
20	**0.0127**	**0.0132**	**0.0360**	**0.0103**	**0.0100**
20.4	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
21	**0.0317**	**0.0113**	**0.0180**	**0.0066**	**0.0080**
22	**0.0063**	**0.0076**	**0.0045**	**0-0051**	**0.0030**
23	**0.0000**	**0.0028**	**0.0045**	**0.0006**	**0.0010**
24	**0.0000**	**0.0010**	**0.0000**	**0.0004**	**0.0000**
25	**0.0063**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
26	**0.0000**	**0..0000**	**0.0000**	**0.0000**	**0.0000**
29	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
Σ	*1.0003*	*1.0000*	*0.9999*	*1.0000*	*0.9940*
H(exp)	*0.8953*	*0.9060*	*0.9177*	*0.9005*	*0.9054*
PE	*0.7921*	*0.8114*	*0.8345*	*0.8006*	*0.8034*
PI	*0.0194*	*0.0161*	*0.0124*	*0.0179*	*0.0164*
PD	*0.9806*	*0.9839*	*0.9876*	*0.9821*	*0.9836*
PIC	*0.8869*	*0.8988*	*0.9120*	*0.8925*	*0.8979*
HWE	+	+	+	+	+

	America. South				
Population	**Colombia** (Antioquia)	**Colombia** (Caucasian-Mestizos)	**Ecuador** (African descent)	**Ecuador** (Amerinians, Quichua)	**Ecuador** (Mestizos)

Ref.	(16)	(10)	(19, 27)	(27)	(17)
n	364	247	104	115	317
Alleles					
5	**0.0510**	**0.0324**	**0.0560**	**0.0000**	**0.0330**
6	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
7	**0.0780**	**0.0789**	**0.0930**	**0.0130**	**0.0710**
8	**0.0330**	**0.0162**	**0.1360**	**0.0087**	**0.0270**
9	**0.0080**	**0.0101**	**0.0370**	**0.0000**	**0.0060**
10	**0.0780**	**0.0567**	**0.0280**	**0.0000**	**0.0350**
11	**0.1020**	**0.0911**	**0.0700**	**0.0435**	**0.0610**
12	**0.1840**	**0.1923**	**0.1070**	**0.1739**	**0.1880**
13	**0.1300**	**0.1073**	**0.0890**	**0.0435**	**0.0690**
14	**0.0730**	**0.0870**	**0.0700**	**0.0435**	**0.0490**
15	**0.0710**	**0.1053**	**0.1260**	**0.1913**	**0.1220**
15.3	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
16	**0.0450**	**0.0526**	**0.0610**	**0.1043**	**0.0900**
16.3	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
16.4	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
17	**0.0300**	**0.0263**	**0.0330**	**0.0739**	**0.0630**
17.4	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
18	**0.0280**	**0.0364**	**0.0420**	**0.0739**	**0.0510**
18.4	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
19	**0.0290**	**0.0223**	**0.0140**	**0.0696**	**0.0310**
19.3	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
19.4	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
20	**0.0180**	**0.0405**	**0.0190**	**0.0304**	**0.0430**
20.4	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
21	**0.0360**	**0.0263**	**0.0140**	**0.0783**	**0.0370**
22	**0.0000**	**0.0121**	**0.0050**	**0.0261**	**0.0160**
23	**0.0030**	**0.0040**	**0.0000**	**0.0130**	**0.0060**
24	**0.0000**	**0..0020**	**0.0000**	**0.0000**	**0.0000**
25	**0.0010**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
26	**0.0010**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
29	**0.0000**	**0.0000**	**0.0000**	**0.0043**	**0.0000**
Σ	*0.9990*	*0.9998*	*1.0000*	*0.9912*	*0.9980*
H(exp)	*0.9064*	*0.9059*	*0.9152*	*0.8927*	*0.9116*
PE	*0.8115*	*0.8119*	*0.8282*	*0.7768*	*0.8217*
PI	*0.0159*	*0.0159*	*0.0135*	*0.0205*	*0.0140*
PD	*0.9841*	*0.9841*	*0.9865*	*0.9795*	*0.9860*
PIC	*0.8993*	*0.8989*	*0.9089*	*0.8837*	*0.9055*
HWE	+	+	+	+	+

	Asia, Indian Subcontinent				
Population	**India** (Bihar, Yadav)	**India** (Bihar, Kurmi)	**India** (Bihar, Baniya)	**India** (Mizoram, Hamar)	**India** (Mizoram, Mara)
Ref.	(14)	(14)	(14)	(3)	(3)
n	45	50	45	80	90
Alleles					
5	**0.1050**	**0.0100**	**0.0440**	**0.0000**	**0.0000**
6	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
7	**0.1180**	**0.1220**	**0.1110**	**0.0000**	**0.0000**
8	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0110**
9	**0.0130**	**0.0200**	**0.0220**	**0.0000**	**0.0110**
10	**0.0260**	**0.0410**	**0.0440**	**0.0130**	**0.0000**
11	**0.1180**	**0.1630**	**0.1000**	**0.0750**	**0.1220**
12	**0.1180**	**0.0710**	**0.1900**	**0.1250**	**0.0890**
13	**0.0530**	**0.0410**	**0.1330**	**0.1500**	**0.1330**
14	**0.0530**	**0.0000**	**0.0330**	**0.0630**	**0.0440**
15	**0.1180**	**0.0820**	**0.1000**	**0.1230**	**0.1220**
15.3	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
16	**0.0790**	**0.0820**	**0.0780**	**0.0870**	**0.1000**
16.3	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
16.4	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
17	**0.0790**	**0.1220**	**0.0670**	**0.1500**	**0.0780**
17.4	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
18	**0.0390**	**0.0820**	**0.0560**	**0.0250**	**0.0560**
18.4	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
19	**0.0130**	**0.0610**	**0.0000**	**0.1000**	**0.1000**
19.3	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
19.4	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
20	**0.0130**	**0.0710**	**0.0110**	**0.0130**	**0.0560**
20.4	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
21	**0.0130**	**0.0000**	**0.0110**	**0.0500**	**0.0330**
22	**0.0260**	**0.0200**	**0.0000**	**0.0130**	**0.0220**
23	**0.0130**	**0.0100**	**0.0000**	**0.0130**	**0.0220**
24	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
25	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
29	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
Σ	*0.9970*	*0.9980*	*1.0000*	*1.0000*	*0.9990*
H(exp)	*0.9115*	*0.9053*	*0.8945*	*0.8933*	*0.9080*
PE	*0.8172*	*0.8065*	*0.7879*	*0..7837*	*0.8122*
PI	*0.0147*	*0.0166*	*0.0202*	*0.0211*	*0.0158*
PD	*0.9853*	*0.9834*	*0.9798*	*0.9789*	*0.9842*
PIC	*0.9046*	*0.8977*	*0.8854*	*0.8836*	*0.9007*

HWE	+	+	+	+	+

	Asia, Indian Subcontinent				
Population	**India** (Mizoram, Lai)	**India** (Mizoram, Lusei)	**India** (Central, Dheria Gond)	**India** (Central, Agharia)	**India** (Central, Teli)
Ref.	(3)	(3)	(23)	(23)	(23)
n	92	92	36	72	50
Alleles					
5	**0.0220**	**0.0000**	**0.0240**	**0.0800**	**0.0490**
6	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
7	**0.0000**	**0.0000**	**0.0470**	**0.0500**	**0.0120**
8	**0.0000**	**0.0220**	**0.0000**	**0.0000**	**0.0000**
9	**0.0000**	**0.0000**	**0.0950**	**0.0000**	**0.0000**
10	**0.0110**	**0.0000**	**0.0240**	**0.0400**	**0.0370**
11	**0.0980**	**0.1200**	**0.2380**	**0.1500**	**0.2070**
12	**0.1410**	**0.1300**	**0.0950**	**0.1200**	**0.1590**
13	**0.0980**	**0.0870**	**0.0240**	**0.1200**	**0.0370**
14	**0.0650**	**0.0330**	**0.0950**	**0.0700**	**0.0610**
15	**0.0980**	**0.1410**	**0.0480**	**0.0800**	**0.1460**
15.3	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
16	**0.1410**	**0.1300**	**0.0950**	**0.1100**	**0.1100**
16.3	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
16.4	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
17	**0.1090**	**0.1520**	**0.0240**	**0.0500**	**0.0730**
17.4	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
18	**0.0330**	**0.0430**	**0.0710**	**0.0400**	**0.0490**
18.4	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
19	**0.0430**	**0.0110**	**0.0240**	**0.0500**	**0.0120**
19.3	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
19.4	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
20	**0.0760**	**0.0540**	**0.0240**	**0.0300**	**0.0120**
20.4	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
21	**0.0430**	**0.0430**	**0.0480**	**0.0000**	**0.0000**
22	**0.0220**	**0.0330**	**0.0000**	**0.0000**	**0.0240**
23	**0.0000**	**0.0000**	**0.0240**	**0.0000**	**0.0000**
24	**0.0000**	**0.0000**	**0.0000**	**0.0100**	**0.0120**
25	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
29	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
Σ	*1.0000*	*0.9990*	*1.0000*	*1.0000*	*1.0000*
H(exp)	*0.9037*	*0.8918*	*0.8914*	*0.9072*	*0.8807*
PE	*0.8046*	*0.7799*	*0.7873*	*0.8120*	*0.7624*
PI	*0.0173*	*0.0216*	*0.0200*	*0.0160*	*0.0253*

PD	*0.9827*	*0.9784*	*0.9800*	*0.9840*	*0.9747*
PIC	*0.8957*	*0.8819*	*0.8831*	*0.8998*	*0.8696*
HWE	+	+	+	+	+

	Asia, Indian Subcontinent				
Population	**India** (Central, Satnami)	**India** (South, Karnataka state, Lingayat)	**India** (South, Karnataka state, Gowda)	**India** (South, Karnataka state, Muslims)	**India** (Sakuna-pakshollu, East and West Godawari Andhra Pradesh**)**
Ref.	(23)	(24)	(24)	(24)	(26)
n	50	98	59	45	24
Alleles					
5	**0.0760**	**0.0960**	**0.0250**	**0.0440**	**0.1250**
6	**0.0000**	**0.0000**	**0.0080**	**0.0000**	**0.0000**
7	**0.0300**	**0.1470**	**0.0840**	**0.0660**	**0.0210**
8	**0.0000**	**0.0050**	**0.0000**	**0.0330**	**0.0000**
9	**0.0150**	**0.0600**	**0.0000**	**0.0000**	**0.0210**
10	**0.0000**	**0.0300**	**0.0330**	**0.0110**	**0.0210**
11	**0.2120**	**0.0860**	**0.1690**	**0.1110**	**0.1040**
12	**0.0610**	**0.0120**	**0.1270**	**0.1550**	**0.0630**
13	**0.0760**	**0.0910**	**0.0670**	**0.0880**	**0.0210**
14	**0.0150**	**0.0660**	**0.0160**	**0.0440**	**0.0210**
15	**0.0760**	**0..1020**	**0.0590**	**0.0880**	**0.1460**
15.3	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
16	**0.1210**	**0.0760**	**0.1690**	**0.1330**	**0.2290**
16.3	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
16.4	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
17	**0.1060**	**0.0610**	**0.0590**	**0.1330**	**0.1250**
17.4	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
18	**0.0000**	**0.0660**	**0.1350**	**0.0330**	**0.0420**
18.4	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0..0000**
19	**0.0300**	**0.0700**	**0.0330**	**0.0220**	**0.0000**
19.3	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
19.4	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
20	**0.0760**	**0.0200**	**0.0080**	**0.0110**	**0.0210**
20.4	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
21	**0.0910**	**0.0050**	**0.0000**	**0.0000**	**0.0000**
22	**0.0000**	**0.0050**	**0.0000**	**0.0000**	**0.0420**
23	**0.0150**	**0.0000**	**0.0000**	**0.0220**	**0.0000**
24	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

25	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
29	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
Σ	*1.0000*	*0.9980*	*0.9920*	*0.9940*	*1.0020*
H(exp)	*0.8916*	*0.9149*	*0.8868*	*0.9012*	*0.8740*
PE	*0.7837*	*0.8251*	*0.7638*	*0.7939*	*0.7523*
PI	*0.0209*	*0.0136*	*0.0233*	*0.0180*	*0.0279*
PD	*0.9791*	*0.9864*	*0.9767*	*0.9820*	*0.9721*
PIC	*0.8824*	*0.9085*	*0.8763*	*0.8929*	*0.8620*
HWE	+	+	-	+	+

	Asia, Indian Subcontinent				
Population	**India** (Bhumihar, Bihar)	**India** (Reddy, East and West Godawari, Andhra Pradesh)	**India** (Khandait, Puri area, state of Orissa)	**India** (Naga, Manipur and Nagaland)	**India** (Juang, Orissa, Keonjhar and Dhenkanal district)
Ref.	(26)	(26)	(26)	(26)	(30)
n	17	19	17	15	50
Alleles					
5	**0.0000**	**0.1050**	**0.1470**	**0.0330**	**0.0600**
6	**0.0000**	**0.0260**	**0.0290**	**0.0000**	**0.0000**
7	**0.1180**	**0.0260**	**0.0590**	**0.0000**	**0.0000**
8	**0.0000**	**0.0260**	**0.0000**	**0.0000**	**0.0000**
9	**0.0000**	**0.0000**	**0.0000**	**0.0330**	**0.0000**
10	**0..1760**	**0.0000**	**0.0000**	**0.0000**	**0.0400**
11	**0.2350**	**0.1050**	**0.1760**	**0.1670**	**0.1800**
12	**0.0590**	**0.1580**	**0.1470**	**0.2000**	**0.2500**
13	**0.0880**	**0.0000**	**0.0880**	**0.0000**	**0.0500**
14	**0.0000**	**0.0530**	**0.2060**	**0.0670**	**0.0800**
15	**0.0290**	**0.1050**	**0.0290**	**0.1000**	**0.0600**
15.3	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
16	**0.1180**	**0.2890**	**0.0290**	**0.1000**	**0.0400**
16.3	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
16.4	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
17	**0.1470**	**0.0790**	**0.0590**	**0.1000**	**0.1100**
17.4	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
18	**0.0290**	**0.0000**	**0.0290**	**0.0670**	**0.0700**
18.4	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
19	**0.0000**	**0.0260**	**0.0000**	**0.0670**	**0.0000**
19.3	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
19.4	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
20	**0.0000**	**0.0000**	**0.0000**	**0.0670**	**0.0000**
20.4	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

21	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0300**
22	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
23	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0200**
24	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
25	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
29	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
Σ	*0.9990*	*0.9980*	*0.9980*	*1.0010*	*0.9900*
H(exp)	*0.8514*	*0.8467*	*0.8653*	*0.8820*	*0.8675*
PE	*0.7018*	*0.7008*	*0.7281*	*0.7642*	*0.7299*
PI	*0.0392*	*0.0390*	*0.0325*	*0.0251*	*0.0299*
PD	*0.9608*	*0.9610*	*0.9675*	*0.9749*	*0.9701*
PIC	*0.8343*	*0.8312*	*0.8509*	*0.8708*	*0.8551*
HWE	+	+	+	+	+

	Asia, Indian Subcontinent		**Asia, Far East**		
Population	**India** (Paroja, Orissa, Koraput-Narangpur district)	**India** (Saora, Orissa)	**China** (Beijing, Han population)	**China** (Hong Kong)	**Japan (pooled)**
Ref.	(30)	(30)	(13)	(4)	
n	78	35	201	243	674
Alleles					
5	**0.0320**	**0.0140**	**0.0657**	**0.0680**	**0.1069**
6	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
7	**0.0130**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
8	**0.0130**	**0.0000**	**0.0057**	**0.0020**	**0.0075**
9	**0.0580**	**0.0440**	**0.0029**	**0.0080**	**0.0106**
10	**0.0450**	**0.0570**	**0.0400**	**0.0430**	**0.0429**
11	**0.1540**	**0.2280**	**0.1371**	**0.1760**	**0.1370**
12	**0.1480**	**0.2000**	**0.1200**	**0.1290**	**0.1310**
13	**0.0580**	**0.0420**	**0.0571**	**0.0590**	**0.0271**
14	**0.1140**	**0.0140**	**0.0971**	**0.0740**	**0.0512**
15	**0.0450**	**0.0300**	**0.0971**	**0.0760**	**0.1220**
15.3	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
16	**0.0700**	**0.0300**	**0.0886**	**0.0660**	**0.0746**
16.3	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
16.4	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
17	**0.0960**	**0.0710**	**0.0686**	**0.0620**	**0.0828**
17.4	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
18	**0.0700**	**0.0850**	**0.0771**	**0.0840**	**0.0708**
18.4	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

19	**0.0320**	**0.1000**	**0.0371**	**0.0390**	**0.0459**
19.3	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
19.4	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
20	**0.0260**	**0.0570**	**0.0200**	**0.0570**	**0.0369**
20.4	**0.0000**	**0.0000**	**0.0000**	**0..0000**	**0.0000**
21	**0.0000**	**0.0140**	**0.0429**	**0.0290**	**0.0166**
22	**0.0060**	**0.0140**	**0.0200**	**0.0140**	**0.0211**
23	**0.0130**	**0.0000**	**0.0171**	**0.0060**	**0.0075**
24	**0.0060**	**0.0000**	**0.0057**	**0.0060**	**0.0053**
25	**0.0000**	**0.0000**	**0.0000**	**0.0020**	**0.0015**
29	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
Σ	*0.9990*	*1.0000*	*0.9998*	*0.9980*	*0.9992*
H(exp)	*0.9083*	*0.8730*	*0.9159*	*0.9100*	*0.9107*
PE	*0.8144*	*0.7508*	*0.8293*	*0.8192*	*0.8185*
PI	*0.0154*	*0.0278*	*0.0133*	*0.0148*	*0.0148*
PD	*0.9846*	*0.9722*	*0.9867*	*0.9852*	*0.9852*
PIC	*0.9013*	*0.8613*	*0.9097*	*0.9033*	*0.9038*
HWE	+	+	+	+	

	Asia, Far East				
Population	Japan	Japan	**Singapore** (Chinese)	**Singapore** (Indians)	**Singapore** (Malay)
Ref.	(7)	(21)	(41)	(41)	(41)
n	508	164	184	177	161
Alleles					
5	0.1060	0.1098	**0.0435**	**0.0650**	**0.0435**
6	0.0000	0.0000	**0.0000**	**0.0000**	**0.0000**
7	0.0000	0.0000	**0.0000**	**0.0565**	**0.0093**
8	0.0070	0.0092	**0.0027**	**0.0085**	**0.0000**
9	0.0130	0.0031	**0.0136**	**0.0254**	**0.0248**
10	0.0440	0.0396	**0.0380**	**0.0198**	**0.0497**
11	0.1370	0.1372	**0.1766**	**0.1497**	**0.2391**
12	0.1260	0.1463	**0.1033**	**0.0932**	**0.0963**
13	0.0270	0.0274	**0.0543**	**0.0706**	**0.0745**
14	0.0530	0.0457	**0.0761**	**0.0565**	**0.0807**
15	0.1210	0.1250	**0.0815**	**0.0932**	**0.0590**
15.3	0.0000	0.0000	**0.0000**	**0.0000**	**0.0000**
16	0.0800	0.0579	**0.0734**	**0.1271**	**0.0714**
16.3	0.0000	0.0000	**0.0000**	**0.0000**	**0.0000**
16.4	0.0000	0.0000	**0.0000**	**0.0028**	**0.0000**
17	0.0780	0.0976	**0.0625**	**0.1017**	**0.0466**
17.4	0.0000	0.0000	**0.0000**	**0.0000**	**0.0000**

18	0.0680	0.0793	**0.0842**	**0.0734**	**0.0466**
18.4	0.0000	0.0000	**0.0000**	**0.0000**	**0.0000**
19	0.0440	0.0518	**0.0679**	**0.0198**	**0.0714**
19.3	0.0000	0.0000	**0.0000**	**0.0000**	**0.0000**
19.4	0.0000	0.0000	**0.0027**	**0.0000**	**0.0000**
20	0.0380	0.0335	**0.0435**	**0.0056**	**0.0373**
20.4	0.0000	0.0000	**0.0000**	**0.0000**	**0.0000**
21	0.0190	0.0092	**0.0353**	**0.0085**	**0.0248**
22	0.0220	0.0183	**0.0163**	**0.0085**	**0.0124**
23	0.0080	0.0061	**0.0082**	**0.0056**	**0.0031**
24	0.0060	0.0031	**0.0163**	**0.0028**	**0.0062**
25	0.0020	0.0000	**0.0000**	**0.0056**	**0.0031**
29	0.0000	0.0000	**0.0000**	**0.0000**	**0.0000**
Σ	*0.9990*	*1.0001*	*0.9999*	*0.9998*	*0.9998*
H(exp)	*0.9123*	*0.9042*	*0.9145*	*0.9110*	*0.8962*
PE	*0.8217*	*0.8064*	*0.8283*	*0.8197*	*0.7974*
PI	*0.0143*	*0.0170*	*0.0133*	*0.0147*	*0.0180*
PD	*0.9857*	*0.9830*	*0.9867*	*0.9853*	*0.9820*
PIC	*0.9057*	*0.8963*	*0.9085*	*0.9042*	*0.8889*
HWE	+	+	+	+	+

	Asia, Far East	**Africa**			
Population	**Vietnam** (North, Hanoi area)	**Cabo Verde**	**Equatorial Guinea** (living in Madrid)	**Mozambique**	**Mozambique** (Maputo)
Ref.	(1)	(12)	(29)	(8)	(35)
n	178	19	134	105	135
Alleles					
5	**0.0480**	**0.0789**	**0.0750**	**0.1100**	**0.0960**
6	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
7	**0.0030**	**0.0526**	**0.1120**	**0.1520**	**0.1440**
8	**0.0060**	**0.2105**	**0.1980**	**0.1670**	**0.1740**
9	**0.0110**	**0.0263**	**0.0260**	**0.0430**	**0.0410**
10	**0.0530**	**0.0263**	**0.0520**	**0.0570**	**0.0700**
11	**0.2500**	**0.0263**	**0.0480**	**0.0430**	**0.0480**
12	**0.0900**	**0.1578**	**0.0780**	**0.1190**	**0.1220**
13	**0.0510**	**0.1578**	**0.1120**	**0.1240**	**0.1300**
14	**0.1010**	**0.0789**	**0.0890**	**0.0430**	**0.0410**
15	**0.0670**	**0.0526**	**0.0820**	**0.0380**	**0.0440**
15.3	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
16	**0.0730**	**0.0263**	**0.0600**	**0.0570**	**0.0480**

16.3	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
16.4	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
17	**0.0560**	**0.0536**	**0.0450**	**0.0240**	**0.0190**
17.4	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0..0000**
18	**0.0650**	**0.0000**	**0.0190**	**0.0240**	**0.0220**
18.4	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
19	**0.0340**	**0.0000**	**0.0040**	**0.0000**	**0.0000**
19.3	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0..0000**
19.4	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
20	**0.0480**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
20.4	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
21	**0.0370**	**0.0263**	**0.0000**	**0.0000**	**0.0000**
22	**0.0030**	**0.0263**	**0.0000**	**0.0000**	**0.0000**
23	**0.0060**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
24	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
25	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
29	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
Σ	*1.0020*	*1.0005*	*1.0000*	*1.0010*	*0.9990*
H(exp)	*0.8893*	*0.8809*	*0.8977*	*0.8927*	*0.8923*
PE	*0.7870*	*0.7641*	*0.7948*	*0.7848*	*0.7820*
PI	*0.0203*	*0.0251*	*0.0189*	*0.0211*	*0.0212*
PD	*0.9797*	*0.9749*	*0.9811*	*0.9789*	*0.9788*
PIC	*0.8812*	*0.8700*	*0.8893*	*0.8832*	*0.8827*
HWE	+	*?*	+	+	+

	Africa		
Population	**Tunisia**	**Tunisia** (Zriba, Arabs)	**Tunisia** (Kesra, Berbers)
Ref.	(6)	(36)	(36)
n	200	45	44
Alleles			
5	**0.0280**	**0.0120**	**0.0000**
6	**0.0000**	**0.0000**	**0.0000**
7	**0.1290**	**0.0370**	**0.1710**
8	**0.0370**	**0.0120**	**0.0980**
9	**0.0140**	**0.0120**	**0.0240**
10	**0.0840**	**0.0980**	**0.0370**
11	**0.1740**	**0.1590**	**0.1950**
12	**0.2110**	**0.1590**	**0.1590**
13	**0.1290**	**0.1590**	**0.1590**
14	**0.0650**	**0.0980**	**0.0370**

15	**0.0250**	**0.0370**	**0.0730**
15.3	**0.0000**	**0.0000**	**0.0000**
16	**0.0170**	**0.0490**	**0.0000**
16.3	**0.0000**	**0.0000**	**0.0000**
16.4	**0.0000**	**0.0000**	**0.0000**
17	**0.0480**	**0.0370**	**0.0240**
17.4	**0.0000**	**0.0000**	**0.0000**
18	**0.0110**	**0.0610**	**0.0120**
18.4	**0.0000**	**0.0000**	**0.0000**
19	**0.0140**	**0.0240**	**0.0000**
19.3	**0.0000**	**0.0000**	**0.0000**
19.4	**0.0000**	**0.0000**	**0.0000**
20	**0.0000**	**0.0000**	**0.0000**
20.4	**0.0000**	**0.0000**	**0.0000**
21	**0.0000**	**0..0370**	**0.0120**
22	**0.0000**	**0.0120**	**0.0000**
23	**0.0000**	**0.0000**	**0.0000**
24	**0.0000**	**0.0000**	**0.0000**
25	**0.0000**	**0.0000**	**0.0000**
29	**0.0000**	**0.0000**	**0.0000**
Σ	*0.9860*	*1.0030*	*1.0010*
H(exp)	*0.8748*	*0.8922*	*0.8631*
PE	*0.7356*	*0.7869*	*0.7261*
PI	*0.0278*	*0.0211*	*0.0338*
PD	*0.9722*	*0.9789*	*0.9662*
PIC	*0.8626*	*0.8827*	*0.8480*
HWE	+	+	+

References

(1) **Shimada, I., Brinkmann, B., Tuyen, N.Q., Hohoff, C.** (2002) Allele frequency data for 16 STR loci in the Vietnamese population. Int. J. Legal Med. 116: 246-248

(2) **Paredes, M., Crespillo, M., Luque, J.A., Valverde, J.L.** (2003) STR frequencies for the PowerPlex® 16 System Kit in a population from Northeast Spain. Forensic Sci. Int. 135: 75-78

(3) **Maity, B., Nunga, S.C., Kashyap, V.K.** (2003) Genetic polymorphism revealed by 13 tetrameric and 2 pentameric STR loci in four Mongoloid tribal population. Forensic Sci. Int. 132: 216-222

(4) **Law, M.Y., To, K.Y., Ho, S.H., Pang, B.C.M., Wong, L.M., Wun, H.L., Yau, S.K., Chan, K.L.** (2002) SRE dat for the PowerPlex ™ 16 loci for the Chinese population in Hong Kong. Forensic Sci. Int. 129: 64-67

(5) **Garfono, L., Pizzamiglio, M., Donato, F., Biondi, F., Rossetti, M., Budowle, B.** (1999) Italian population data on two new short tandem repeat loci: D2S1338 ans Penta E. Forensic Sci. Int. 105: 131-136

(6) **Casadevall-Brandt, C., Ben Dhiab, M., Taroni, F., Gehrig, C., Dimo-Simonin, N., Zemni, M., Mangin, P.** (2003) Tunisian population allele frequencies for 15 PCR-based loci. Prog. Forensic Genet. 9 / Int. Congress Ser. 1239: 113-116

(7) **Hashiyada, M., Itakura, Y., Nata, M.** (2003) PowerPlex™ 16 analysis in Japanese population. Prog. Forensic Genet. 9 / Int. Congress Ser. 1239: 125-130

(8) **Alves, C., Gusmao, L., Pereira, L., Amorim, A.** (2003) Multiplex STR genotyping: comparison study, population data and new sequence information. Prog. Forensic Genet. 9 / Int. Congress Ser. 1239: 131-135

(9) **Garcia-Hirschfeld, J., Farfan, M.J., Prieto, V., Lopez-Soto, M., Torres, Y., Sanz, P.** (2003) Allele distribution on 15 STRs in a population from Extremadura, (Central-Western Spain). Prog. Forensic Genet. 9 / Int. Congress Ser. 1239: 165-169

(10) **Yunis, J.J., Garcia, O., Moreno, S., Pineda, C., Rodriguez, C., Uriarte, I., Yunis, J.** (2003) Population data on Powerplex 2.1 (FGA, vWA, TPOX, TH01, Penta E, D18S51, D21S11, D3S1358, D8S1179) and Gammastar (D16S539, D7S820, D13S317, D5S818) in a sample of Caucasian-Mestizos from Colombia. Prog. Forensic Genet. 9 / Int. Congress Ser. 1239: 207-212

(11) **Abrantes, D., Pontes, M.L., Lima, G., Rezende, P.A., Pereira, M.J., Pinheiro, M.F.** (2003) Analysis of Penta D and Penta E STR loci in a Northern Portuguese population. Prog. Forensic Genet. 9 / Int. Congress Ser. 1239: 223-226

(12) **Riberio, T., Viriato, L., Vieira-Silva, C., Cruz, C., Espinheira, R., Geada, H.** (2003) Portuguese population data on two pentanucleotide STR loci Penta E and Penta D. Prog. Forensic Genet. 9 / Int. Congress Ser. 1239: 235-238

(13) **Liu, Y., Huo, Z.Y., Tang, H., Wang, J., Jiao, Z., Ma, W., Jiangwei, Y., Yang, J., Jia, S., Zhu, X.** (2003) Frequency data for 15 STR loci and forensic use in a Beijing-Han population. Prog. Forensic Genet. 9 / Int. Congress Ser. 1239: 267-270

(14) **Ashma. R., Kashyap, V.K.** (2002) Genetic polymorphism at 15 STR loci among three important subpopulation of Bihar, India. Forensic Sci. Int. 130: 58-62

(15) **Cakir, A.H., Celebioglu, A., Altunbas, S., Yardimci, E.** (2003) Allele frequencies for 15 STR loci in Van-Agri districts of the Eastern Anatolia region of Turkey. Forensic Sci. Int. 135: 60-63

(16) **Gaviria, A., Ibarra, A.A., Jaramillo, N., Palacio, O.D., Acosta, M.A., Brion, M., Carracedo, A.** (2004) Nineteen autosomal microsatellite data from Antioquia (Colombia). Forensic Sci. Int. 143: 69-71

(17) **Gonzalez-Andrade, F., Sanchez-Q, D., Martinez-Jarreta, B.** (2003) Genetic profile of Ecuadorian Mestizo population (Ecuador – South America) by using the Power Plex ® 16 System Kit. Forensic Sci. Int. 135: 64-66

(18) **Konjhodzic, R., Kubat, M., Skavic, J.** (2004) Bosnian population data for 15 STR loci in Power Plex 16 kit. Int. J. Legal Med.: 119-121

(19) **Gonzalez-Andrade, F., Sanchez de Gonzalez, D., Martinez-Jarreta, B.** (2004) Genetic profile of the Ecuadorian black population (Ecuador-South America) by using the Power Plex® 16 sytem kit. Prog. Forensic Genet. 10 / Int. Congress Ser. 1261: 166-168

(20) **Barrot-Feixat, C., Gonzalez-Martin, A., Ortega, M., Sanchez, C., Gorostiza, A., Huguet, E., Brandt-Casadevall, C., Corbella, J., Gené, M.** (2004) Hña hñu Amerindian population from La Sierra Otomi-Tepehua (Mexico) characterised by 14 STR-PCR polymorphisms. Prog. Forensic Genet. 10 / Int. Congress Ser. 1261: 179-181

(21) **Hara, M., Yamamoto, Y., Takada, A., Saito, K., Kido, A., Oya, M., Kameyama, H.** (2004) Population data for 15 STR loci D3S1358, TH01, D21S11, D18S51, Penta E, D5S818, D13S317, D7S820, D16S539, CSF1PO, Penta D, vWA, D8S1179, TPOX and FGA in Japanese. Prog. Forensic Genet. 10 / Int. Congress Ser. 1261: 204-206

(22) **Immel, U.-D., Kleiber, M., Klintschar, M.** (2004) Population genetic analysis in a German population from Saxony-Anhalt using the Powerplex™16 system. Prog. Forensic Genet. 10 / Int. Congress Ser. 1261: 216-218

(23) **Sarkar, N., Kashyap, V.K.** (2002) Genetic diversity at two pentanucleotide STR and thirteen tetranucleotide STR loci by multiplex PCR in four predominant population groups of central India. Forensic Sci. Int. 128: 196-201

(24) **Rajkumar, R., Kashyap, V.K.** (2002) Distribution of alleles of 15 STR loci of the Powerplex™ 16 Multiplex system in four predominant population groups of South India. Forensic Sci. Int. 126: 173-177

(25) **Egyed, B., Füredi, S., Angyal, M., Balogh, I., Kalmar, L., Padar, Z.** (2005) Analysis of the population heterogeneity in Hungary using fifteen forensically informative STR markers. Forensic Sci. Int., in press

(26) **Kashyap, V.K., Sarkar, N., Trivedi, R.** (2002) Allele frequencies for STR loci of the PowerPlex™ 16 multiplex system in five endogamous population of India. Forensic Sci. Int. 126: 178-186

(27) **González-Andrade, F., Sánchez-Q, D., Martinez-Jarreta, B.** (2005) Genetic analysis of the Amerindian Kichwas and Afroamerican descendents populations from Ecuador characterized by 15 STR-PCR polymorphisms. Forensic Sci. Int., in press

(28) **Marino, M., Sala, A., Corach, D.** (2005) Population genetic analysis of 15 autosomal STRs loci in the central region of Argentina. Forensic Sci. Int., in press

(29) **Alves, C., Gusmao, L., Lopez-Parra, A.M., Soledad Mesa, M., Amorim, A., Arroyo-Pardo, E.** (2005) STR allelic frequencies for an African population sample (Equatorial Guinea) using AmpF/STR Identifiler and Powerplex 16 kits. Forensic Sci. Int. 148: 239-242

(30) **Sahoo, S., Kasyap, V.K.** (2002) Genetic variation at 15 autosomal microsatellite loci in the three highly endogamous tribal populations of Orissa, India. Forensic Sci. Int. 130: 189-193

(31) **Marino, M., Sala, A., Corach, D.** (2005) Genetic attributes of 15 autosomal STRs in the population of two patagonian provinces of Argentina. Forensic Sci. Int., in press.

(32) **Marino, M., Sala, A., Corach, D.** (2005) Genetic analysis of the populations from Northern and Mesopotamian provinces of Argentina by means of 15 autosomal STRs. Forensic Sci. Int., in press

(33) **Cariolou, M.A., Manoli, P., Demetriou, N., Bashiardes, E., Karagrigoriou, A., Budowle, B.** (2005) Allele distribution of 15 STR loci used for human identity purposes in the Greek Cypriot population of the island of Cyprus. Forensic Sci. Int., in press

(34) **Pinheiro, M.F., Cainé, L., Pontes, L., Abrantes, D., Lima, G., Pereira, M.J., Rezende, P.** (2005) Allele frequencies of sixteen STRs in the population of Northern Portugal. Forensic Sci. Int. 148: 221-223

(35) **Alves, C., Gusmao, L., Damasceno, A., Soares, B., Amorim, A.** (2004) Contribution for an African autosomic STR database (AmpF/STR Identifiler and Powerplex 16 System) and a report on genotypic variations. Forensic Sci. Int. 139: 201-205

(36) **Cherni, L., Loueslati Yaacoubi, B., Pereira, L., Alves, C., Khodjet El Kill, H., Ben Ammar El Gaaied, A., Amorim, A.** (2005) Data for 15 autosomal STR markers (Powerplex 16 System) from two Tunisian populations: Kesra (Berber) and Zriba (Arab). Forensic Sci. Int. 147: 101-106

(37) **Kovatsi, L., Parsons, T.J., Just, R.S., Irwin, J.A**. (2005) Genetic variation for 15 autosomal STR loci (PowerPlex 16) in a population sample from northern Greece. Forensic Sci. Int., in press

(38) **Barbarii, L.E., Rolf, B., Constantinescu, C., Hohoff, C., Calistru, P., Dermengiu, D.** (2004) Allele frequencies of 13 short tandem repeat (STR) loci in Romanian population. Forensic Sci. Int. 141: 171-174

(39) **Toscanini, U., Berardi, G., Raimondi, E.** (2003) STR data for PowerPlex®16 system from Neuquen population, SW Argentina. Forensic Sci. Int. 134: 219-221

(40) **Whittle, M.R., Romano, N.L., Negreiros, V.A.C.** (2004) Updated Brazilian genetic data, together with mutation rates, on 19 STR loci, including D10S1237. Forensic Sci. Int. 139: 207-210

(41) **Yong, R.Y.Y., Aw, L.T., Yap, E.P.H.** (2004) Allele frequencies of 15 STR loci in three main ethnic populations in Singapore using an in-house marker panel. Forensic Sci. Int. 141: 175-183

(42) **Souza Goes, A.C. de, Silva, D.A. da, Fonseca Gil, E.H., Silva, M.T.D. da, Pereira, R.W., Carvalho, E.F. de** (2004) Allele frequencies data and statistic parameters for 16 STR loci – D19S433, D2S1338, CSF1PO, D16S539, D7S820, D21S11, D18S51, D13S317, D5S818, FGA, Penta E, TH01, vWA, D8S1179, TPOX, D3S1358 – in the Rio de Janeiro population, Brazil. Forensic Sci. Int. 140: 131-132

(43) **Berardi, G., Toscanini, U., Raimondi, E**. (2003) STR data for PowerPlex®16 system from Buenos Aires population, Argentina. Forensic Sci. Int. 134: 222-224

(44) **Koziol, P., Ciesielka, M., Madro, R., Krajka, A.** (2004) Genetic data on 19 STR loci in south-east Poland. Forensic Sci. Int. 139: 89-92