

Table 1. DNA profiles of evidence (A1, A2) and reference samples (M1, M2, M3, M4).

Sample	D3S1358	VWA	D16S539	D2S1338	AMY	D8S1179	D21S11	D18S51	D19S433	TH01	FGA
M1	16-17	14-17	11-13	24-26	XY	13-13	30-31.2	14-15	13.2-14.2	6-9.3	21-22
M2	16-16	14-18	11-12	23-25	XY	11-13	31-31.2	14-17	13-15.2	9-9	18-20
M3	17-18	17-17	11-13	23-23	XY	10-15	30-30	12-14	13-14	6-9	21-25
M4	14-17	16-17	12-12	21-25	XY	11-14	28-30	-	14-14	9.3-9.3	24-25
A1	14,16,17	14,16, 17,18	11,12,13	23,24,25, 26	X,Y	11,13	29,30,31, 31.2	14,15,17	13,13.2, 14.2,15.2	6,9,9.3	18,20, 21,22
A2	15,16,17	14,17	11	-	X,Y	13	30,31.2	-	13.2,14.2	-	21

Table 2. Summary of DNA profiles of reference samples (M1, M2, M3, M4) found in the evidence (A1).

Reference sample	Number of loci with alleles present or absent in evidence A1			Number of loci with alleles in the evidence A1	
	Two present	One present	Absent	Present	Absent
(M1)	10	0	0	20	0
(M2)	10	0	0	20	0
(M3)	5	4	1	14	6
(M4)	4	3	2	11	7

Table 3a

Frequencies of genotypes in the evidence A1.

Parameter	locus	D3S1358		vWA		D16S539		D2S1338		D8S1179	
	frequency	allele	f	allele	f	allele	f	allele	f	allele	f
Allelel present in A1	f1	14	0.1567	14	0.1083	11	0.2867	23	0.1000	11	0.0717
	f2	16	0.2133	16	0.1917	12	0.3242	24	0.1033	13	0.3067
	f3	17	0.2125	17	0.2445	13	0.2008	25	0.1200	-	-
	f4	-	-	18	0.2375	-	-	26	0.0183	-	-
Total frequency of alleles present in A1	fs	0.5825		0.7825		0.8117		0.3416		0.3784	
Total frequency of alleles absent from A1	1-fs	0.4175		0.2175		0.1883		0.6584		0.6216	
Frequency of a genotype with 2 alleles present in A1	fs ²	0.3393		0.6123		0.6589		0.1167		0.1432	
Frequency of a genotype with 1 allele present in A1 and 1 allele absent from A1	2xfs(1-fs)	0.4864		0.3404		0.3057		0.4498		0.4704	
Frequency of a genotype with 2 alleles absent from A1	(1-fs) ²	0.1743		0.0473		0.0355		0.4335		0.3864	

f – allelic frequencies in the population of Western Pomerania [Population genetics of 15 autosomal STR ...]

$$fs = f1 + f2 + f3 + f4 \text{ (model 1)}$$

The product of all ten of fs2 is 0.00000221 = 1/453, 000 (model 3)

Table 3b

Frequencies of genotypes in the evidence A1.

Parameter	locus	D21S11		D18S51		D19S433		TH01		FGA	
	frequency	allele	f	allele	f	allele	f	allele	f	allele	f
Alleles present in A1	f1	29	0.1938	14	0.1492	13	0.2217	6	0.2158	18	0.0175
	f2	30	0.2325	15	0.1517	13.2	0.0208	9	0.2217	20	0.1367
	f3	31	0.0733	17	0.1308	14.2	0.0300	9.3	0.3250	21	0.1775
	f4	31.2	0.0858	-	-	15.2	0.0317	-	-	22	0.1983
Total frequency of alleles present in A1	fs	0.5854		0.4317		0.3042		0.7625		0.5300	
Total frequency of alleles absent from A1	1-fs	0.4146		0.5683		0.6958		0.2375		0.4700	
Frequency of a genotype with 2 alleles present in A1	fs ²	0.3427		0.1864		0.0925		0.5814		0.2809	
Frequency of a genotype with 1 allele present in A1 and 1 allele absent from A1	2xfs(1-fs)	0.4854		0.4907		0.4233		0.3622		0.4982	
Frequency of a genotype with 2 alleles absent from A1	(1-fs) ²	0.1719		0.3230		0.4841		0.0564		0.2209	

f – allelic frequencies in the population of Western Pomerania [Population genetics of 15 autosomal STR ...]

$$fs = f1 + f2 + f3 + f4 \text{ (model 1)}$$

The product of all ten of fs2 is 0.00000221 = 1/453, 000 (model 3)