SUPPLEMENTARY INFORMATION

ESM1: STR haplotypes in four Mayan from Guatemala (N=200).

ESM2: Parameters of population and forensic genetic interest. Number of individuals, combined matching probabilities, combined power of discrimination, combined power of exclusion, average heterozygosity and average gene diversity index for each Mayan group.

ESM3: STRUCTURE v.2.3.1 results. Simulation summary: number of populations assumed, natural logarithm probability, Ln P (D), and its variance Var [Ln P (D)].

Electronic supplementary material 1:
STRs haplotypes Kaqchiquel, K'iche Mam & Q'echi' from Guatemala [N=200 (50,50,50 &50)]

Sample	Pop.	D8S1179		D21S11		D7S820		CSF1PO		D3S1358		TH01		D13S317		D16S539		D2S1338		D19S433		vWA		TPOX		D18S51		D5S818		FGA	
GU-026	Kaqchiquel	10	14	27.2	29	11	12	10	13	15	15	6	7	9	10	9	10	18	23	15	17	14	16	8	8	13	13	11	11	21	24
GU-069	Kaqchiquel	12	13	29	31.2	10	11	10	11	15	15	6	9.3	9	14	10	12	18	24	13	15.2	15	17	8	11	16	19	11	11	20	24
GU-111	Kaqchiquel	14	14	29	31.2	10	12	10	12	17	17	6	7	13	13	9	10	19	23	13	14.2	16	16	12	12	15	18	11	12	25	26
GU-115	Kaqchiquel	12	14	28	30	11	12	10	12	15	16	6	9	10	13	10	10	20	23	13.2	16.2	14	16	8	11	14	17	9	11	19	23
GU-116	Kaqchiquel	13	14	28	31.2	11	11	10	11	15	16	7	7	10	14	10	11	19	23	13.2	13.2	16	17	8	12	14	16	7	11	20	24
GU-117	Kaqchiquel	12	14	29	30	12	13	10	12	15	15	6	7	9	14	10	12	20	23	14	15.2	17	18	12	13	13	17	11	11	25	26
GU-118	Kaqchiquel	11	12	30	32.2	11	11	11	11	15	16	6	6	8	13	10	11	21	23	13.2	16.2	16	18	12	12	14	17	11	11	22	26
GU-119	Kaqchiquel	13	14	30	30.2	10	11	11	12	15	17	6	6	9	11	10	12	18	20	13	13.2	16	18	8	11	17	20	9	11	24	26
GU-120	Kaqchiquel	14	15	29	33.2	10	11	12	12	16	16	7	7	11	14	10	11	19	20	12.2	13.2	17	17	8	11	14	15	11	11	23	26
GU-121	Kaqchiquel	13	14	30	32.2	10	12	10	10	15	16	6	6	11	13	11	12	17	23	13.2	13.2	16	16	8	12	13	17	9	11	21	25
GU-122	Kaqchiquel	13	14	29	30	12	12	10	12	15	15	6	7	12	13	11	12	19	19	13.2	13.2	16	16	8	12	13	17	11	12	26	26
GU-123	Kaqchiquel	13	14	29	32	11	12	9	12	15	15	6	7	9	12	11	12	23	23	15.2	16.2	16	17	11	11	14	16	11	11	22	25
GU-124	Kaqchiquel	13	15	29	30	11	11	12	14	16	16	6	6	13	14	10	11	22	22	13	13	16	17	8	11	16	16	7	11	22	26
GU-125	Kaqchiquel	13	14	31.2	32.2	11	12	12	13	16	16	6	6	9	10	11	11	20	23	12	15	16	17	8	11	14	18	11	11	22	26
GU-126	Kaqchiquel	12	13	29	29	12	12	10	10	14	14	6	7	9	11	10	11	17	22	12.2	13.2	16	18	11	11	12	18	12	13	19	26
GU-127	Kaqchiquel	13	14	29	32.2	11	11	11	13	15	15	9	9.3	9	10	11	12	19	22	13.2	14	16	16	12	12	14	14	11	12	24	27
GU-128	Kaqchiquel	11	15	29	30	>10	11	11	12	16	17	6	7	9	12	10	11	17	17	13.2	13.2	16	18	11	11	14	16	7	11	21	26
GU-129	Kaqchiquel	13	13	30	32.2	10	>10	10	12	15	15	6	6	9	11	9	11	18	18	13	15.2	16	17	8	11	17	17	9	11	22	24
GU-130	Kaqchiquel	10	12	28	30	11	11	10	13	15	17	6	9.3	9	10	11	12	19	23	12.2	13	16	17	8	12	13	16	11	12	25	26
GU-131	Kaqchiquel	12	14	29	30	10	12	10	14	15	15	6	7	11	13	10	11	21	23	13	15.2	16	16	8	12	15	15	7	11	24	24
GU-132	Kaqchiquel	14	14	29	30	10	11	12	13	16	16	6	6	9	10	10	11	19	19	13.2	14	15	16	8	11	15	16	11	12	19	19
GU-133	Kaqchiquel	12	14	29	33.2	12	12	10	12	14	15	6	6	9	13	11	12	19	24	13	13.2	16	16	8	8	12	17	11	12	25	28
GU-134	Kaqchiquel	13	14	29	29	10	12	10	12	15	16	7	9.3	11	11	9	13	22	23	13.2	14	15	16	8	11	15	17	11	13	23	25
GU-135	Kaqchiquel	12	14	30	31.2	10	11	10	12	15	15	6	7	12	13	9	10	23	25	12	15	17	17	8	11	15	18	11	12	25	27
GU-164	Kaqchiquel	12	12	29	29	10	10	10	13	15	16	6	9.3	12	14	12	12	18	19	14.2	15	18	18	8	12	13	13	10	11	23	24
GU-165	Kaqchiquel	12	15	30.2	32.2	10	12	12	13	15	17	6	6	9	11	9	10	19	23	13	14	16	16	8	8	15	15	11	12	24	26
GU-167	Kaqchiquel	13	14	31.2	33.2	12	12	10	12	15	16	6	6	9	10	11	12	19	23	13	13.2	14	16	8	11	16	20	11	11	20	23
GU-168	Kaqchiquel	14	15	30	31.2	10	12	10	12	15	15	6	6	14	14	9	10	18	23	13	13.2	16	17	8	8	14	15	11	12	19	21
GU-169	Kaqchiquel	14	14	29	32.2	11	13	12	12	15	16	6	6	9	10	12	12	19	22	13.2	16.2	17	17	8	11	13	18	11	12	20	20
GU-170	Kaqchiquel	12	15	32.2	33.2	11	12	10	12	15	15	6	6	8	10	9	11	19	19	14	15.2	16	19	11	12	16	18	11	11	19	26

GU-173	Kaqchiquel	13	14	30	32.2	11	12	11	12	15	16	6	7	12	13	9	11	17	19	13	13.2	16	17	8	12	14	16	11	12	24	25
GU-174	Kaqchiquel	13	14	30	31.2	11	12	12	12	15	16	6	6	13	14	9	10	19	20	13	15.2	17	17	8	12	14	16	12	12	25	26
GU-176	Kaqchiquel	14	14	30	32.2	11	13	12	12	15	17	6	6	10	12	9	12	19	20	13.2	14	16	17	8	11	15	19	11	11	25	27
GU-177	Kaqchiquel	10	13	29	30	10	11	12	12	15	15	6	7	8	9	11	12	20	22	13.2	16.2	16	17	11	11	10	18	12	12	24	24
GU-179	Kaqchiquel	13	14	30	30.2	11	12	11	12	14	15	6	9.3	9	12	9	12	18	20	12.2	13.2	16	18	11	11	11	20	9	11	21	26
GU-181	Kaqchiquel	13	14	29	32.2	10	12	11	12	15	15	6	7	9	10	9	10	20	21	13.2	14	16	18	8	11	14	15	11	11	22	25
GU-182	Kaqchiquel	13	14	29	30	10	11	10	11	15	15	6	6	9	12	9	12	19	22	13.2	14	17	17	8	8	13	18	7	7	21	26
GU-183	Kaqchiquel	13	14	29	30	12	13	9	10	15	16	6	6	9	9	10	11	19	20	14	15	17	17	8	11	14	15	11	11	21	26
GU-184	Kaqchiquel	10	14	30	32.2	>10	11	10	12	15	15	6	6	9	10	10	11	20	23	12	15.2	16	17	8	11	18	18	7	12	22	25
GU-191	Kaqchiquel	12	15	29	32	12	12	10	11	16	16	6	7	12	13	10	12	18	23	12	13	17	17	8	11	18	19	12	12	23	24
GU-192	Kaqchiquel	12	15	29	31.2	9	12	10	11	14	16	6	6	9	13	10	10	19	21	12.2	13.2	14	15	11	11	12	14	11	11	24	24
GU-194	Kaqchiquel	10	15	29	32.2	9	12	11	12	15	15	6	7	12	13	12	12	22	24	13.2	14	16	19	12	12	18	18	9	11	20	24
GU-195	Kaqchiquel	13	15	29	31.2	11	12	10	12	15	16	6	6	11	12	10	12	20	22	14	14	18	19	11	12	14	14	11	13	24	25
GU-196	Kaqchiquel	11	12	29	31.2	11	12	10	10	16	16	6	6	12	12	10	11	19	23	13	13	15	18	11	11	17	21	11	12	25	26
GU-277	Kaqchiquel	12	13	29	33.2	11	11	12	12	15	16	6	7	9	10	11	12	23	23	13	13.2	17	19	11	12	14	19	11	11	26	27
GU-473	Kaqchiquel	13	14	30	32.2	10	12	12	13	15	15	6	6	11	13	11	12	20	24	13.2	14	16	16	11	12	14	15	11	11	20	26
GU-474	Kaqchiquel	13	14	30	31.2	10	12	11	12	15	15	6	9.3	11	12	10	11	19	24	15	16	16	18	8	11	17	18	11	12	25	25
GU-475	Kaqchiquel	13	13	29	30	12	12	10	13	15	18	6	6	10	12	11	12	19	20	12	14	14	16	8	13	16	18	7	12	25	27
GU-476	Kaqchiquel	13	14	30	32.2	11	12	10	12	15	15	6	7	8	13	10	12	18	19	15	15	16	16	8	8	13	17	11	11	26	27
GU-477	Kaqchiquel	10	13	30	32.2	11	12	12	12	15	16	6	7	11	12	10	11	19	20	13	14	16	18	8	12	15	15	11	11	25	25
GU-082	K'iche'	14	15	29	31.2	12	12	11	12	15	17	6	6	9	10	9	11	19	22	12	13	17	18	8	8	17	17	11	11	23	25
GU-049	K'iche'	14	15	30	32.2	12	12	11	13	15	16	7	9.3	9	12	10	10	19	20	12	13	15	16	11	13	15	17	11	12	19	26
GU-056	K'iche'	12	13	31	31	11	12	12	12	15	15	6	8	12	13	9	10	18	18	13	15	14	17	8	12	12	18	7	11	22	27
GU-085	K'iche'	13	15	30	32	11	11	12	12	15	16	6	6	9	13	10	12	21	22	13.2	14	16	17	9	11	15	17	11	11	22	25
GU-086	K'iche'	10	13	29	31	11	12	12	12	15	15	7	9.3	9	11	10	11	19	20	14	14	16	17	8	12	14	19	7	11	22	24
GU-087	K'iche'	13	15	29	30	10	11	10	12	15	16	6	9.3	10	14	11	11	20	23	13	15	15	17	8	12	13	15	11	11	20	26
GU-136	K'iche'	13	15	29	31	12	12	11	11	15	16	6	7	11	13	11	11	19	23	13.2	15	16	16	8	12	15	18	7	11	23	24
GU-137	K'iche'	11	14	29	32.2	10	13	12	12	16	17	6	9.3	12	14	10	13	19	20	14	14	16	17	8	11	13	14	11	11	19	25
GU-139	K'iche'	12	14	30	31.2	10	12	11	12	15	16	6	7	9	12	10	11	18	19	11.2	14	16	17	8	12	18	18	11	12	19	25
GU-140	K'iche'	14	15	28	29	10	11	11	12	15	15	6	9.3	9	12	9	13	19	19	13.2	14	17	18	8	8	13	18	7	11	23	25
GU-141	K'iche'	14	14	29	30	11	12	9	12	15	16	7	7	9	9	10	11	18	23	12.2	14	16	19	11	12	15	17	10	12	24	24
GU-145	K'iche'	11	13	29	30	12	12	11	12	15	15	6	6	10	11	12	12	19	23	14	14	16	17	8	11	16	17	11	12	25	25
GU-146	K'iche'	13	15	29	31	10	12	11	12	15	15	7	7	12	12	10	10	20	23	13	14	17	18	8	8	14	17	9	11	20	23

GU-148	K'iche'	12	13	32.2	33.2	10	10	12	14	15	17	6	7	11	12	12	12	19	23	13	15	14	17	8	11	14	14	7	7	21	22
GU-151	K'iche'	12	14	29	33.2	11	12	10	11	15	17	6	6	12	14	10	11	20	20	13.2	15.2	16	17	8	8	14	14	11	11	25	26
GU-152	K'iche'	10	15	28	30	12	14	10	12	15	16	6	9.3	8	12	12	12	20	20	13	15	16	16	11	12	14	17	11	12	24	26
GU-153	K'iche'	13	13	29	31.2	10	11	12	12	15	16	6	7	10	14	11	12	19	22	13.2	15	16	18	11	11	13	14	9	11	23	25
GU-163	K'iche'	13	13	30	32.2	11	12	11	12	14	16	7	9.3	9	13	11	12	17	19	14	15	16	19	11	12	13	13	11	11	21	25
GU-166	K'iche'	13	14	28	30	11	13	11	12	15	16	6	6	11	12	9	9	19	24	13.2	14.2	16	17	8	8	12	14	11	11	24	26
GU-171	K'iche'	16	16	29	33.2	11	13	10	13	15	15	6	8	10	12	11	13	20	23	13	13.2	16	17	8	12	14	16	11	11	21	24
GU-172	K'iche'	13	13	30	31.2	10	12	10	12	15	17	6	6	9	14	10	12	17	19	13.2	16	14	16	8	8	13	17	12	12	25	26
GU-178	K'iche'	13	15	30	32.2	11	12	10	12	15	15	6	7	8	9	10	12	17	19	14	14	16	17	11	12	12	13	10	11	19	22
GU-185	K'iche'	12	12	32.2	32.2	11	12	12	12	15	15	6	7	10	14	10	12	17	19	14	16	14	17	8	11	17	20	7	12	19	26
GU-186	K'iche'	12	14	29	31	8	11	9	10	15	15	6	6	11	12	12	12	17	19	15	15.2	16	18	8	8	15	17	12	12	23	25
GU-187	K'iche'	12	13	30	32.2	12	12	10	12	15	16	6	7	11	12	9	12	17	24	12.2	16.2	16	17	8	12	15	15	10	11	23	26
GU-190	K'iche'	13	13	30	31.2	11	12	12	12	15	16	6	7	9	13	11	12	23	24	13.2	14	17	17	12	12	16	18	11	13	22	26
GU-193	K'iche'	12	16	29	30	10	12	11	11	15	16	7	9.3	9	10	10	11	22	23	13	13.2	16	17	8	12	14	15	10	11	24	25
GU-197	K'iche'	13	14	32.2	32.2	12	13	12	12	15	16	6	6	12	12	11	12	19	20	14	15	17	17	8	8	14	14	11	12	21	24
GU-198	K'iche'	14	14	30	30	11	13	11	13	15	15	6	7	10	12	12	12	19	24	14	14.2	16	16	8	12	16	19	11	12	26	26
GU-200	K'iche'	12	16	29	30	11	12	11	13	16	17	6	7	13	14	10	11	19	23	12.2	15	15	17	11	12	14	15	7	11	25	25
GU-202	K'iche'	13	14	30	31.2	11	12	10	13	15	15	7	9.3	9	9	10	12	17	23	14	15.2	16	18	8	8	14	17	7	12	22	25
GU-207	K'iche'	13	13	29	31.2	10	10	12	12	15	16	6	9.3	8	13	10	10	22	23	14	14	16	18	8	13	13	15	11	11	22	24
GU-209	K'iche'	12	13	29	33.2	10	13	10	12	15	16	6	9.3	10	12	10	10	22	23	13.2	15	16	17	8	11	14	15	11	11	19	25
GU-212	K'iche'	12	12	30	31	10	12	12	12	15	16	6	7	9	12	9	13	18	22	13.2	14	16	16	11	12	16	22	11	11	18	24
GU-214	K'iche'	13	14	30	31.2	12	13	10	13	15	17	6	7	12	12	9	12	22	23	14	15	16	16	8	8	13	15	11	12	25	25
GU-215	K'iche'	14	15	29	32.2	12	12	10	12	15	15	6	9.3	9	12	11	12	19	20	13	13	17	19	8	12	12	13	11	12	25	26
GU-217	K'iche'	10	14	30	31.2	11	13	10	11	15	17	7	7	11	14	11	11	19	23	13.2	14.2	16	16	12	12	15	18	7	13	20	21
GU-218	K'iche'	13	13	29	32.2	11	12	11	12	15	16	6	6	9	14	12	12	20	22	13	13	16	18	11	12	13	19	11	11	24	26
GU-221	K'iche'	12	12	29	31	11	11	10	12	15	17	7	9.3	10	14	9	10	19	20	12	14	17	17	8	12	13	17	9	11	26	26
GU-222	K'iche'	13	14	30	32.2	11	11	10	10	14	15	6	6	13	14	11	11	19	22	12.2	13.2	16	17	8	11	13	14	7	12	23	24
GU-224	K'iche'	13	13	28	30	10	10	10	11	15	16	6	7	9	10	12	13	17	23	13	14	16	16	11	12	13	14	9	11	21	26
GU-226	K'iche'	14	15	29	32.2	12	13	9	11	15	15	6	7	9	12	10	13	17	23	13	14	14	17	9	11	16	17	11	11	22	24
GU-228	K'iche'	12	15	31.2	32.2	10	11	11	12	15	16	7	7	9	9	10	11	19	20	13.2	14.2	16	17	8	11	14	18	11	12	25	25
GU-229	K'iche'	12	13	29	30	10	12	9	12	15	15	6	7	9	12	12	12	23	23	13.2	14	17	18	8	12	15	15	11	11	22	25
GU-237	K'iche'	12	14	28	32.2	12	12	12	12	15	18	6	6	12	14	9	12	22	23	14	15	16	18	8	8	14	15	9	11	21	26
GU-247	K'iche'	12	14	30	30	11	12	10	13	15	16	6	6	9	13	9	12	19	23	13.2	15.2	14	17	8	8	15	18	11	12	24	27

GU-253	K'iche'	13	14	31.2	32.2	10	12	10	12	15	17	6	6	11	13	10	11	23	23	13	15	16	17	11	12	17	18	9	11	22	27
GU-256	K'iche'	12	15	30	32.2	10	11	11	12	16	17	6	6	9	13	11	12	19	23	13.2	14	16	16	11	11	14	16	9	12	19	24
GU-258	K'iche'	13	13	31.2	31.2	12	12	10	12	15	16	7	7	10	13	10	10	20	24	13.2	16	16	17	8	11	14	15	11	11	23	25
GU-267	K'iche'	14	14	30	33.2	12	12	10	11	15	15	6	9.3	9	9	11	13	20	23	15	15	15	17	8	8	18	21	10	12	24	26
GU-236	Mam	10	14	30	32.2	10	12	13	13	15	15	6	9.3	9	11	9	10	19	20	13.2	15	14	17	8	8	15	16	7	11	25	28
GU-240	Mam	11	12	29	31.2	11	12	11	12	15	15	6	7	10	10	10	12	20	23	13.2	14	17	18	8	8	17	23	9	11	19	26
GU-360	Mam	13	15	29	29	11	12	11	12	14	17	7	9.3	10	12	10	12	19	23	12.2	13.2	16	17	8	11	16	17	11	11	23	25
GU-361	Mam	12	13	29	31.2	11	11	10	10	14	15	6	6	9	12	9	10	22	22	13.2	14	16	17	8	11	14	17	12	12	21	23
GU-362	Mam	13	15	30	33.2	10	12	12	12	14	15	6	7	9	9	10	12	17	19	13.2	15	16	18	8	12	17	18	11	11	24	25
GU-363	Mam	13	14	30	31	12	13	11	11	15	15	6	7	9	12	10	11	20	22	12.2	13.2	16	17	11	11	14	14	7	11	25	26
GU-364	Mam	13	14	29	29	11	12	10	12	15	15	6	6	9	10	9	9	17	23	13	15	17	18	8	12	15	16	11	12	20	24
GU-366	Mam	11	12	29	29	11	12	11	12	15	15	6	6	10	14	10	10	19	20	15.2	15.2	16	16	8	11	14	15	11	12	23	27
GU-367	Mam	12	14	31	31	10	12	10	13	15	18	6	7	10	13	10	11	21	22	13.2	13.2	14	17	8	8	16	18	10	10	23	25
GU-368	Mam	14	14	28	31	11	12	10	13	15	16	6	7	10	13	11	12	17	17	13.2	13.2	17	18	8	12	16	19	7	12	22	24
GU-369	Mam	14	15	29	30	11	12	11	13	15	16	6	6	12	13	10	11	19	19	12.2	14	16	17	12	12	13	14	10	11	22	23
GU-370	Mam	12	13	30	31	10	12	10	12	15	18	6	7	10	13	9	11	17	23	14	14	17	18	12	12	15	16	11	13	20	22
GU-371	Mam	11	13	29	29	10	10	10	11	13	18	6	7	9	10	11	12	17	24	14	14.2	16	18	11	12	13	14	11	12	20	21
GU-372	Mam	13	13	32	32.2	10	12	10	11	14	15	7	7	9	12	11	13	23	23	12.2	12.2	16	16	8	8	17	19	12	12	19	22
GU-373	Mam	13	13	28	30	10	12	10	11	15	15	6	7	8	9	11	12	19	19	11.2	13.2	16	16	11	11	17	17	10	12	24	25
GU-374	Mam	13	14	30	32.2	11	12	11	11	15	17	7	7	9	14	11	12	20	20	13.2	14	16	17	8	12	14	15	10	11	19	26
GU-376	Mam	13	13	30	31.2	10	10	10	12	15	16	6	6	9	11	10	11	19	22	14	14.2	16	16	8	8	14	16	8	10	25	25
GU-379	Mam	10	13	30	33.2	11	13	10	12	15	17	6	7	9	12	10	11	19	19	14	15	16	19	8	11	16	18	11	13	25	25
GU-380	Mam	13	15	29	32.2	11	12	10	11	15	16	6	7	9	13	10	10	19	24	13.2	14	16	16	11	11	12	15	7	11	24	25
GU-381	Mam	13	15	32.2	33.2	9	10	11	13	15	16	6	7	12	12	10	10	17	22	13	15.2	14	15	8	11	13	13	11	11	20	21
GU-382	Mam	13	15	29	33.2	10	11	12	13	15	16	7	7	13	14	10	11	20	23	13.2	14	16	17	11	12	15	25	9	9	19	25
GU-384	Mam	10	13	29	29	12	12	11	12	15	16	6	7	9	10	10	10	18	24	13	13.2	16	17	8	8	15	15	10	12	25	25
GU-385	Mam	13	14	29	29	11	12	12	12	15	15	6	10	9	10	9	10	19	23	13.2	15.2	17	19	8	8	14	17	11	11	25	27
GU-387	Mam	13	13	28	30	11	12	10	13	16	17	6	6	9	9	10	10	22	23	12.2	13.2	17	17	8	12	12	12	11	11	25	27
GU-388	Mam	12	13	32.2	33.2	10	10	11	12	15	16	7	7	10	14	10	12	23	23	13.2	14	13	16	8	11	14	14	11	12	22	25
GU-389	Mam	13	14	29	30	12	12	12	12	15	15	6	7	9	12	9	12	17	20	13	13.2	18	19	8	12	14	25	11	11	23	25
GU-390	Mam	13	15	31.2	31.2	10	12	10	11	15	15	6	9.3	9	13	11	11	19	24	13.2	15	17	18	8	11	15	15	7	11	22	25
GU-391	Mam	12	13	29	30	10	12	11	12	17	17	6	6	13	14	10	12	20	25	14	14.2	16	17	8	11	18	18	10	11	22	25
GU-392	Mam	13	13	29	32.2	11	11	10	12	15	16	6	6	9	12	11	12	20	22	13.2	15.2	14	19	8	12	14	15	11	11	19	26

GU-393	Mam	12	14	31.2	33.2	11	12	11	11	15	16	6	7	8	13	12	12	19	24	14	15	17	19	8	11	14	19	10	11	23	26
GU-395	Mam	14	15	32.2	33.2	11	12	10	12	15	15	6	6	11	14	11	12	18	19	13	13.2	16	16	8	12	15	17	11	11	25	26
GU-397	Mam	13	13	29	31.2	10	12	11	11	15	16	6	9.3	9	10	9	12	19	22	13.2	15.2	17	19	8	12	14	21	7	13	24	25
GU-402	Mam	13	14	29	30	8	12	10	10	16	17	6	7	9	12	9	12	18	20	15	17	14	17	8	11	13	21	11	13	25	28
GU-403	Mam	13	14	28	30	11	11	11	12	14	15	6	6	9	12	9	9	20	23	14	14	14	17	8	12	18	18	10	11	20	24
GU-405	Mam	14	15	29	31.2	12	13	11	12	15	16	6	7	9	10	9	11	20	23	14	14	16	16	8	8	14	18	11	12	24	26
GU-406	Mam	13	13	29	30	12	13	10	11	15	15	6	7	11	12	9	9	19	19	13.2	15	16	17	11	11	14	26	7	12	23	25
GU-407	Mam	13	14	29	30	12	12	11	12	16	16	6	9.3	9	10	10	11	17	19	13	14	16	17	8	12	14	15	7	12	22	26
GU-408	Mam	14	15	29	31	10	12	10	11	15	16	7	7	9	11	10	10	19	20	13.2	13.2	16	17	12	12	14	17	11	11	26	28
GU-409	Mam	13	15	30	32.2	10	12	12	13	15	16	6	6	9	10	11	12	19	20	12.2	14	16	17	12	12	13	18	9	11	23	26
GU-410	Mam	15	15	28	30	10	11	12	13	15	16	6	7	10	12	9	10	18	22	13.2	14	17	18	8	12	14	15	11	11	24	25
GU-411	Mam	14	14	28	30	11	12	10	12	15	16	7	9.3	9	12	10	11	19	23	13.2	17	16	16	8	12	17	17	7	10	25	25
GU-412	Mam	13	13	29	32.2	9	10	10	11	15	15	7	9.3	11	12	11	12	22	24	13	13.2	17	17	11	12	14	17	11	11	24	26
GU-414	Mam	12	13	28	31.2	10	11	10	10	15	18	7	9.3	9	12	10	11	19	22	13.2	14	16	16	6	11	14	16	9	11	24	26
GU-415	Mam	12	13	29	30	10	12	10	12	15	16	7	7	8	9	10	12	17	20	13.2	14	17	18	8	11	12	17	10	11	19	19
GU-416	Mam	12	14	29	30	10	13	11	12	15	15	6	7	9	13	10	10	20	23	13	13.2	16	19	8	11	14	18	10	11	25	26
GU-417	Mam	13	14	32.2	32.2	11	11	11	11	16	17	6	7	9	9	9	10	19	23	14	15	16	18	8	12	14	17	11	11	23	25
GU-418	Mam	12	15	30	32.2	12	12	10	11	15	16	6	7	9	13	9	10	19	23	13.2	14	14	17	12	12	14	18	7	11	23	23
GU-419	Mam	13	15	29	29	10	12	11	12	14	15	6	6	9	9	12	13	19	20	14	15	16	17	11	11	20	25	11	12	24	26
GU-420	Mam	13	15	30	33.2	10	12	12	12	14	16	7	7	9	10	11	12	18	20	13.2	14.2	17	17	11	12	16	17	7	11	25	26
GU-423	Mam	14	15	29	31.2	12	12	9	10	14	16	6	7	9	10	9	13	17	23	13	14	16	16	12	12	13	16	11	12	23	24
GU-114	Q'echi'	15	17	30	32.2	10	11	10	11	15	16	6	6	13	13	10	10	23	23	12.2	13	14	16	8	8	13	15	11	13	22	26
GU-259	Q'echi'	12	15	29	30	9	11	12	12	15	16	6	6	11	12	9	10	19	23	14	14.2	16	16	8	11	19	19	11	13	19	20
GU-260	Q'echi'	14	15	30	31.2	>10	11	12	12	15	16	6	9.3	9	10	10	11	21	23	13.2	13.2	17	19	11	11	12	21	9	11	20	23
GU-262	Q'echi'	13	16	30	31.2	10	11	11	12	15	18	6	8	11	12	10	11	20	24	13.2	14	17	18	8	12	15	21	11	11	26	26
GU-263	Q'echi'	13	15	31.2	31.2	>10	12	10	12	15	15	6	7	8	13	9	11	20	24	14	14.2	15	19	8	12	15	15	9	9	23	25
GU-264	Q'echi'	10	12	31	33.2	10	12	11	11	16	16	6	9.3	9	9	11	12	19	21	13	15	17	18	8	11	12	15	11	12	24	27
GU-265	Q'echi'	15	15	30	33.2	10	11	12	12	15	16	7	7	10	11	12	12	17	20	13	13.2	16	17	8	8	12	16	7	12	21	25
GU-266	Q'echi'	12	13	26	29	11	11	11	13	16	16	6	6	9	9	10	12	23	23	13.2	15.2	17	18	8	12	13	19	10	11	24	25
GU-271	Q'echi'	13	15	29	29	10	11	10	12	15	16	6	7	9	12	12	12	20	23	13.2	14.2	16	16	8	11	16	17	9	11	26	27
GU-272	Q'echi'	12	12	29	31.2	11	12	10	12	15	16	6	6	11	13	9	10	19	24	13	15	16	16	8	8	14	17	9	9	26	26
GU-273	Q'echi'	13	14	30	31.2	11	12	10	11	14	15	6	7	12	12	10	12	19	23	14.2	15	15	15	8	11	13	17	11	12	19	25
GU-274	Q'echi'	12	13	30	32.2	12	12	10	12	15	16	7	9.3	9	12	12	13	17	19	14.2	15	15	17	12	12	15	17	11	11	25	27

GU-275	Q'echi'	13	15	29	30	10	12	9	10	15	15	6	7	10	12	12	12	20	23	14	15	16	18	8	8	15	17	11	11	21	25
GU-279	Q'echi'	13	13	31	32.2	12	12	11	12	15	15	6	7	9	10	10	11	19	23	13.2	15.2	14	16	11	12	14	17	11	12	25	26
GU-280	Q'echi'	14	14	30	32.2	9	11	11	12	16	16	6	9.3	9	12	12	12	20	23	12	15	16	16	8	11	13	16	9	11	25	26
GU-282	Q'echi'	12	13	29	31.2	10	12	11	13	15	15	6	7	11	13	10	10	17	20	13	13.2	16	17	8	11	19	19	9	9	25	26
GU-283	Q'echi'	12	15	30	32	12	12	11	13	15	17	6	9.3	9	14	9	12	22	23	13.2	15.2	16	18	8	12	16	20	11	11	21	25
GU-285	Q'echi'	13	17	29	31	11	11	11	12	15	15	6	6	9	14	9	9	20	23	13.2	14	17	18	11	12	14	14	11	11	19	24
GU-286	Q'echi'	13	15	29	30	8	12	10	11	15	15	6	7	9	12	9	9	17	23	16	16.2	15	17	8	12	14	16	11	11	24	26
GU-287	Q'echi'	13	14	31.2	33.2	11	12	11	12	15	16	6	7	11	12	10	10	18	19	13.2	15	16	17	8	11	15	17	11	13	25	25
GU-289	Q'echi'	13	15	30	30	10	11	10	12	14	16	6	9.3	11	13	10	12	23	24	13	13.2	16	18	11	12	12	17	9	11	21	23
GU-290	Q'echi'	10	14	29	31.2	10	11	9	12	15	15	6	7	11	12	10	11	18	19	12	13	16	17	11	11	16	18	11	12	21	22
GU-291	Q'echi'	13	13	29	30	10	11	10	11	15	15	6	9.3	12	14	9	12	23	23	15	15	15	16	8	8	14	18	7	11	21	27
GU-292	Q'echi'	11	14	29	32.2	10	11	11	11	15	17	6	7	12	12	12	12	20	23	12	13.2	18	19	12	12	13	16	11	12	23	25
GU-293	Q'echi'	12	13	30	31.2	>10	13	11	12	15	16	6	7	9	12	12	12	19	23	14	16	16	17	8	8	14	14	11	13	21	24
GU-294	Q'echi'	14	14	29	33.2	11	12	12	12	15	16	6	9.3	8	9	9	12	23	23	15.2	16.2	17	18	8	8	17	17	11	12	26	26
GU-295	Q'echi'	14	14	30	31.2	11	12	11	12	15	16	7	7	12	14	9	12	19	23	13.2	14	15	17	7	8	17	20	7	11	19	25
GU-300	Q'echi'	12	13	30	31.2	11	11	10	12	15	15	6	7	9	13	9	10	23	23	13	14	16	17	8	8	13	15	10	11	22	23
GU-303	Q'echi'	13	14	29	31.2	8	>10	12	12	15	15	6	7	9	14	9	10	18	19	13.2	15	14	20	8	8	12	17	11	11	23	24
GU-304	Q'echi'	12	14	31	32.2	10	12	10	11	15	16	6	6	9	13	9	11	22	22	13	15	15	18	8	11	14	18	9	11	19	25
GU-305	Q'echi'	10	13	29	29	11	12	12	12	15	15	6	6	9	13	9	12	20	21	14	15	19	20	8	12	14	17	10	11	23	26
GU-306	Q'echi'	13	13	27	31	10	11	10	12	14	18	6	9.3	10	12	11	12	23	24	14	14.2	15	17	8	8	15	19	11	11	23	26
GU-308	Q'echi'	10	13	31.2	33.2	11	11	10	11	15	18	6	9.3	10	11	11	12	22	23	15	15	16	16	8	13	14	15	7	9	22	25
GU-309	Q'echi'	13	15	30	31.2	9	11	11	12	14	16	6	7	10	10	12	13	20	22	12.2	13.2	16	16	11	12	14	14	9	11	24	24
GU-310	Q'echi'	14	14	30	30	10	>10	9	12	15	17	6	6	13	13	9	11	20	23	15.2	16	13	17	12	12	12	12	7	7	19	24
GU-311	Q'echi'	12	12	30	33.2	10	11	12	13	15	16	6	7	9	12	10	10	21	23	13.2	14	17	18	8	12	13	19	9	11	22.2	28
GU-312	Q'echi'	13	13	30	31	10	11	11	12	15	16	6	6	9	13	10	10	19	22	13.2	13.2	17	19	11	11	15	17	9	12	24	26
GU-313	Q'echi'	12	13	30	31.2	10	12	11	12	15	16	6	7	10	12	10	12	18	19	13.2	15	14	17	12	12	15	20	9	11	19	23
GU-314	Q'echi'	12	12	30	31.2	11	13	11	12	15	15	6	7	9	10	11	11	20	23	13.2	14	14	16	8	11	19	25	11	13	25	27
GU-315	Q'echi'	13	15	28	33.2	11	14	9	11	15	15	6	7	12	12	10	11	20	23	13.2	13.2	13	16	11	11	18	19	9	11	23	26
GU-316	Q'echi'	12	13	29	31.2	9	10	12	12	17	17	6	7	9	11	10	10	19	22	13.2	13.2	15	17	8	11	14	18	11	11	20	25
GU-318	Q'echi'	10	13	29	30	11	12	11	12	15	15	9.3	9.3	12	14	9	9	19	20	13.2	15.2	16	17	8	12	14	20	7	10	21	25
GU-319	Q'echi'	15	16	29	31.2	11	11	12	12	15	15	6	6	9	13	9	11	23	23	13.2	16.2	16	18	11	12	14	14	10	11	20	25
GU-320	Q'echi'	10	14	29	30	12	13	10	12	15	15	6	9.3	12	13	9	13	23	23	13.2	14	16	16	8	12	12	14	7	12	25	26
GU-330	Q'echi'	13	16	29	33.2	12	13	11	12	15	15	6	9.3	12	13	10	13	22	23	13.2	14	16	17	9	11	14	17	11	12	24	26

GU-343	Q'echi'	11	11	29	32.2	11	12	11	12	15	16	9.3	9.3	9	11	11	12	18	23	13.2	13.2	16	16	8	12	15	17	7	11	23	26
GU-345	Q'echi'	14	17	30	31.2	12	12	11	12	15	16	6	6	12	12	10	12	23	23	13	14.2	16	17	8	8	14	17	11	12	26	26
GU-347	Q'echi'	13	16	29	29	11	12	11	13	15	15	6	7	10	14	10	11	17	20	13	15.2	17	19	8	11	17	17	11	11	22	26
GU-348	Q'echi'	12	13	30	30	10	11	11	12	14	16	6	7	10	12	12	12	20	21	13	14	16	17	8	12	14	19	7	9	22	26
GU-358	Q'echi'	13	14	29	31.2	10	12	11	14	15	15	7	9.3	9	11	11	11	19	23	13.2	13.2	16	17	8	11	12	14	9	11	19	25

ELECTRONIC SUPPLEMENTARY MATERIAL 2:

Parameters of population and forensic genetic interest. Number of individuals, combined matching probabilities, combined power of discrimination, combined power of exclusion, average heterozygosity and average gene diversity index for each Mayan group.

Mayan groups	n	n. of alleles	CMP	CPD	CPE	Aveg. He	Aveg. GDI (FST)
Kaqchiquel	50	104	5.00E+06	1.000000	0.999999	0.748000	0.00406
Kiche	50	105	3.03E+05	1.000000	0.999996	0.756000	0.00390
Mam	50	106	2.17E+05	1.000000	0.999995	0.761333	0.00389
Qeqchi	50	113	9.52E+04	1.000000	0.999989	0.760000	0.00381

N: number of individuals
CMP: Combined Matching Probabilities
CPD: Combined Power of Discrimination
CPE: Combined Power of Exclusion
Aveg. He: Average Heterozygosity
Aveg. GDI: Average Gene Diversity Index

ELECTRONIC SUPPLEMENTARY MATERIAL 3:

STRUCTURE v.2.3.1 results. Simulation summary: number of populations assumed, natural logarithm probability, Ln P (D), and its variance Var [Ln P (D)].

Population analysed	STRs	n	Population assumed	Ln P (D)	Var [Ln] P (D)]
4 Mayan	15	200	K=1	**-9625.6**	57.4
4 Mayan	15	200	K=2	-9670.6	201.2
4 Mayan	15	200	K=4	-9763.6	405.3
5 pop Guatemala*	15	400	K=1	-20244.1	0.2
5 pop Guatemala	15	400	K=2	**-20034.8**	8.9
5 pop Guatemala	15	400	K=3	-20036.3	24.9
5 pop Guatemala	15	400	K=4	-20038.0	27.3
5 pop Guatemala	15	400	K=5	-20042.4	42.2
Kaqchikel	15	50	K=1	**-2353.9**	39.9
Kaqchikel	15	50	K=2	-2364.4	65.6
K'iche'	15	50	K=1	**-2457.2**	43.6
K'iche'	15	50	K=2	-2462.6	56.6
Mam	15	50	K=1	**-2385.7**	46.5
Mam	15	50	K=2	-2396.4	48.9
Q'eqchi	15	50	K=1	**-2381.8**	41.9
Q'eqchi	15	50	K=2	-2386.0	51.8

Data in bold: model with the highest posterior probability value.

*Four Mayan populations (Present study) and Guatemalan Mestizo from *Martinez-Espin et. al 2006*