

Table S2. Comparison of membership coefficients to cacao ancestry genetic groups described by Motamayor *et al.*, [16] of recognized cacao clones obtained in this study and published.

Clone	Source	Amelonado	Contamana	Criollo	Iquitos	Nacional
UF-29	SNP	0.561	0	0	0	0.439
	CATIE	0.510	0	0	0	0.45
	ICGD	0.524	0	0	0	0.444
UF-613	SNP	0.626	0	0	0	0.374
	CATIE	0.570	0	0	0	0.350
	ICGD	0.596	0	0	0	0.328
UF-221	SNP	0.586	0	0.413	0	0
	CATIE	0.520	0	0.460	0	0
UF-654	SNP	0.574	0.099	0.148	0.179	0
	CATIE	0.510	0	0.470	0	0
UF-667	SNP	0.561	0	0.439	0	0
	CATIE	0.520	0	0.460	0	0
	ICGD	0.501	0	0.475	0	0
UF-668	SNP	0.550	0	0.450	0	0
	CATIE	0.510	0	0.480	0	0
	ICGD	0.502	0	0.474	0	0
UF-676	SNP	0.569	0	0.431	0	0
	CATIE	0.520	0	0.460	0	0
	ICGD	0.502	0	0.474	0	0
UF-677	SNP	0.575	0	0.425	0	0
	CATIE	0.520	0	0.460	0	0
	ICGD	0.502	0	0.475	0	0
SCA-6	SNP	0	0.999	0	0	0
	ICGD	0	0.978	0	0	0
SCA-12	SNP	0	0.999	0	0	0
	ICGD	0	0.997	0	0	0
CCN-51	SNP	0.321	0	0.123	0.556	0
	Origin	0.215	0	0.222	0.454	0
	ICGD	0.491	0	0	0.440	0

Legend: **Source** refers to the origin of the data, **SNP** obtained in this study, **ICGD**: deposited on International Cacao Germplasm Database (<http://www.icgd.rdg.ac.uk/>), **CATIE** (Centro Agronómico Tropical de Investigación y Enseñanza): published on Mata-Quiros et al., (2018) and **Origin** refers to Boza et al. (2014) study about the origin of this clone. **Note:** Curaray, Guiana, Maraón, Nanay and Purús ancestries were not considered because memberships to them were lower than 5 % for all the clones.

References not included in the main text:

Boza, E. J., Motamayor, J. C., Amores, F. M., Cedeño-Amador, S., Tondo, C. L., Livingstone, D. S., Schnell, R. J., & Gutiérrez, O. A. Genetic Characterization of the Cacao Cultivar CCN 51: Its Impact and Significance on Global Cacao Improvement and Production. 2014;JASHS:139(2), 219.

Mata-Quiros A., Arciniegas-Leal A., Phillips-Mora W., Meinhardt L.W., Motilal L., Mischke S., et al. Assessing hidden parentage and genetic integrity of the "United Fruit Clones" of cacao (*Theobroma cacao*) from Costa Rica using SNP markers. Breed Sci. 2018; 68(5): 545–553.