

Supplementary materials

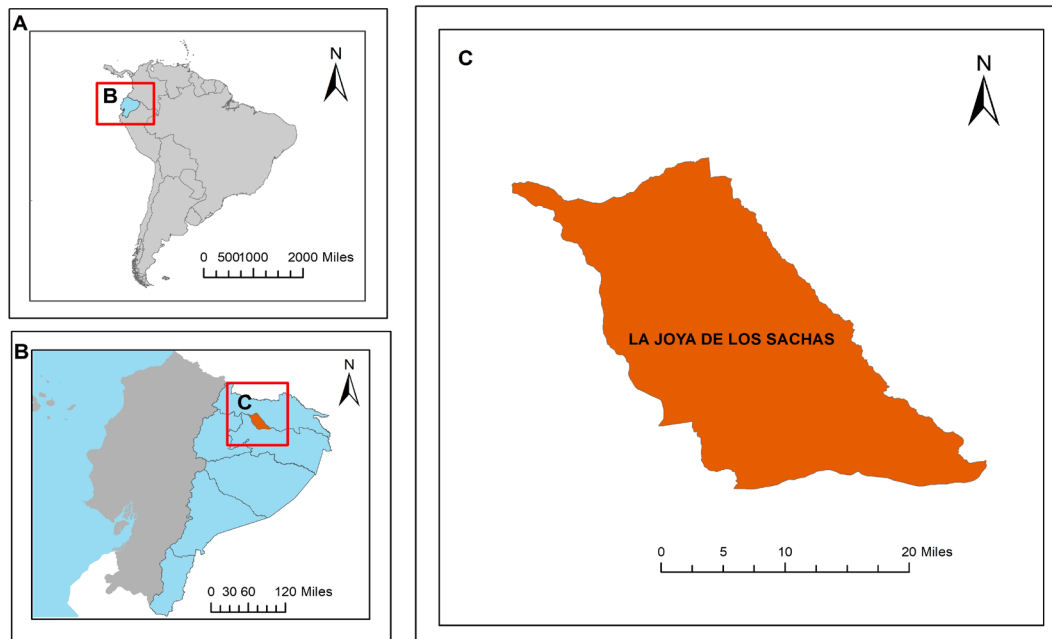


Figure S1. Study area; A) Ecuador; B) Orellana, La Joya de los Sachas; C) Planting areas.

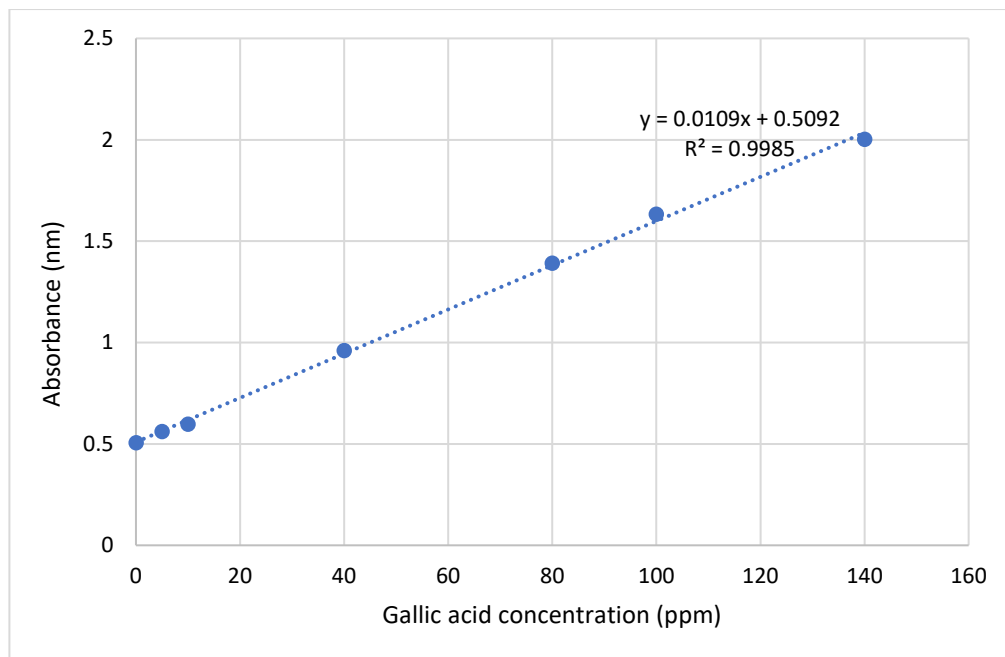


Figure S2. Calibration curve for total polyphenols.



Figure S3. Total polyphenol analysis photograph.

Table S1. Effect of the treatments on the dependent variables analyzed.

G	F	FM	WB (g)	FR (%)	BS (% p/p)	pH	A (% p/p)	P (% p/p)	L (% p/p)	TP (mgGAE/gDW)
Arriba	Jute sack	Pre-drying	158.6 ± 4.8	85.7 ± 2.3	11.5 ± 0.5	5.6 ± 0.02	3.6 ± 0.1	12.5 ± 1.6	45.9 ± 0.7	58.2 ± 4.8
		Beans with pulp	159.5 ± 4.4	64.0 ± 1.7	14.6 ± 0.5	4.9 ± 0.04	3.1 ± 0.1	12.3 ± 0.1	46.3 ± 1.9	79.2 ± 3.3
	Wooden box	Pre-drying	158.4 ± 6.8	85.3 ± 2.5	16.3 ± 1.1	5.0 ± 0.03	3.5 ± 0.1	13.1 ± 0.5	43.9 ± 3.4	57.8 ± 1.23
		Beans with pulp	166.3 ± 2.9	63.0 ± 2.0	13.9 ± 0.8	5.1 ± 0.02	3.1 ± 0.1	12.2 ± 0.8	47.7 ± 4.6	57.2 ± 4.9
Super árbol	Jute sack	Pre-drying	145.8 ± 0.6	89.3 ± 2.5	13.3 ± 0.7	5.7 ± 0.11	3.9 ± 0.1	13.7 ± 0.4	43.8 ± 2.5	55.5 ± 3.2
		Beans with pulp	130.7 ± 2.4	64.3 ± 0.6	18.1 ± 0.6	5.1 ± 0.00	3.3 ± 0.1	13.0 ± 0.5	45.2 ± 1.4	48.8 ± 2.7
	Wooden box	Pre-drying	146.3 ± 2.3	95.0 ± 1.7	13.4 ± 0.7	5.6 ± 0.06	4.0 ± 0.1	14.1 ± 0.5	43.9 ± 1.0	48.5 ± 1.6
		Beans with pulp	125.5 ± 0.7	74.3 ± 2.9	17.8 ± 0.7	5.2 ± 0.05	3.3 ± 0.1	12.7 ± 1.	44.4 ± 0.9	55.3 ± 2.8

Results are expressed as mean ± standard deviation (SD) (n = 3).

Fermentation rate (FR); Weight of 100 beans (WB); pH cotyledon (pH); Beans shell (BS); Protein (P); Ash (A); Lipid (L); Total polyphenols (TP)