

Supplementary Materials:

**Table S1:** Physicochemical characterization of jaboticabas Sabará (*Plinia jaboticaba*), Escarlata (*Plinia phitrantha x Plinia cauliflora*), Otto Andersen (*Plinia cauliflora*) e Esalq (*Plinia phitrantha*).

Jaboticaba	Mass	Height	Diameter	Soluble Solids	Titratble acidity		Skin color			
	(g)	(mm)	(mm)	(° Brix)	(% citric acid)	°Hue	L*	C*	a*	b*
Sabará ( <i>Plinia jaboticaba</i> )	7,37 ± 0,25 <sup>a</sup>	23,37 ± 0,47 <sup>a</sup>	23,30 ± 0,19 <sup>a</sup>	11,23 ± 0,05 <sup>a</sup>	0,52 ± 0,02 <sup>a</sup>	33,99 ± 2,40 <sup>a,b</sup>	25,64 ± 0,08 <sup>a</sup>	7,16 ± 1,77 <sup>a</sup>	6,97 ± 0,59 <sup>a</sup>	4,76 ± 0,74 <sup>a</sup>
Escarlate ( <i>Plinia phitrantha x Plinia cauliflora</i> )	7,01 ± 0,30 <sup>a</sup>	21,95 ± 0,72 <sup>a</sup>	22,40 ± 0,54 <sup>a</sup>	14,58 ± 0,22 <sup>c</sup>	1,83 ± ,028 <sup>b</sup>	35,90 ± 1,25 <sup>b</sup>	28,88 ± 0,89 <sup>b,c</sup>	19,08 ± 0,38 <sup>b</sup>	17,96 ± 0,27 <sup>b</sup>	12,98 ± 0,38 <sup>c</sup>
Otto Andersen ( <i>Plinia cauliflora</i> )	11,60 ± 0,33 <sup>b</sup>	25,72 ± 0,77 <sup>b</sup>	26,62 ± 0,31 <sup>b</sup>	19,98 ± 0,25 <sup>d</sup>	1,60 ± 0,10 <sup>b</sup>	35,64 ± 0,39 <sup>a,b</sup>	27,28 ± 0,54 <sup>a,b</sup>	6,65 ± 1,58 <sup>a</sup>	6,33 ± 0,36 <sup>a</sup>	4,55 ± 0,30 <sup>a</sup>
Esalq ( <i>Plinia phitrantha</i> )	7,38 ± 0,19 <sup>a</sup>	22,57 ± 0,52 <sup>a</sup>	22,71 ± 0,90 <sup>a</sup>	12,16 ± 0,12 <sup>b</sup>	2,00 ± 0,13 <sup>b</sup>	30,37 ± 2,24 <sup>a</sup>	30,31 ± 1,29 <sup>c</sup>	17,17 ± 6,23 <sup>b</sup>	18,02 ± 1,17 <sup>b</sup>	10,55 ± 0,57 <sup>b</sup>

Means followed by the same letter do not differ from each other by one-way ANOVA and Tukey's test (n=15) (p<0.05).

**Table S2:** Volatile aromatic compounds divided by clusters of each jaboticaba obtained by headspace solid phase microextraction combined with gas chromatography/mass spectrometry (SPME-GC-MS). C1, C2, C3, C4 indicate clusters of compounds exclusive for each species. Where: Sabara: 'Sabará' (*Plinia jaboticaba*), ESCAR: 'Escarlate' (*Plinia phitrantha* × *Plinia cauliflora*), OTTO: 'Otto Andersen' (*Plinia cauliflora*) and 'Esalq' (*Plinia phitrantha*)

Code	Compound	CAS	Odor description	RI calc	RI lit	Class	Clusters
4	Propyl acetate	109-60-4	solvent, celery	989	980	ester	C1-SABARA
6	Cyclofenchene	488-97-1	n.d.	1010	n.d.	other	C1-SABARA
9	Ethyl isovalerate	108-64-5	fruity	1054	1060	ester	C1-SABARA
33	Ethyl 3-hexenoate	2396-83-0	sweet, fruity, pineapple	1339	n.d.	ester	C1-SABARA
34	(Z)-3-hexen-1-ol acetate	3681-71-8	green, banana	1340	1327	ester	C1-SABARA
38	Butyl 2-butenolate	7299-91-4	n.d.	1352	n.d.	ester	C1-SABARA
41	Cyclopropanecarboxylic acid,3-methylbutyl ester	1000245-65-3	n.d.	1396	n.d.	carboxylic acid	C1-SABARA
62	(Z)-3-hexenyl (E)-2-butenolate	65405-80-3	green	1611	1610	ester	C1-SABARA
77	Nonanol	143-08-8	fat, green	1678	1666	alcohol	C1-SABARA
86	2-phenylacetamide, N-(1-phenyl-2-propyl)-	1000223-70-1	n.d.	1762	n.d.	other	C1-SABARA
90	Citronellyl butyrate	141-16-2	fruity, sweet, rose	1802	1809	monoterpenoid ester	C1-SABARA
106	Ethyl cinnamate	103-36-6	balsam, fruity, spicy, berry, plum	2136	2139	ester	C1-SABARA
70	$\alpha$ -Muurolene	31983-22-9	wood	1647	n.d.	sesquiterpene	C2-ESCAR
78	$\beta$ -patchoulene	514-51-2	n.d.	1681	n.d.	sesquiterpene	C2-ESCAR
117	3,6-dimethyl-4H-furo[3,2-c]pyran-4-one	36745-38-7	n.d.	2201	n.d.	ketone	C2-ESCAR
3	Ethyl propionate	105-37-3	fruity, grape, pineapple	977	977	ester	C3-OTTO
5	D- $\alpha$ -pinene	7785-70-8	pine, turpentine	1001	1011	monoterpene	C3-OTTO
10	Ethyl-2-methyl	7452-79-1	sharp, sweet, fruity	1073	1073	ester	C3-OTTO
25	(E)-ethyl tiglate	5837-78-5	sweet, tropical, berry, floral	1239	n.d.	ester	C3-OTTO
32	cis-1,3,3-trimethylbicyclo[3.1.0]hexane-1-carboxaldehyde	1000365-94-2	n.d.	1338	n.d.	aldehyde	C3-OTTO
43	Cyclopentane, 1-ethyl-1-methyl-	16747-50-5	n.d.	1400	n.d.	alkane	C3-OTTO

58	$\delta$ -selinene	28624-23-9	n.d.	1601	n.d.	sesquiterpene	C3-OTTO
59	L-bornyl acetate	5655-61-8	pine	1603	1600	sesquiterpenoid ester	C3-OTTO
79	Viridiflorene	21747-46-6	n.d.	1699	n.d.	sesquiterpene	C3-OTTO
81	$\alpha$ -selinene	473-13-2	pepper, orange	1719	1724	sesquiterpene	C3-OTTO
98	Methyl cinnamate	103-26-4	strawberry, cherry, cinnamon	2065	2056	ester	C3-OTTO
112	Methyl isoeugenol	93-16-3	spicy, clove, blossom, carnation	2180	2196	other	C3-OTTO
121	$\beta$ -eudesmol	473-15-4	wood, green	2225	2214	sesquiterpenoid alcohol	C3-OTTO
7	$\alpha$ -thujene	2867-05-2	wood, green, herb	1014	1021	monoterpene	C4-ESALQ
12	Undecane	1120-21-4	alkane, wax	1109	1100	alkane	C4-ESALQ
28	3-octanone	106-68-3	fresh, herbal, lavender	1244	1241	ketone	C4-ESALQ
44	(E)-2-octenal	2548-87-0	green, nut, fat, leaf, walnut	1407	1408	aldehyde	C4-ESALQ
47	2,2-dimethylhexanal	996-12-3	n.d.	1478	n.d.	aldehyde	C4-ESALQ
60	(E)-2-octen-1-ol	18409-17-1	mushroom (soap, plastic)	1604	1590	alcohol	C4-ESALQ
84	Benzyl acetate	140-11-4	floral, fruity, jasmin	1755	1747	ester	C4-ESALQ
103	p-vinylbenzohydrazide	1000244-74-9	n.d.	2105	n.d.	other	C4-ESALQ
113	2,9-bornanediol	54831-21-9	n.d.	2185	n.d.	monoterpenoid alcohol	C4-ESALQ
114	$\alpha$ -eudesmol	473-16-5	sweet, wood	2190	2208	sesquiterpenoid alcohol	C4-ESALQ

\* Chemical Abstracts Service (CAS) is a division of the American Chemical Society. \*\* Descriptions consulted on the site <http://www.thegoodscentscompany.com/>.

<sup>a</sup> Retention index calculated. <sup>b</sup> Retention index from literature from database <https://mona.fiehnlab.ucdavis.edu/>.

**Table S3:** Odor thresholds of volatiles compounds of jaboticabas Sabará (*Plinia jaboticaba*), Escarlata (*Plinia phitrantha x Plinia cauliflora*), Otto Andersen (*Plinia cauliflora*) e Esalq (*Plinia phitrantha*).

Code	Compound	CAS	Odor description	Class	Odor treshold (mg. Kg <sup>-1</sup> )
1	Ethyl acetate	141-78-6	pineapple	ester	1.190[1]
2	Ethanol	4-17-5	alcohol	alcohol	0.090[2]
3	Ethyl propionate	105-37-3	fruity, grape, pineapple	ester	3.452[3]
4	Propyl acetate	109-60-4	solvent, celery	ester	0.239[4]
5	D- $\alpha$ -pinene	7785-70-8	pine, turpentine	monoterpene	0.190[5]
6	Cyclofenchene	488-97-1	n.d.	other	-
7	$\alpha$ -thujene	353313	wood, green, herb	monoterpene	22.000[6]
8	Ethyl butyrate	105-54-4	fruity, juicy, pineapple	ester	0.400[7]
9	Ethyl isovalerate	108-64-5	fruity	ester	0.001[3]
10	Ethyl-2-methyl	7452-79-1	sharp, sweet, fruity	ester	0.968-11.700[8]
11	Hexanal	66-25-1	grass, tallow, fat	aldehyde	75.000[5]
12	Undecane	1120-21-4	alkane, wax	alkane	5.600[4]
13	$\beta$ -pinene	127-91-3	pine, resin, turpentine	monoterpene	1.500[5]
14	$\beta$ -thujene	28634-89-1	n.d.	monoterpene	-
15	Isoamyl acetate	123-92-2	fresh, banana, sweet	ester	0.013 - 0.172[9]
16	$\beta$ -myrcene	123-35-3	balsamic, must, spice	monoterpene	0.100[5]
17	Ethyl (Z)-crotonate	6776-19-8	n.d.	ester	-
18	$\alpha$ -Phellandrene	99-83-2	turpentine, mint, spice	monoterpene	0.160[10]
19	D-limonene	5989-27-5	lemon, orange	monoterpene	0.040[4]
20	$\beta$ -phellandrene	555-10-2	mint, terpentine	monoterpene	0.500[11]
21	1,8 cineole	470-82-6	eucalyptus	monoterpenoid alcohol	0.001[12]
22	2-hexenal	505-57-7	apple, green	aldehyde	424.000[13]
23	Ethyl hexanoate	123-66-0	apple peel, fruity	ester	0.080[7]
24	$\gamma$ -Terpinene	99-85-4	gasoline, turpentine	monoterpene	0.260[5]
25	(E)-Ethyl tiglate	5837-78-5	sweet, berry, floral	ester	0.063[14]

26	$\beta$ -ocimene	13877-91-3	sweet, herb	monoterpene	0.034[5]
27	Propyl methacrylate	2210-28-8	n.d.	ester	-
28	3-octanone	106-68-3	fresh, herbal, lavender	ketone	0.057[15]
29	o-cymene	527-84-4	n.d.	monoterpene	0.004[16]
30	Hexyl acetate	142-92-7	fruity, apple	ester	0.237[17]
31	cis-1,3,3-trimethylbicyclo[3.1.0]hexane-1-carboxaldehyde	1000365-94-2	n.d.	aldehyde	-
32	Ethyl 3-hexenoate	2396-83-0	sweet, fruity, pineapple	ester	-
33	(Z)-3-hexen-1-ol acetate	3681-71-8	green, banana	ester	0.013[12]
34	4-hexen-1-ol acetate	72237-36-6	n.d.	ester	-
35	Methyl heptenone	110-93-0	citrus, green, lemongrass	ketone	0.019[18]
36	Ethyl 2-hexenoate	1552-67-6	fruity, green, sweet	ester	-
37	Butyl 2-butenolate	7299-91-4	n.d.	ester	-
38	Hexanol	111-27-3	resin, flower, green	alcohol	0.180[19]
39	(Z)-3-hexen-1-ol	928-96-1	grass	alcohol	0.910[5]
40	Cyclopropanecarboxylic acid,3-methylbutyl ester	1000245-65-3	n.d.	ester	-
41	(E)-2-hexen-1-ol	928-95-0	leaf, green, fruity	alcohol	0.100[5]
42	Cyclopentane, 1-ethyl-1-methyl-	16747-50-5	n.d.	alkane	-
43	(E)-2-octenal	2548-87-0	green, nut, fat, leaf	aldehyde	0.003[5]
44	Ethyl octanoate	106-32-1	fruity, fat	ester	0.580[7]
45	$\alpha$ -cubebene	17699-14-8	herb, wax	sesquiterpene	-
46	2,2-dimethylhexanal	996-12-3	n.d.	aldehyde	-
47	$\delta$ -elemene	20307-84-0	wood	sesquiterpene	-
48	$\alpha$ -copaene	1000360-33-0	wood, spice	sesquiterpene	-
49	Ethyl sorbate	110318-09-7	fruity	ester	-
50	2-Ethyl-1-hexanol	104-76-7	rose, green	alcohol	0.400[17]
51	$\beta$ -bourbonene	5208-59-3	herbal	sesquiterpene	-
52	Benzaldehyde	100-52-7	almond, burnt sugar	aldehyde	0.093[20]
53	Grape butyrate	5405-41-4	marshmallow	ester	2.500[21]
54	Linalool	78-70-6	flower, lavender	sesquiterpenoid alcohol	0.001[5]
55	$\beta$ -cubebene	13744-15-5	citrus, fruity	sesquiterpene	-
56	4-terpineol	562-74-3	pepper, woody, earth	monoterpenoid alcohol	32.000[5]
57	$\delta$ -selinene	28624-23-9	n.d.	sesquiterpene	-

58	L-bornyl acetate	5655-61-8	pine	sesquiterpenoid ester	-
59	(E)-2-octen-1-ol	18409-17-1	mushroom (soap, plastic)	alcohol	0.840[22]
60	$\beta$ -elemene	515-13-9	herb, wax, fresh	sesquiterpene	-
61	(Z)-3-hexenyl (E)-2-butenolate	65405-80-3	green	ester	0.500[5]
62	Isoledene	1000156-10-8	n.d.	sesquiterpene	-
63	$\gamma$ -elemene	490377	green, wood, oil	sesquiterpene	-
64	Alloaromadendrene	25246-27-9	wood	sesquiterpene	-
65	1-epi-bicyclosquiphellandrene	54274-73-6	n.d.	sesquiterpene	-
66	Aristolene	6831-16-9	n.d.	sesquiterpene	-
67	$\alpha$ -muurolene	31983-22-9	wood	sesquiterpene	-
68	Methyl benzoate	93-58-3	prune, lettuce, herb, sweet	ester	0.073[23]
69	cis-muurola-4(14),5-diene	1000365-95-4	n.d.	sesquiterpene	-
70	Humulene	6753-98-6	wood	sesquiterpene	0.390[5]
71	Ethyl benzoate	93-89-0	camomile, flower, fruity	ester	0.620[16]
72	$\gamma$ -muurolene	30021-74-0	herb, wood, spice	sesquiterpene	-
73	$\gamma$ -gurjunene	22567-17-5	musty	sesquiterpene	-
74	Nonanol	143-08-8	fat, green	alcohol	0.045[24]
75	$\beta$ -patchoulene	514-51-2	n.d.	sesquiterpene	-
76	Viridiflorene	21747-46-6	n.d.	sesquiterpene	-
77	$\beta$ -selinene	17066-67-0	herb	sesquiterpene	-
78	$\alpha$ -selinene	473-13-2	pepper, orange	sesquiterpene	-
79	(E)-germacrene D	23986-74-5	wood, spice	sesquiterpene	-
80	$\alpha$ -amorphene	483-75-0	n.d.	sesquiterpene	-
81	Benzyl acetate	140-11-4	floral, fruity, jasmin	ester	14.000 - 22.000[25]
82	$\delta$ -cadinene	483-76-1	thyme, medicine, wood	sesquiterpene	-
83	2-phenylacetamide, N-(1-phenyl-2-propyl)-	1000223-70-1	n.d.	other	-
84	Cadine-1,4-diene	16728-99-7	spice, fruity	sesquiterpene	-
85	Selina-3,7(11)-diene	6813-21-4	n.d.	sesquiterpene	-
86	$\gamma$ -cadinene	39029-41-9	wood	sesquiterpene	-
87	Citronellyl butyrate	141-16-2	fruity, sweet, rose	monoterpenoid ester	-
88	$\alpha$ -cadinene	24406-05-1	woody, dry	sesquiterpene	-
89	Calamenene	483-77-2	herb, spice	sesquiterpene	-

90	Geraniol	106-24-1	rose, geranium	monoterpenoid alcohol	0.001[12]
91	$\alpha$ -calacorene	21391-99-1	wood	sesquiterpene	-
92	Palustrol	95975-84-1	n.d.	sesquiterpenoid alcohol	-
93	$\beta$ -caryophyllene oxide	1139-30-6	herb, sweet, spice	sesquiterpene	0.41[5]
94	Ledol	577-27-5	sweet, green	sesquiterpenoid alcohol	-
95	Methyl cinnamate	103-26-4	strawberry, cherry	ester	0.12[26]
96	Humulane-1,6-dien-3-ol	1000140-23-1	n.d.	sesquiterpenoid alcohol	-
97	Mansonone	5574-34-5	n.d.	other	-
98	Cubenol	21284-22-0	spice, herb, green tea	sesquiterpenoid alcohol	-
99	p-vinylbenzohydrazide	1000244-74-9	n.d.	other	-
100	Rosifoliol	63891-61-2	n.d.	sesquiterpenoid alcohol	-
101	Ethyl cinnamate	103-36-6	sweet, fruity, spicy, berry plum	ester	0.017-0.04[16]
102	Selina-6-en-4-ol	1000140-23-2	n.d.	sesquiterpenoid alcohol	-
103	Carotol	465-28-1	pleasant mild	sesquiterpenoid alcohol	0.008[27]
104	T-cadinol	1474790	wood, balsamic	sesquiterpenoid alcohol	-
105	T-muurolol	19912-62-0	herb, weak spice, honey	sesquiterpenoid alcohol	-
106	Spathulenol	6750-60-3	earthy, herbal, fruity	sesquiterpenoid alcohol	-
107	Methyl isoeugenol	93-16-3	spicy, clove, blossom	other	1.600[28]
108	2,9-bornanediol	54831-21-9	n.d.	monoterpenoid alcohol	-
109	$\alpha$ -eudesmol	473-16-5	sweet, wood	sesquiterpenoid alcohol	-
110	$\alpha$ -cadinol	481-34-5	herb, wood	sesquiterpenoid alcohol	-
111	Cadalene	483-78-3	n.d.	sesquiterpene	-
112	3,6-Dimethyl-4H-furo[3,2-c]pyran-4-one	36745-38-7	n.d.	ketone	-
113	Occidentalol	29484-47-7	n.d.	sesquiterpenoid alcohol	-
114	Juniper camphor	473-04-1	camphor	sesquiterpenoid alcohol	0.520[10]
115	Tetracyclo[6.3.2.0(2,5).0(1,8)]tridecan-9-ol, 4,4-dimethyl	1000157-75-1	n.d.	alcohol	-
116	$\beta$ -eudesmol	473-15-4	wood, green	sesquiterpenoid alcohol	-
117	Galaxolide 2	1000285-26-7	musk	other	-

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