

Supplementary Table S1. Purple Passion Fruit, *Passiflora edulis* Sims f. *edulis*, genotypes and accessions collected and used for this study and their geographical origin in various Departments of Colombia and group identification by source (Landrace, Commercial Cultivar or Genebank Accession).

Accession	Coordinates	Altitude	Group	Colombian Department
BBFV001	4°18,671'N; 74°20,116' W	1887	landrace	Cundinamarca
BBFV002	4°38,483'N; 74°4,930' W	2628	landrace	Cundinamarca
BBFV003	4°39,250'N; 74°23,651' W	1484	landrace	Cundinamarca
BBFV004	4°40,667'N; 74°5,543' W	2560	landrace	Cundinamarca
BBFV005	4°39,317'N; 74°24,120' W	1510	cultivar	Cundinamarca
BBFV006	4°18,510'N; 74°20,200' W	1910	landrace	Cundinamarca
BBFV007	4°18,510'N; 74°20,200' W	1930	cultivar	Cundinamarca
BBFV008	5°14,210'N; 76°1,598' W	1600	landrace	Risaralda
BBFV009	5°54,125'N; 73°6,574' W	2187	landrace	Boyacá
BBFV010	5°53,905'N; 73°6,214' W	2188	landrace	Boyacá
BBFV011	5°42,843'N; 73°36,482' W	2451	landrace	Boyacá
BBFV012	5°15,110'N; 76°1,360' W	1600	landrace	Risaralda
BBFV013	5°41,190'N; 73°16,678' W	2704	landrace	Boyacá
BBFV014	5°41,336'N; 73°16,785' W	2760	landrace	Boyacá
BBFV015	4°26,423'N; 75°25,844' W	1890	landrace	Tolima
BBFV016	4°19,830'N; 75°78,243' W	1503	landrace	Quindío
BBFV017	4°18,179'N; 74°16,958' W	2427	cultivar	Cundinamarca
BBFV018	4°37,582'N; 75°5,453' W	1915	cultivar	Tolima
BBFV019	2°12,110'N 76°4,463'W	2146	landrace	Cauca
BBFV020	1°10,502'N; 76°53,266'W	2153	landrace	Putumayo
BBFV021	1°10,517'N; 76°53,295'W	2108	landrace	Putumayo
BBFV022	1°10,573'N; 76°54,236'W	2134	landrace	Putumayo
BBFV023	1°10,578'N; 76°54,310'W	2134	landrace	Putumayo
BBFV024	1°18,693'N; 77°20,309'W	2226	landrace	Nariño
BBFV025	1°20,493'N; 77°219.938'W	1994	landrace	Nariño
BBFV026	1°22,094'N; 77°19,553'W	1931	landrace	Nariño
BBFV027	1°19,693'N; 77°20,309'W	1973	landrace	Nariño
BBFV028	1°13,290'N; 77°27,005'W	1483	landrace	Nariño
BBFV029	6°9.856'N 73°21.123'W	1642	cultivar	Santander
BBFV030	5°35,610'N; 75°49,115'W	1756	landrace	Antioquia
BBFV031	5°36,001'N; 75°49,013'W	1800	landrace	Antioquia
BBFV032	7°2,256'N; 72°56,520'W	2010	landrace	Santander del Norte
BBFV033	7°16,555'N; 72°58,086'W	2185	landrace	Santander del Norte
BBFV034	2°11,935'N; 76°3,237'W	2030	cultivar	Huila
BBFV035	2°12,128'N 76°4,460'W	2127	cultivar	Huila
BBFV036	2°12,070'N; 76°4,565'W	2146	landrace	Cauca
BBFV037	2°15,454'N; 76°11,789'W	2357	landrace	Huila
BBFV038	2°16,211'N; 76°12,162'W	2431	landrace	Huila
BBFV039	1°53,485'N; 76°19,465'W	1893	landrace	Huila
BBFV040	1°51,346'N; 76°22,331'W	2114	landrace	Huila
BBFV041	1°51,142'N; 76°22,350'W	2175	landrace	Huila
BBFV042	5°43.156'N; 73°41.215'W	2100	cultivar	Boyacá
C101	AGROSAVIA		genebank	Antioquia
C145	AGROSAVIA		genebank	Antioquia
C3866	AGROSAVIA		genebank	Antioquia
C3867	AGROSAVIA		genebank	Antioquia
C3869	AGROSAVIA		genebank	Antioquia
C3873	AGROSAVIA		genebank	Antioquia
C4092	AGROSAVIA		genebank	Antioquia
C4095	AGROSAVIA		genebank	Antioquia

Supplementary Table S2. Photosynthetic rate (A), transpiration rate (E), stomatal conductance (gs), extrinsic water use efficiency (WUEe) and intrinsic water use efficiency (WUEi) measured for the best nine purple passion fruit genotypes *Passiflora edulis* Sims f. *edulis*, from the Bogotá Universidad Nacional (BBFV) series grown in two production locations: Pasca and Susacón at different elevations in meters above sea level (m a.s.l). Total genotypes included 34 landraces, 8 commercial cultivars and 8 genebank accessions. Asterisks indicated the best genotypes for gas exchange.

Genotypes	Pasca (1800 m a.s.l)					Susacón (2500 m a.s.l)				
	A	E	gs	WUEe	WUEi	A	E	gs	WUEe	WUEi
BBFV001	*13.6±0.15	*1.2±0.2	0.7±0.01	*8.75±0.41	*19.42±2.3	9.59±0.2	1.85±0.1	0.75±0.1	*5.18±0.3	12.78±0.6
BBFV006	*12.4±0.71	2.8±0.6	0.8±0.02	4.42±0.8	15.5±1.1	*11.84±0.5	2.15±0.2	0.67±0.02	*5.04±0.2	*16.17±0.9
BBFV009	*12.8±0.78	3.1±0.2	0.9±0.01	4.12±0.71	*19.22±1.1	*12.61±0.6	2.31±0.2	0.54±0.02	*5.45±0.2	*19.25±1.1
BBFV010	*11.8±0.36	2.4±0.9	1.5±0.01	4.91±0.7	7.86±0.9	*11.21±0.5	1.99±0.2	0.63±0.02	*5.13±0.1	*16.24±1.2
BBFV011	*11.4±0.87	*1.1±0.1	0.9±0.01	*10.3±0.7	11.44±0.9	10.5±0.5	2.15±0.3	0.57±0.02	4.88±0.3	*18.42±1.2
BBFV024	*12.6±0.87	*1.3±0.1	0.9±0.01	4.6±0.6	14.21±1.1	*12.52±0.5	1.95±0.1	0.77±0.3	4.31±0.5	10.89±1.1
BBFV037	*13.6±0.97	*1.1±0.2	0.7±0.02	*9.27±0.8	*19.42±2.5	8.39±0.6	1.87±0.1	0.77±0.05	4.48±0.1	10.89±0.9
BBFV046	*12.3±0.36	2.8±0.1	0.9±0.02	*8.01±0.8	13.31±1.1	10.25±0.6	2.14±0.2	0.6±0.05	4.78±0.6	*17.08±1.2
BBFV047	*13.6±0.74	*1.2±0.1	0.9±0.01	4.53±0.6	15.12±1.2	9.24±0.6	2.01±0.4	0.72±0.06	4.59±0.4	*16.49±1.5

Supplementary Table S3. Derived parameters for photosynthetic light response in the best ten genotypes of purple passion fruit, *Passiflora edulis* Sims f. *edulis*, grown in two production locations, Pasca and Susacón at different meters above sea level (m a.s.l). The traits, \pm standard deviation, included A_{max} = maximum photosynthesis rate, PAR_{sat} = photosynthetically active radiation at saturation of light, Rd = rate of dark respiration, Ic = point of light compensation, ϕ = apparent quantum yield based on the number of photons absorbed to fix one mole of CO_2 . Total genotypes included 34 landraces, 8 commercial cultivars and 8 genebank accessions. Asterisks indicated maximum values obtained for each parameter found in the best ten genotypes with the averages for each group of genotypes (landraces, commercial cultivars and genebank accessions).

Genotypes	Pasca (1800 m a.s.l)					Susacón (2500 m a.s.l)				
	A_{max}	PAR_{sat}	Rd	Ic	ϕ	A_{max}	PAR_{sat}	Rd	Ic	ϕ
BBFV001	*21.4 \pm 0.8	416.8 \pm 1.9	0.19 \pm 0.2	24.62 \pm 1.9	*0.053 \pm 0.007	17.75 \pm 1.1	650.67 \pm 2.3	1.36 \pm 0.6	10.14 \pm 0.9	*0.059 \pm 0.005
BBFV006	*17.5 \pm 1.3	362.6 \pm 1.9	0.56 \pm 0.5	38.05 \pm 0.1	*0.054 \pm 0.003	*19.21 \pm 2.3	544.79 \pm 2.2	0.98 \pm 0.8	9.32 \pm 0.8	*0.066 \pm 0.001
BBFV009	*19.4 \pm 1.2	410.7 \pm 2.6	0.32 \pm 0.5	27.57 \pm 0.9	*0.056 \pm 0.001	*19.54 \pm 1.1	558.02 \pm 2.3	*0.54 \pm 0.6	9.14 \pm 0.9	*0.067 \pm 0.006
BBFV010	*19.6 \pm 1.1	598.6 \pm 3.4	1.75 \pm 0.6	27.62 \pm 0.9	*0.055 \pm 0.003	15.62 \pm 1.3	554.70 \pm 2.3	1.94 \pm 0.8	17.25 \pm 0.8	*0.064 \pm 0.002
BBFV022	*21.4 \pm 1.1	416.6 \pm 1.5	0.28 \pm 0.5	*43.16 \pm 3.5	*0.054 \pm 0.005	*19.74 \pm 1.8	628.01 \pm 2.9	0.76 \pm 0.1	9.47 \pm 0.8	0.052 \pm 0.006
BBFV024	*21.6 \pm 0.9	472.3 \pm 2.6	*0.12 \pm 0.5	25.55 \pm 2.1	0.051 \pm 0.001	*19.75 \pm 0.1	670.99 \pm 2.3	0.54 \pm 0.4	12.74 \pm 0.9	0.054 \pm 0.003
BBFV037	18.5 \pm 1.1	514.6 \pm 2.6	0.52 \pm 0.7	33.58 \pm 2.6	*0.058 \pm 0.002	*19.27 \pm 0.7	686.62 \pm 0.7	0.97 \pm 0.3	9.51 \pm 0.9	0.057 \pm 0.003
BBFV038	*21.3 \pm 1.1	438.12 \pm 3.3	0.33 \pm 0.6	24.01 \pm 1.8	*0.055 \pm 0.006	*19.56 \pm 0.6	420.61 \pm 1.3	0.73 \pm 0.1	*9.07 \pm 0.3	0.052 \pm 0.004
BBFV046	*25.7 \pm 2.1	556.5 \pm 2.5	0.38 \pm 0.8	16.01 \pm 0.9	*0.052 \pm 0.007	*19.73 \pm 0.7	512.26 \pm 1.2	0.95 \pm 0.9	9.73 \pm 0.6	0.053 \pm 0.002
BBFV047	*22.5 \pm 1.2	*336.1 \pm 3.2	0.21 \pm 0.4	29.53 \pm 2.2	*0.052 \pm 0.002	*21.94 \pm 1.1	518.54 \pm 2.3	0.57 \pm 0.4	10.14 \pm 0.7	0.055 \pm 0.004
Average Overall	15.41	451.51	1.38	30.54	0.04	16.34	579.96	1.63	15.13	0.04
Landraces	18.59	462.83	1.09	28.43	0.04	16.31	580.35	1.04	13.56	0.05
Cultivars	15.02	422.98	1.70	33.29	0.03	15.85	560.81	2.06	17.45	0.03
Genebank Acc.	14.90	413.64	1.73	32.21	0.03	16.29	524.40	1.88	18.72	0.04