

Supplementary Data

Title: Gene flow in natural populations of *Carica papaya* in the fragmented landscapes at the southern end of the Isthmus of Tehuantepec

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Table S1. Geographic coordinates of Costa Rica and Nicaragua individuals sampled in north western Costa Rica and western Nicaragua, including regional population ID, regional subpopulation ID, Sex, GPS coordinates, and regional population location.

Population	subpop	Accession	Sex	Location	Region
CR1	1	CR2	F	10° 2.683' N, 84° 45.233' W	Miramar
CR1	1	CR3	F	10° 2.848' N, 84° 45.228' W	Miramar
CR1	1	CR4	F	10° 2.841' N, 84° 45.217' W	Miramar
CR1	1	CR5	M	10° 2.842' N, 84° 45.218' W	Miramar
CR1	1	CR6	M	10° 2.834' N, 84° 45.216' W	Miramar
CR1	1	CR7	F	10° 2.830' N, 84° 45.212' W	Miramar
CR1	2	CR8	F	10° 2.808' N, 84° 45.186' W	Miramar
CR1	2	CR9	M	10° 2.810' N, 84° 45.188' W	Miramar
CR1	2	CR10	M	10° 2.810' N, 84° 45.187' W	Miramar
CR1	2	CR11	F	10° 2.815' N, 84° 45.190' W	Miramar
CR1	2	CR12	M	10° 2.817' N, 84° 45.190' W	Miramar
CR1	2	CR13	F	10° 2.815' N, 84° 45.189' W	Miramar
CR1	2	CR14	M	10° 2.818' N, 84° 45.196' W	Miramar
CR1	2	CR15	M	10° 2.818' N, 84° 45.198' W	Miramar
CR1	3	CR16	F	10° 3.786' N, 84° 45.621' W	Miramar
CR1	3	CR17	M	10° 3.776' N, 84° 45.616' W	Miramar
CR1	3	CR19	F	10° 3.788' N, 84° 45.611' W	Miramar
CR1	3	CR20	F	10° 3.786' N, 84° 45.612' W	Miramar
CR1	3	CR21	M	10° 3.794' N, 84° 45.616' W	Miramar
CR1	3	CR22	M	10° 3.844' N, 84° 45.679' W	Miramar
CR1	3	CR23	F	10° 3.846' N, 84° 45.685' W	Miramar
CR1	3	CR24	F	10° 3.862' N, 84° 45.706' W	Miramar

CR1	3	CR25	M	10° 3.866' N, 84° 45.710' W	Miramar
CR1	4	CR26	F	10° 4.245' N, 84° 46.329' W	Miramar
CR1	4	CR27	F	10° 4.619' N, 84° 46.745' W	Miramar
CR1	4	CR28	M	10° 4.618' N, 84° 46.747' W	Miramar
CR1	4	CR29	F	10° 4.705' N, 84° 46.853' W	Miramar
CR2	1	CR30	M	10° 14.783' N, 85° 0.342' W	South of Canas
CR2	1	CR31	F	10° 16.738' N, 85° 1.841' W	South of Canas
CR2	1	CR32	F	10° 16.742' N, 85° 1.845' W	South of Canas
CR2	1	CR33	F	10° 17.435' N, 85° 2.146' W	South of Canas
CR2	1	CR34	M	10° 27.962' N, 85° 8.280' W	South of Canas
CR3	1	CR35	F	10° 13.545' N, 85° 7.295' W	Canas to Playa Naranja
CR3	1	CR36	M	10° 13.531' N, 85° 7.344' W	Canas to Playa Naranja
CR3	1	CR37	M	10° 13.528' N, 85° 7.342' W	Canas to Playa Naranja
CR3	1	CR38	M	10° 13.528' N, 85° 7.343' W	Canas to Playa Naranja
CR3	1	CR39	M	10° 13.529' N, 85° 7.343' W	Canas to Playa Naranja
CR3	1	CR40	F	10° 13.532' N, 85° 7.359' W	Canas to Playa Naranja
CR3	1	CR41	M	10° 13.531' N, 85° 7.352' W	Canas to Playa Naranja
CR3	1	CR42	F	10° 13.533' N, 85° 7.376' W	Canas to Playa Naranja
CR3	1	CR43	M	10° 13.533' N, 85° 7.375' W	Canas to Playa Naranja
CR3	1	CR44	F	10° 13.568' N, 85° 7.647' W	Canas to Playa Naranja
CR3	1	CR45	M	10° 13.549' N, 85° 7.712' W	Canas to Playa Naranja
CR3	1	CR46	F	10° 13.544' N, 85° 7.715' W	Canas to Playa Naranja
CR3	1	CR47	M	10° 13.550' N, 85° 7.723' W	Canas to Playa Naranja
CR3	1	CR48	M	10° 13.562' N, 85° 7.730' W	Canas to Playa Naranja
CR3	2	CR49	M	10° 14.931' N, 85° 13.629' W	Canas to Playa Naranja
CR3	2	CR50	F	10° 14.938' N, 85° 13.651' W	Canas to Playa Naranja
CR3	2	CR51	M	10° 14.939' N, 85° 13.651' W	Canas to Playa Naranja
CR3	2	CR52	M	10° 14.958' N, 85° 13.655' W	Canas to Playa Naranja
CR3	3	CR53	F	10° 14.170' N, 85° 15.422' W	Canas to Playa Naranja
CR3	3	CR54	M	10° 14.178' N, 85° 15.432' W	Canas to Playa Naranja
CR3	3	CR55	M	10° 14.175' N, 85° 15.438' W	Canas to Playa Naranja
CR3	3	CR56	F	10° 14.171' N, 85° 15.445' W	Canas to Playa Naranja
CR3	3	CR57	M	10° 14.140' N, 85° 15.474' W	Canas to Playa Naranja
CR3	3	CR58	F	10° 14.115' N, 85° 15.523' W	Canas to Playa Naranja
CR3	3	CR59	M	10° 14.106' N, 85° 15.567' W	Canas to Playa Naranja
CR3	3	CR60	M	10° 14.088' N, 85° 15.632' W	Canas to Playa Naranja
CR3	3	CR61	M	10° 14.075' N, 85° 15.670' W	Canas to Playa Naranja
CR3	3	CR62	M	10° 14.073' N, 85° 15.678' W	Canas to Playa Naranja
CR3	3	CR63	F	10° 14.040' N, 85° 15.839' W	Canas to Playa Naranja
CR4	1	CR64	M	9° 55.431' N, 84° 57.412' W	Paquera
CR4	1	CR65	M	9° 55.329' N, 84° 57.541' W	Paquera
CR4	1	CR66	M	9° 55.324' N, 84° 57.543' W	Paquera

CR4	1	CR67	M	9° 55.308' N, 84° 57.547' W	Paquera
CR4	1	CR68	M	9° 55.244' N, 84° 57.542' W	Paquera
CR4	1	CR69	M	9° 55.018' N, 84° 57.594' W	Paquera
CR4	1	CR70	M	9° 55.018' N, 84° 57.593' W	Paquera
CR4	2	CR71	M	9° 54.589' N, 84° 57.594' W	Paquera
CR4	2	CR72	M	9° 54.530' N, 84° 57.640' W	Paquera
CR4	2	CR73	F	9° 54.576' N, 84° 57.657' W	Paquera
CR4	2	CR74	M	9° 54.508' N, 84° 57.652' W	Paquera
CR4	2	CR75	F	9° 54.638' N, 84° 56.982' W	Paquera
CR4	2	CR76	F	9° 54.566' N, 84° 56.651' W	Paquera
CR4	2	CR77	F	9° 54.426' N, 84° 56.517' W	Paquera
CR4	2	CR78	M	9° 54.401' N, 84° 56.538' W	Paquera
CR4	2	CR79	M	9° 54.229' N, 84° 56.271' W	Paquera
CR4	2	CR80	F	9° 54.227' N, 84° 56.268' W	Paquera
CR4	3	CR81	M	9° 53.884' N, 84° 56.164' W	Paquera
CR4	3	CR82	M	9° 53.885' N, 84° 56.195' W	Paquera
CR4	3	CR83	F	9° 53.884' N, 84° 56.196' W	Paquera
CR4	3	CR84	M	9° 53.884' N, 84° 56.190' W	Paquera
CR4	3	CR85	F	9° 53.765' N, 84° 56.154' W	Paquera
CR4	3	CR86	F	9° 53.330' N, 84° 56.706' W	Paquera
CR4	3	CR87	F	9° 53.320' N, 84° 56.705' W	Paquera
CR4	3	CR88	F	9° 50.086' N, 84° 56.940' W	Paquera
CR5	1	CR90	F	9° 47.447' N, 84° 56.471' W	West of Paquera
CR5	1	CR91	M	9° 47.451' N, 84° 56.475' W	West of Paquera
CR5	1	CR92	M	9° 47.438' N, 84° 56.479' W	West of Paquera
CR5	1	CR93	M	9° 46.410' N, 84° 58.181' W	West of Paquera
CR5	2	CR94	M	9° 45.280' N, 84° 59.590' W	West of Paquera
CR5	2	CR95	F	9° 45.260' N, 84° 59.606' W	West of Paquera
CR5	2	CR96	M	9° 45.261' N, 84° 59.608' W	West of Paquera
CR5	2	CR97	F	9° 45.236' N, 84° 59.717' W	West of Paquera
CR5	2	CR98	M	9° 45.240' N, 84° 59.722' W	West of Paquera
CR5	2	CR99	M	9° 45.242' N, 84° 59.729' W	West of Paquera
CR5	3	CR100	F	9° 44.963' N, 85° 00.538' W	West of Paquera
CR5	3	CR101	M	9° 43.691' N, 85° 01.841' W	West of Paquera
CR5	3	CR102	F	9° 42.861' N, 85° 07.047' W	West of Paquera
CR6	1	CR104	M	9° 50.570' N, 85° 20.412' W	Playa Carrillo
CR6	1	CR105	M	9° 52.135' N, 85° 26.837' W	Playa Carrillo
CR6	1	CR106	F	9° 52.134' N, 85° 26.837' W	Playa Carrillo
CR6	2	CR107	M	9° 53.610' N, 85° 31.789' W	Playa Carrillo
CR6	2	CR108	M	9° 53.616' N, 85° 31.788' W	Playa Carrillo
CR6	2	CR109	M	9° 53.616' N, 85° 31.786' W	Playa Carrillo
CR6	2	CR110	F	9° 53.630' N, 85° 31.786' W	Playa Carrillo

CR6	2	CR111	M	9° 53.635' N, 85° 31.787' W	Playa Carrillo
CR6	2	CR112	F	9° 53.637' N, 85° 31.784' W	Playa Carrillo
CR6	2	CR113	M	9° 53.635' N, 85° 51.784' W	Playa Carrillo
CR7	1	CR114	F	10° 21.823' N, 85° 40.302' W	From Playa Carillo to Canas
CR7	1	CR115	F	10° 21.833' N, 85° 40.270' W	From Playa Carillo to Canas
CR7	1	Cr116	F	10° 21.873' N, 85° 40.250' W	From Playa Carillo to Canas
CR7	1	Cr117	M	10° 21.857' N, 85° 40.248' W	From Playa Carillo to Canas
CR7	1	Cr118	M	10° 21.861' N, 85° 40.161' W	From Playa Carillo to Canas
CR7	1	Cr119	F	10° 21.860' N, 85° 40.111' W	From Playa Carillo to Canas
CR7	1	Cr120	M	10° 21.858' N, 85° 40.109' W	From Playa Carillo to Canas
CR2	2	Cr121	M	10° 28.168' N, 85° 8.243' W	Canas
CR2	2	Cr122	F	10° 28.201' N, 85° 8.236' W	Canas
CR2	3	Cr123	F	10° 27.235' N, 85° 07.831' W	Canas
CR2	3	Cr124	M	10° 27.243' N, 85° 07.836' W	Canas
CR2	3	Cr125	M	10° 27.244' N, 85° 07.836' W	Canas
CR2	3	Cr126	M	10° 27.245' N, 85° 07.836' W	Canas
CR2	3	Cr127	M	10° 27.240' N, 85° 07.836' W	Canas
CR2	3	Cr128	F	10° 27.241' N, 85° 07.834' W	Canas
CR2	3	Cr129	M	10° 27.266' N, 85° 07.858' W	Canas
CR8	1	Cr130	M	10° 56.433' N, 85° 40.862' W	Cuajiniqual
CR8	1	Cr131	M	10° 56.433' N, 85° 40.863' W	Cuajiniqual
CR8	1	Cr132	M	10° 56.430' N, 85° 40.871' W	Cuajiniqual
CR8	1	Cr133	M	10° 56.427' N, 85° 40.876' W	Cuajiniqual
CR8	1	Cr134	F	10° 56.429' N, 85° 40.879' W	Cuajiniqual
CR8	1	Cr135	F	10° 56.427' N, 85° 40.876' W	Cuajiniqual
CR8	1	Cr136	M	10° 56.428' N, 85° 40.877' W	Cuajiniqual
CR8	1	Cr137	M	10° 56.427' N, 85° 40.878' W	Cuajiniqual
CR8	1	Cr138	F	10° 56.424' N, 85° 40.874' W	Cuajiniqual
CR8	1	Cr139	M	10° 56.397' N, 85° 40.853' W	Cuajiniqual
CR8	1	Cr140	F	10° 56.396' N, 85° 40.852' W	Cuajiniqual
CR8	1	Cr141	M	10° 56.395' N, 85° 40.857' W	Cuajiniqual
CR8	1	Cr142	F	10° 56.409' N, 85° 40.849' W	Cuajiniqual
CR8	1	Cr143	M	10° 56.407' N, 85° 40.849' W	Cuajiniqual
CR8	1	Cr144	M	10° 56.423' N, 85° 40.849' W	Cuajiniqual
CR8	1	Cr145	F	10° 56.415' N, 85° 40.847' W	Cuajiniqual
CR8	2	Cr146	M	10° 56.761' N, 85° 39.359' W	Cuajiniqual
CR8	2	Cr147	M	10° 56.760' N, 85° 39.358' W	Cuajiniqual
CR8	2	Cr148	F	10° 56.760' N, 85° 39.358' W	Cuajiniqual
CR8	2	Cr149	F	10° 56.760' N, 85° 39.343' W	Cuajiniqual
CR8	2	Cr150	M	10° 56.803' N, 85° 39.450' W	Cuajiniqual
CR8	2	Cr151	M	10° 56.952' N, 85° 39.322' W	Cuajiniqual
CR8	3	Cr152	F	10° 38.554' N, 85° 27.226' W	Cuajiniqual

CR8	3	Cr153	M	10° 38.552' N, 85° 27.230' W	Cuajiniquial
CR8	4	Cr154	F	10° 45.133' N, 85° 30.817' W	Cuajiniquial
CR8	4	Cr155	F	10° 45.134' N, 85° 30.816' W	Cuajiniquial
CR8	4	Cr156	M	10° 47.019' N, 85° 31.969' W	Cuajiniquial
CR8	4	Cr157	M	10° 47.020' N, 85° 31.966' W	Cuajiniquial
CR8	4	Cr158	F	10° 48.971' N, 85° 32.625' W	Cuajiniquial
CR8	4	Cr159	M	10° 48.977' N, 85° 32.623' W	Cuajiniquial
CR7	2	Cr160	F	10° 35.216' N, 85° 39.158' W	Cuajiniquial
CR7	2	Cr161	M	10° 35.217' N, 85° 39.162' W	From Playa Carillo to Canas
CR7	2	Cr162	M	10° 35.216' N, 85° 39.157' W	From Playa Carillo to Canas
CR7	2	Cr163	M	10° 35.217' N, 85° 39.148' W	From Playa Carillo to Canas
CR7	2	Cr164	F	10° 35.216' N, 85° 39.131' W	From Playa Carillo to Canas
CR7	2	Cr165	M	10° 35.211' N, 85° 39.130' W	From Playa Carillo to Canas
CR7	2	Cr166	F	10° 35.207' N, 85° 39.114' W	From Playa Carillo to Canas
CR7	2	Cr167	M	10° 35.210' N, 85° 39.113' W	From Playa Carillo to Canas
CR7	2	Cr168	M	10° 35.209' N, 85° 39.103' W	From Playa Carillo to Canas
CR7	2	Cr170	F	10° 35.209' N, 85° 39.058' W	From Playa Carillo to Canas
CR7	2	Cr171	F	10° 35.205' N, 85° 39.026' W	From Playa Carillo to Canas
CR7	3	Cr172	M	10° 34.128' N, 85° 35.617' W	From Playa Carillo to Canas
CR7	3	Cr173	M	10° 34.130' N, 85° 35.617' W	From Playa Carillo to Canas
CR7	3	Cr174	F	10° 34.127' N, 85° 35.622' W	From Playa Carillo to Canas
CR7	3	Cr175	M	10° 34.132' N, 85° 35.625' W	From Playa Carillo to Canas
CR7	3	Cr176	F	10° 34.132' N, 85° 35.624' W	From Playa Carillo to Canas
NI1	1	NI2	M	11° 13.411' N, 85° 32.302' W	Southwest of Highway 1
NI1	1	NI3	M	11° 13.410' N, 85° 32.303' W	Southwest of Highway 1
NI1	1	NI4	M	11° 13.416' N, 85° 32.312' W	Southwest of Highway 1
NI1	1	NI6	F	11° 13.406' N, 85° 32.297' W	Southwest of Highway 1
NI1	1	NI7	F	11° 13.412' N, 85° 32.292' W	Southwest of Highway 1
NI1	1	NI8	F	11° 13.442' N, 85° 32.348' W	Southwest of Highway 1
NI1	1	NI9	M	11° 13.442' N, 85° 32.344' W	Southwest of Highway 1
NI1	1	NI10	F	11° 13.442' N, 85° 32.349' W	Southwest of Highway 1
NI1	1	NI11	F	11° 13.469' N, 85° 32.360' W	Southwest of Highway 1
NI1	1	NI12	F	11° 13.477' N, 85° 32.367' W	Southwest of Highway 1
NI2	2	NI13	F	11° 23.537' N, 85° 57.718' W	North of Rivas
NI2	1	NI14	F	11° 23.540' N, 85° 57.710' W	North of Rivas
NI2	1	NI16	F	11° 23.540' N, 85° 57.709' W	North of Rivas
NI2	1	NI17	M	11° 23.539' N, 85° 57.708' W	North of Rivas
NI2	1	NI18	M	11° 23.545' N, 85° 57.706' W	North of Rivas
NI2	1	NI19	M	11° 23.544' N, 85° 57.706' W	North of Rivas
NI2	1	NI20	F	11° 23.544' N, 85° 57.706' W	North of Rivas
NI2	1	NI21	M	11° 23.542' N, 85° 57.708' W	North of Rivas
NI2	1	NI22	M	11° 23.556' N, 85° 57.099' W	North of Rivas

NI2	1	NI23	M	11° 23.557' N, 85° 57.698' W	North of Rivas
NI2	1	NI24	M	11° 23.556' N, 85° 57.698' W	North of Rivas
NI2	1	NI25	M	11° 23.558' N, 85° 57.699' W	North of Rivas
NI2	1	NI26	F	11° 23.556' N, 85° 57.699' W	North of Rivas
NI2	1	NI27	F	11° 23.489' N, 85° 58.505' W	North of Rivas
NI2	1	NI28	F	11° 23.503' N, 85° 58.521' W	North of Rivas
NI2	1	NI29	F	11° 23.482' N, 85° 59.078' W	North of Rivas
NI2	1	NI30	F	11° 23.488' N, 85° 59.074' W	North of Rivas
NI2	1	NI31	M	11° 23.486' N, 85° 59.077' W	North of Rivas
NI2	1	NI33	M	11° 23.481' N, 85° 59.094' W	North of Rivas
NI2	2	NI34	M	11° 36.666' N, 86° 03.436' W	North of Rivas
NI2	2	NI35	F	11° 36.665' N, 86° 03.440' W	North of Rivas
NI2	2	NI36	M	11° 36.917' N, 86° 01.845' W	North of Rivas
NI3	1	NI37	H	11° 53.624' N, 86° 08.979' W	Grenada
NI3	1	NI38	F	11° 53.728' N, 86° 08.931' W	Grenada
NI3	1	NI39	F	11° 54.298' N, 86° 10.546' W	Grenada
NI3	1	NI40	H	11° 54.301' N, 85° 10.597' W	Grenada
NI3	2	NI41	F	11° 52.526' N, 86° 11.779' W	Grenada
NI3	2	NI42	F	11° 52.526' N, 86° 11.783' W	Grenada
NI3	2	NI43	F	11° 52.525' N, 86° 11.788' W	Grenada
NI3	2	NI44	M	11° 52.524' N, 86° 11.782' W	Grenada
NI3	2	NI45	M	11° 52.522' N, 86° 11.786' W	Grenada
NI3	2	NI46	M	11° 51.570' N, 86° 12.019' W	Grenada
NI3	2	NI47	M	11° 51.572' N, 86° 12.020' W	Grenada
NI3	2	NI48	F	11° 57.566' N, 86° 12.014' W	Grenada
NI4	1	NI49	F	12° 17.372' N, 86° 35.208' W	Leon
NI4	1	NI50	M	12° 17.374' N, 86° 35.210' W	Leon
NI4	1	NI51	F	12° 17.390' N, 86° 35.208' W	Leon
NI4	1	NI52	F	12° 17.390' N, 86° 35.208' W	Leon
NI4	1	NI53	F	12° 17.391' N, 86° 35.210' W	Leon
NI4	1	NI54	M	12° 17.392' N, 86° 35.208' W	Leon
NI4	1	NI55	M	12° 17.392' N, 86° 35.213' W	Leon
NI4	1	NI56	M	12° 17.395' N, 86° 35.215' W	Leon
NI4	1	NI57	F	12° 17.435' N, 86° 35.206' W	Leon
NI4	1	NI58	M	12° 17.432' N, 86° 35.208' W	Leon
NI4	1	NI59	M	12° 17.435' N, 86° 35.208' W	Leon
NI4	1	NI60	F	12° 17.432' N, 86° 35.213' W	Leon
NI4	1	NI61	M	12° 17.433' N, 86° 35.205' W	Leon
NI5	1	NI62	F	12° 34.940' N, 87° 00.245' W	North West of Leon
NI5	1	NI63	M	12° 34.941' N, 87° 00.246' W	North West of Leon
NI5	1	NI64	F	12° 34.937' N, 87° 00.247' W	North West of Leon
NI5	1	NI65	M	12° 34.938' N, 87° 00.247' W	North West of Leon

NI5	2	NI66	F	12° 43.617' N, 87° 10.954' W	North West of Leon
NI5	2	NI67	M	12° 43.653' N, 87° 10.979' W	North West of Leon
NI5	2	NI68	M	12° 43.740' N, 87° 11.030' W	North West of Leon
NI5	2	NI69	M	12° 43.799' N, 87° 11.061' W	North West of Leon
NI5	2	NI70	M	12° 43.800' N, 87° 11.059' W	North West of Leon
NI5	2	NI71	F	12° 43.847' N, 87° 11.098' W	North West of Leon
NI5	2	NI72	F	12° 43.847' N, 87° 11.094' W	North West of Leon
NI5	2	NI73	M	12° 43.854' N, 87° 11.090' W	North West of Leon
NI5	2	NI74	F	12° 43.871' N, 87° 11.097' W	North West of Leon
NI5	2	NI75	M	12° 43.886' N, 87° 11.102' W	North West of Leon
NI5	2	NI76	M	12° 43.906' N, 87° 11.119' W	North West of Leon
NI5	2	NI77	F	12° 43.917' N, 87° 11.124' W	North West of Leon
NI5	2	NI78	F	12° 43.914' N, 87° 11.136' W	North West of Leon
NI5	3	NI79	M	12° 50.074' N, 86° 55.216' W	North West of Leon
NI5	3	NI81	M	12° 50.070' N, 86° 55.215' W	North West of Leon
NI5	3	NI82	F	12° 50.078' N, 86° 55.218' W	North West of Leon
NI5	3	NI83	F	12° 50.058' N, 86° 55.238' W	North West of Leon
NI5	3	NI84	M	12° 50.056' N, 86° 55.236' W	North West of Leon
NI5	3	NI85	F	12° 50.052' N, 86° 55.216' W	North West of Leon
NI5	3	NI86	M	12° 50.074' N, 86° 55.232' W	North West of Leon
NI5	3	NI87	M	12° 50.049' N, 86° 55.237' W	North West of Leon
NI5	3	NI88	F	12° 50.054' N, 86° 55.234' W	North West of Leon
NI5	3	NI89	F	12° 50.085' N, 86° 55.235' W	North West of Leon
NI5	3	NI90	M	12° 50.081' N, 86° 55.231' W	North West of Leon
NI5	4	NI91	M	12° 50.818' N, 86° 56.087' W	North West of Leon
NI5	4	NI92	M	12° 50.818' N, 86° 56.086' W	North West of Leon
NI5	4	NI93	F	12° 50.824' N, 86° 56.079' W	North West of Leon
NI5	4	NI94	M	12° 50.823' N, 86° 56.074' W	North West of Leon
NI5	4	NI95	M	12° 50.793' N, 86° 56.041' W	North West of Leon
NI5	4	NI97	F	12° 50.803' N, 86° 58.065' W	North West of Leon
NI5	4	NI98	M	12° 50.807' N, 86° 56.062' W	North West of Leon
NI5	4	NI99	F	12° 50.750' N, 86° 55.992' W	North West of Leon
NI5	4	NI100	M	12° 50.737' N, 86° 55.974' W	North West of Leon

Table S2. Cultivar names, accessions, and place of origin.

Name ^a	Accession	Improved or Unimproved Cultivar	Mating System	Origin
918_H	UH 918	Unimproved	Gynodioecious	Orotina, Costa Rica
CO_H	Coimbatore 7	Improved	Gynodioecious	Coimbatore, India
DREW_M	Drew	Improved	Dioecious	S.E. Queensland, Australia
H11_F	HCAR 11	Improved	Gynodioecious	Hawaii, United States
H116_F	HCAR 16	Unimproved	Gynodioecious	Malaysia
H164_F	HCAR 164	Improved	Dioecious	Colombia, via Florida, U.S.A
H196_F	HCAR196	Improved	Gynodioecious	Hawaii, United States
H207_F	HCAR 207	Improved	Gynodioecious	Taiwan
H27_F	HCAR 27	Improved	Gynodioecious	Hawaii, United States
H302_F	HCAR 302	Improved	Gynodioecious	Hawaii, United States
H928_M	UH 928	Unimproved	Dioecious	Rio Terraba, near Paso Real, Costa Rica
HCAR_F	HCAR 14	Unimproved	Gynodioecious	Panamá
KAEK	HCAR 13	Improved	Gynodioecious	Thailand
DUM_H				
KHAG	HCAR 20	Improved	Gynodioecious	Thailand
NAUN_H				
NO31_F	NO3-1	Improved	Gynodioecious	Hawaii, United States (originally from Cuba)
SUNUP_H	SunUp	Improved	Gynodioecious	Hawaii, United States

^aGender of cultivar: M=Male, F=Female, H=Hermaphrodite.

Table S3. Morphological characteristics adapted from International Board of Plant Genetic Resources, 1988.

Morphological Characteristics	Phenotypic range (IPBGR, 1988)
<i>Vegetative traits:</i>	
Leaf shape	See IBPGR (1988)
Mature leaf teeth	1 – Straight; 2 – Convex; 3 – Concave; 4 - Other
Leaf petiole color	1 – Pale green; 2 – Normal green; 3 – Dark green; 4 – Green and shades of red-purple; 5 – Red-purple; 6 - Other
Stem color	1-Greenish or light gray; 2-Grayish brown; 3-Green and shades of red-purple; 4-Red-purple
Stem pigmentation	1-Only or mostly basal; 2-Only or mostly lower; 3-Only or mostly median; 4-Only or mostly upper; 5-Indiscriminate
Shape of petiole sinus	1 – Open; 2 – Slightly open; 3 – Slightly closed; 4 – Strongly closed; 5 - Other
<i>Reproductive traits:</i>	
Type of flower	1-Flowers solitary; 2-Inflorescences; 3-Both
Inflorescence stalk color	1 – Greenish; 2 - Purplish/pinkish; 3 – Dark red-purple/pink; 4 - Other
Male corolla tube color	1 – White; 2 – White yellow (cream); 3 – Yellow; 4 – Deep yellow to orange; 5 – Greenish; 6 – Dark green; 7 – Yellow/green and red-purple shades; 8 – Red purplish (pinkish); 9 – Dark red-purple (pink); 10 - Other
Male corolla lobe color	1 – White; 2 – White yellow (cream); 3 – Yellow; 4 – Deep yellow to orange; 5 – Greenish; 6 – Dark green; 7 – Yellow/green and red-purple shades; 8 – Red purplish (pinkish); 9 – Dark red-purple (pink); 10 - Other
Female flower color	1 – White; 2 – White yellow (cream); 3 – Yellow; 4 – Deep yellow to orange; 5 – Greenish; 6 – Dark green; 7 – Yellow/green and red-purple shades; 8 – Red purplish (pinkish); 9 – Dark red-purple (pink); 10 - Other
Fruit shape	1 – Globular; 2 – Round; 3 – High round; 4 – Elliptic; 5 – Oval; 6 – Oblong; 7 – Oblong-ellipsoid; 8 – Oblong-blocky; 9 – Elongate; 10 – Lengthened cylindrical; 11 – Pear shaped (pyriform); 12 – Club; 13 – Blossom end tapered; 14 – Acron (heart shaped); 15 – Reniform; 16 – Turbinate inferior
Fruit skin color	1 – Yellow; 2 – Deep yellow to orange; 3 – Red/purple; 4 – Yellowish green; 5 – Green; 6 - Other
Fruit flesh color	1 – Light yellow; 2 – Bright yellow; 3 – Deep yellow to orange; 4 – Reddish orange; 5 – Scarlet; 6 – Other
Fruit central cavity shape	1 – Irregular; 2 – Round; 3 – Angular; 4 – Slightly star shaped; 5 – Star shaped; 6 - Other
Fruit stalk end shape	1 – Depressed; 3 – Flattened; 5 – Inflated; 7 – Pointed
Seed shape	1-Generally round; 2-Generally spherical or ovoid
Seed color	1 – Generally tan; 2 – Generally grey-yellow; 3 – Generally grey; 4 – Generally brown black; 5 – Generally black; 6 - Variable

Table S4. Microsatellite loci with primer design, size of repeat unit, linkage group, fluorophore label, marker ID and combination of primer pairs.

Locus	Forward Primer (5' → 3')	Reverse Primer (5' → 3')	Size of Repeat ^a	Linkage Group	Forward Label	Combo Plex ^b
CPM1606CC	AAGGAATCAAAAGGTAAGTCTGC	TTCTTCCTCCACTGATCGCC	2	2	6FAM	A
Ctg-27CC	TGAGCCTTGAACCCAAAGTTTC	TGCTTCAAAGACAAGAAAGGCTG	2	3	HEX	C
P3K2696CC	CATTCTTTTTCTCGGGATCCAA	TGATGAATAATTAGGGCAGGAGC	2	4	NED	A
P3K7483A5	GCAGCCCGTACAGAAGAGGA	CTCTGAGCAGCAAGCCAACA	3	8	PET	B
CPM1564CC	GGGCCTTTGATCCATGTGAA	CCTATGGGCTCAGTCCACCA	2	8	6FAM	B
P3K5796CC	AGGGAGGTGATGGAGCCAAT	CCTTTGAATCCCACCACCAA	2	1	HEX	A
P6K946CC	GCTGTAATGATTCTGCACCA	AAACCACAACCAAAATATACGCA	2	2	NED	B
P6K1213CC	GGATGATTCACACCCACAT	AAGCCGTCCTAAAGCTAGAAGC	3	9	PET	D
P3K855C0	TGGATGCATGTGATGTGTTTTG	AAGCCCAAGAGAAATGGGGA	2	1	6FAM	C
P3K2981YC0	GCCATCTGCTTGCAAGGTCT	TCAGGGGATGGTTCAGGAGA	3	1	HEX	D
P3K2974CC	TCAGAATTTCCATGTCCACAGC	TGTTTGTCTCTACTGCGTGAAAGTI	2	5	NED	D
P8K209CC	ATTAGGGATGGGTGTGCCG	AGCCTGGAGCTTACCTTCCG	3	9	PET	E
CPM1774CC	GGCACTGTGACTGGCATTGA	CTGACAACCTGTGACCCACG	2	9	6FAM	E
P3K911CC	TGGAAATCCCCCTCACTCCT	GACATTTATATCTGCGAGCGCC	2	7	HEX	F
P3K2851CC	TAGAAGCAGATGCGGAGGGA	TCCAGACCCAAAAACCCAAA	2	7	NED	E
P3K7022CC	ACGAACACTTGCATGAGACCC	CCCCACGAAGCTTGCTACAG	2	5	PET	F
P3K6947CC	ATTCTTCCTCCCTCCCTCCC	AAAAAGGGTGGGGGTTTGAG	2	4	6FAM	F
P3K1776CC	TGTTTGCATTTTGTCTTTCCC	AATGATCAATCCCTACGCGTTC	2	2	HEX	G
P3K736CC	CTCTCTTCAAGGCCATCTCCA	GCCATGAAGTTGGCGAAGTATT	2	4	NED	G
P3K6818S5	CCGTCCTACTATATGTATCACCAGA	TGTGTGATTTTGTATGCGTGTTT	2	5	PET	C

^asize of repeat indicates the amount of base pairs in the repeated nucleotide sequence within the microsatellite locus: 2=dinucleotide repeat; 3=trinucleotide unit; ^bPCR product from 3 primer sets were combined for analysis—plexed primers share the same letter designation.

Table S5. Allelic diversity and deviation from Hardy-Weinberg Equilibrium of papaya in 14 Costa Rican and Nicaraguan regional populations.

Regional Population		CPM1564CC	CPM1606CC	ctg-27CC	P3K2696CC	P3K7483A5	P3K5796CC	P6K946CC	P6K1213CC	P3K855C0	P3K2981YC0	P3K2974CC	P8K209CC
CR1	<i>A</i> ^b	5	9	5	9	6	5	3	4	9	5	1	4
N=27	<i>He</i> ^c	0.49	0.85	0.64	0.73	0.73	0.22	0.37	0.36	0.78	0.72	0.00 ^f	0.28
	<i>Ho</i> ^d	0.44	0.72	0.5*	0.77	0.24	0.38	0.38	0.19	0.48**	0.65	0.00 ^f	0.22
CR2	<i>A</i>	2	7	3	4	7	1	3	3	9	5	1	4
N=13	<i>He</i>	0.50	0.85	0.67	0.55	0.75	0.00 ^f	0.42	0.58	0.90	0.70	0.00 ^f	0.61
	<i>Ho</i>	0.28	0.55	0.43	0.46	0.46	0.00 ^f	0.46	0.18	0.33	0.70	0.00 ^f	0.21*
CR3	<i>A</i>	6	11	6	8	6	4	2	5	10	6	2	1
N=29	<i>He</i>	0.47	0.79	0.61	0.71	0.81	0.26	0.32	0.68	0.84	0.75	0.04	0.00 ^f
	<i>Ho</i>	0.37	0.56	0.50	0.64	0.91	0.13*	0.40	0.50	0.54*	0.52	0.05	0.00 ^f
CR4	<i>A</i>	2	10	4	8	9	2	3	4	11	4	1	1
N=25	<i>He</i>	0.50	0.83	0.50	0.65	0.81	0.97	0.37	0.64	0.84	0.48	0.00 ^f	0.00 ^f
	<i>Ho</i>	0.55	0.46*	0.55	0.66	0.90	0.00	0.42	0.21***	0.60	0.20	0.00 ^f	0.00 ^f
CR5	<i>A</i>	2	9	5	6	6	3	3	4	10	4	2	1
N=13	<i>He</i>	0.52	0.86	0.73	0.83	0.83	0.36	0.59	0.64	0.85	0.49	0.08	0.00 ^f
	<i>Ho</i>	0.58	0.69	0.67	0.27**	1.00	0.08	0.55	0.53	0.20	0.08	0.00	0.00 ^{f***}
CR6	<i>A</i>	2	5	1	2	3	2	2	3	6	4	1	1
N=9	<i>He</i>	0.37	0.73	0.00 ^f	0.27	0.53	0.11	0.10	0.62	0.82	0.77	0.00 ^f	0.00 ^f
	<i>Ho</i>	0.44	0.57	0.00 ^f	0.30	0.70	0.11	0.10	0.00*	0.44	0.50	0.00 ^f	0.00 ^f
CR7	<i>A</i>	5	8	5	8	5	3	2	4	11	7	2	6
N=23	<i>He</i>	0.60	0.70	0.69	0.72	0.68	0.17	0.23	0.54	0.87	0.79	0.09	0.65
	<i>Ho</i>	0.64	0.30***	0.41	0.22***	0.26***	0.09	0.26	0.31	0.40***	0.55	0.09	0.31

CR8	A	5	9	5	9	6	3	4	4	11	7	2	7
N=30	He	0.57	0.86	0.64	0.54	0.76	0.16	0.42	0.57	0.85	0.78	0.03	0.64
	Ho	0.53	0.30***	0.60	0.20***	0.37***	0.17	0.26	0.13***	0.41***	0.55	0.03	0.39
NI1	A	4	5	4	4	4	2	4	3	8	1	1	4
N=10	He	0.31	0.77	0.54	0.56	0.50	0.42	0.59	0.54	0.85	0.00 ^f	0.00 ^f	0.44
	Ho	0.33	0.33	0.67	0.60	0.20	0.55	0.60	0.28	0.56	0.00 ^f	0.00 ^f	0.38
NI2	A	4	10	4	8	6	5	3	4	11	1	1	4
N=22	He	0.50	0.89	0.61	0.78	0.69	0.65	0.14	0.52	0.87	0.00 ^f	0.00 ^f	0.48
	Ho	0.60	0.55	0.55	0.57	0.33**	0.65	0.14	0.19	0.42***	0.00 ^f	0.00 ^f	0.38
NI3	A	3	4	4	5	6	2	1	4	4	1	1	5
N=12	He	0.56	0.69	0.74	0.74	0.67	0.52	0.00 ^f	0.59	0.46	0.00 ^f	0.00 ^f	0.73
	Ho	0.25	0.31	0.42	0.42	0.25	0.42	0.00 ^f	0.23	0.45	0.00 ^f	0.00 ^f	0.36
NI4	A	2	8	3	8	4	2	2	5	4	1	1	5
N=10	He	0.52	0.82	0.68	0.85	0.52	0.52	0.17	0.67	0.52	0.00 ^f	0.00 ^f	0.74
	Ho	0.36	0.55	0.19	0.19	0.27	0.73	0.00	0.30	0.18	0.00 ^f	0.00 ^f	0.70
NI5	A	10	11	6	10	7	5	2	7	14	5	2	6
N=37	He	0.63	0.85	0.71	0.80	0.81	0.70	0.06	0.68	0.88	0.76	0.03	0.66
	Ho	0.59	0.57*	0.65	0.61	0.53***	0.55**	0.00	0.49	0.73	0.36	0.03	0.47
Cultivar	A	4	5	5	5	5	3	3	4	9	4	4	6
N=16	He	0.42	0.48	0.47	0.73	0.77	0.48	0.49	0.70	0.87	0.69	0.69	0.63
	Ho	0.11**	0.06***	0.11***	0.00***	0.07***	0.16*	0.15	0.12***	0.38***	0.46	0.06**	0.00***
All	A	14	25	11	15	14	10	6	7	18	8	6	12
N=281													

^a $F = (H_E - H_O)/H_E$; ^bA = Number of observed alleles; ^c H_E = Expected heterozygosity; ^d H_O = Observed heterozygosity;

^fmonomorphic loci; *Bonferroni $P < 0.0025$; **Bonferroni $P < 0.0005$; ***Bonferroni $P < 0.00005$

Table S5. Continued

Regional Population		CPM1774CC	P3K911CC	P3K2851CC	P3K7022CC	P3K6947CC	P3K1776CC	P3K736CC	P3K6818S5	Mean All Loci	Percent Significant Deviation from HWE	F^a
CR1 N=27	A	3	5	4	4	6	5	7	4	5.15	25%	0.19
	He	0.50	0.62	0.48	0.60	0.62	0.64	0.69	0.32	0.53		
	Ho	0.30	0.61*	0.37	0.30*	0.91	0.33***	0.56	0.24	0.43		
CR2 N=13	A	3	5	2	3	4	4	5	3	3.9	15%	0.41
	He	0.56	0.63	0.47	0.35	0.54	0.71	0.74	0.21	0.54		
	Ho	0.35	0.25	0.00**	0.16	0.75	0.16**	0.50	0.22	0.32		
CR3 N=29	A	2	6	1	5	2	4	5	3	4.75	15%	0.21
	He	0.51	0.63	0.00 ^f	0.34	0.46	0.25	0.68	0.17	0.47		
	Ho	0.00**	0.38	0.00 ^f	0.31	0.69	0.14	0.62	0.18	0.372		
CR4 N=25	A	2	4	1	4	2	4	4	3	4.15	25%	0.27
	He	0.51	0.54	0.00 ^f	0.19	0.51	0.38	0.49	0.32	0.48		
	Ho	0.00***	0.44	0.00 ^f	0.12	0.96***	0.20**	0.36	0.28	0.35		
CR5 N=13	A	2	4	1	2	2	3	3	3	3.75	10%	0.17
	He	0.52	0.65	0.00 ^f	0.15	0.52	0.44	0.38	0.21	0.48		
	Ho	0.92		0.00 ^f	0.15	0.92	0.38	0.38	0.23	0.40		
CR6 N=9	A	2	3	1	3	2	3	4	2	2.6	10%	0.32
	He	0.53	0.42	0.00 ^f	0.54	0.51	0.35	0.50	0.42	0.38		
	Ho	0.00*	0.30	0.00 ^f	0.20	0.80	0.10	0.30	0.33	0.26		
CR7 N=23	A	3	4	2	4	2	4	7	3	4.75	40%	0.37
	He	0.57	0.62	0.17	0.20	0.51	0.59	0.72	0.17	0.51		
	Ho	0.59	0.04***	0.09	0.17	0.95***	0.06***	0.52***	0.18	0.32		

CR8	A	3	7	2	3	4	7	7	4	5.45		
N=30	He	0.55	0.65	0.03	0.28	0.61	0.69	0.75	0.54	0.55		
	Ho	0.55	0.04***	0.03	0.27	0.91***	0.23***	0.82	0.56	0.37	40%	0.33
NI1	A	3	5	2	3	4	3	1	4	3.45		
N=10	He	0.61	0.69	0.23	0.22	0.47	0.70	0.00 ^f	0.59	0.45		
	Ho	0.62	0.33	0.00	0.22	0.56	0.00*	0.00 ^f	0.11*	0.32	10%	0.30
NI2	A	3	8	2	2	5	6	1	4	4.6		
N=22	He	0.68	0.80	0.06	0.51	0.39	0.71	0.00 ^f	0.67	0.50		
	Ho	0.65	0.39***	0.05	0.05	0.33	0.24***	0.00 ^f	0.36**	0.32	25%	0.35
NI3	A	3	7	1	2	2	4	1	3	3.15		
N=12	He	0.65	0.83	0.00 ^f	0.41	0.11	0.66	0.00 ^f	0.34	0.44		
	Ho	0.27	0.18	0.00 ^f	0.18	0.11	0.38	0.00 ^f	0.70	0.25	0%	0.43
NI4	A	3	9	3	3	4	4	1	2	3.7		
N=10	He	0.64	0.90	0.57	0.35	0.61	0.69	0.00 ^f	0.31	0.50		
	Ho	0.60	0.80	0.00	0.30	0.70	0.30	0.00 ^f	0.00	0.31	5%	0.39
NI5	A	4	12	3	5	5	7	1	4	6.3		
N=37	He	0.65	0.85	0.37	0.66	0.67	0.64	0.00 ^f	0.64	0.60		
	Ho	0.55	0.59	0.00***	0.07***	0.48	0.34***	0.00 ^f	0.37***	0.40	35%	0.34
Cultivar	A	3	4	2	6	3	5	5	3	4		
N=16	He	0.57	0.61	0.31	0.76	0.67	0.54	0.71	0.59	0.61		
	Ho	0.23	0.13***	0.00**	0.18***	0.60	0.13	0.14	0.17	0.16	65%	0.73
All	A	4	18	6	7	2	11	12	8	10.70		
N=283												

^a $F = (H_E - H_O)/H_E$; ^bA = Number of observed alleles; ^c H_E = Expected heterozygosity; ^d H_O = Observed heterozygosity; ^fmonomorphic loci; *Bonferroni $P < 0.0025$; **Bonferroni $P < 0.0005$; ***Bonferroni $P < 0.00005$

Table S6. STRUCTURE identity percentages for K = 2 and K=4 (natural populations and cultivars).

Population	Subpop	Accession	K=2		K=4			
			Cluster 1	Cluster 2	Cluster 1	Cluster 2	Cluster 3	Cluster 4
CR1	1	CR2	0.371	0.629	0.164	0.322	0.493	0.021
CR1	1	CR3	0.501	0.499	0.349	0.308	0.294	0.049
CR1	1	CR4	0.241	0.759	0.065	0.478	0.444	0.012
CR1	1	CR5	0.515	0.485	0.284	0.485	0.111	0.12
CR1	1	CR6	0.176	0.824	0.081	0.799	0.112	0.009
CR1	1	CR7	0.111	0.889	0.04	0.864	0.084	0.012
CR1	2	CR8	0.556	0.444	0.193	0.376	0.131	0.3
CR1	2	CR9	0.51	0.49	0.333	0.347	0.221	0.1
CR1	2	CR10	0.087	0.913	0.015	0.566	0.404	0.014
CR1	2	CR11	0.16	0.84	0.094	0.446	0.454	0.005
CR1	2	CR12	0.205	0.795	0.183	0.528	0.282	0.007
CR1	2	CR13	0.12	0.88	0.057	0.144	0.792	0.007
CR1	2	CR14	0.539	0.461	0.059	0.499	0.021	0.421
CR1	2	CR15	0.126	0.874	0.025	0.933	0.022	0.02
CR1	3	CR16	0.053	0.947	0.015	0.961	0.013	0.011
CR1	3	CR17	0.259	0.741	0.025	0.618	0.133	0.224
CR1	3	CR19	0.457	0.543	0.133	0.559	0.054	0.254
CR1	3	CR20	0.2	0.8	0.062	0.622	0.287	0.029
CR1	3	CR21	0.058	0.942	0.025	0.8	0.165	0.01
CR1	3	CR22	0.145	0.855	0.084	0.863	0.028	0.024
CR1	3	CR23	0.233	0.767	0.181	0.773	0.02	0.026
CR1	3	CR24	0.093	0.907	0.066	0.896	0.025	0.012
CR1	3	CR25	0.547	0.453	0.783	0.139	0.068	0.01
CR1	4	CR26	0.064	0.936	0.019	0.854	0.106	0.021
CR1	4	CR27	0.052	0.948	0.014	0.677	0.288	0.021
CR1	4	CR28	0.091	0.909	0.018	0.937	0.03	0.016
CR1	4	CR29	0.03	0.97	0.011	0.96	0.021	0.008
CR2a	1	CR30	0.142	0.858	0.047	0.868	0.044	0.04
CR2a	1	CR31	0.057	0.943	0.019	0.952	0.018	0.011
CR2a	1	CR32	0.133	0.867	0.034	0.587	0.334	0.045
CR2a	1	CR33	0.023	0.977	0.009	0.819	0.166	0.006
CR2a	1	CR34	0.025	0.975	0.007	0.965	0.022	0.006
CR2b	2	Cr121	0.096	0.904	0.024	0.035	0.931	0.01
CR2b	2	Cr122	0.769	0.231	0.01	0.014	0.055	0.921
CR2b	3	Cr123	0.322	0.678	0.134	0.113	0.665	0.088
CR2b	3	Cr124	0.849	0.151	0.01	0.013	0.138	0.839

CR2b	3	Cr125	0.716	0.284	0.011	0.016	0.307	0.667
CR2b	3	Cr126	0.143	0.857	0.012	0.018	0.95	0.02
CR2b	3	Cr127	0.226	0.774	0.01	0.012	0.947	0.031
CR2b	3	Cr128	0.643	0.357	0.032	0.018	0.623	0.327
CR2b	3	Cr129	0.296	0.704	0.008	0.016	0.84	0.137
CR3	1	CR35	0.019	0.981	0.006	0.955	0.034	0.005
CR3	1	CR36	0.016	0.984	0.007	0.833	0.157	0.004
CR3	1	CR37	0.025	0.975	0.007	0.615	0.372	0.006
CR3	1	CR38	0.04	0.96	0.009	0.968	0.013	0.01
CR3	1	CR39	0.02	0.98	0.006	0.939	0.049	0.006
CR3	1	CR40	0.021	0.979	0.006	0.964	0.024	0.006
CR3	1	CR41	0.093	0.907	0.01	0.941	0.015	0.035
CR3	1	CR42	0.024	0.976	0.008	0.954	0.032	0.006
CR3	1	CR43	0.06	0.94	0.025	0.925	0.032	0.018
CR3	1	CR44	0.159	0.841	0.082	0.894	0.013	0.012
CR3	1	CR45	0.057	0.943	0.017	0.869	0.102	0.011
CR3	1	CR46	0.019	0.981	0.006	0.97	0.019	0.005
CR3	1	CR47	0.035	0.965	0.016	0.71	0.264	0.01
CR3	1	CR48	0.032	0.968	0.013	0.736	0.245	0.006
CR3	2	CR49	0.062	0.938	0.036	0.921	0.036	0.007
CR3	2	CR50	0.059	0.941	0.019	0.95	0.026	0.005
CR3	2	CR51	0.12	0.88	0.028	0.917	0.04	0.014
CR3	2	CR52	0.02	0.98	0.007	0.979	0.01	0.004
CR3	3	CR53	0.025	0.975	0.007	0.968	0.017	0.008
CR3	3	CR54	0.021	0.979	0.006	0.979	0.01	0.005
CR3	3	CR55	0.047	0.953	0.013	0.963	0.017	0.007
CR3	3	CR56	0.081	0.919	0.015	0.947	0.015	0.023
CR3	3	CR57	0.026	0.974	0.007	0.982	0.007	0.004
CR3	3	CR58	0.049	0.951	0.023	0.955	0.016	0.006
CR3	3	CR59	0.022	0.978	0.006	0.97	0.016	0.007
CR3	3	CR60	0.019	0.981	0.006	0.95	0.039	0.006
CR3	3	CR61	0.023	0.977	0.007	0.972	0.015	0.005
CR3	3	CR62	0.182	0.818	0.126	0.788	0.08	0.006
CR3	3	CR63	0.196	0.804	0.085	0.882	0.012	0.021
CR4	1	CR64	0.038	0.962	0.008	0.908	0.053	0.031
CR4	1	CR65	0.053	0.947	0.009	0.961	0.009	0.021
CR4	1	CR66	0.031	0.969	0.007	0.96	0.021	0.012
CR4	1	CR67	0.032	0.968	0.007	0.965	0.016	0.011
CR4	1	CR68	0.034	0.966	0.012	0.923	0.06	0.005
CR4	1	CR69	0.024	0.976	0.006	0.96	0.022	0.012
CR4	1	CR70	0.024	0.976	0.006	0.969	0.017	0.009
CR4	2	CR71	0.058	0.942	0.018	0.91	0.061	0.011

CR4	2	CR72	0.082	0.918	0.03	0.846	0.105	0.019
CR4	2	CR73	0.11	0.89	0.016	0.89	0.017	0.077
CR4	2	CR74	0.023	0.977	0.006	0.941	0.043	0.011
CR4	2	CR75	0.099	0.901	0.024	0.926	0.02	0.03
CR4	2	CR76	0.03	0.97	0.009	0.974	0.011	0.005
CR4	2	CR77	0.022	0.978	0.005	0.943	0.037	0.015
CR4	2	CR78	0.015	0.985	0.005	0.981	0.01	0.003
CR4	2	CR79	0.064	0.936	0.019	0.946	0.021	0.015
CR4	2	CR80	0.36	0.64	0.079	0.71	0.017	0.195
CR4	3	CR81	0.017	0.983	0.005	0.977	0.013	0.004
CR4	3	CR82	0.126	0.874	0.027	0.892	0.026	0.054
CR4	3	CR83	0.09	0.91	0.016	0.884	0.022	0.077
CR4	3	CR84	0.021	0.979	0.006	0.974	0.015	0.005
CR4	3	CR85	0.132	0.868	0.018	0.835	0.04	0.106
CR4	3	CR86	0.018	0.982	0.006	0.978	0.012	0.004
CR4	3	CR87	0.19	0.81	0.098	0.853	0.022	0.027
CR4	3	CR88	0.014	0.986	0.004	0.961	0.031	0.004
CR5	1	CR90	0.022	0.978	0.006	0.976	0.012	0.006
CR5	1	CR91	0.027	0.973	0.006	0.98	0.007	0.006
CR5	1	CR92	0.036	0.964	0.008	0.956	0.027	0.009
CR5	1	CR93	0.019	0.981	0.006	0.979	0.011	0.004
CR5	2	CR94	0.021	0.979	0.006	0.967	0.019	0.007
CR5	2	CR95	0.069	0.931	0.019	0.924	0.027	0.03
CR5	2	CR96	0.063	0.937	0.011	0.916	0.015	0.058
CR5	2	CR97	0.035	0.965	0.01	0.939	0.037	0.015
CR5	2	CR98	0.049	0.951	0.017	0.938	0.033	0.012
CR5	2	CR99	0.048	0.952	0.017	0.943	0.027	0.013
CR5	3	CR100	0.021	0.979	0.005	0.976	0.013	0.005
CR5	3	CR101	0.028	0.972	0.008	0.982	0.006	0.004
CR5	3	CR102	0.046	0.954	0.013	0.801	0.177	0.009
CR6	1	CR104	0.02	0.98	0.007	0.947	0.04	0.006
CR6	1	CR105	0.019	0.981	0.007	0.981	0.009	0.003
CR6	1	CR106	0.017	0.983	0.006	0.979	0.011	0.004
CR6	2	CR107	0.018	0.982	0.006	0.981	0.01	0.003
CR6	2	CR108	0.024	0.976	0.009	0.979	0.008	0.004
CR6	2	CR109	0.016	0.984	0.005	0.98	0.011	0.005
CR6	2	CR110	0.047	0.953	0.017	0.94	0.024	0.019
CR6	2	CR111	0.019	0.981	0.005	0.975	0.014	0.006
CR6	2	CR112	0.067	0.933	0.043	0.905	0.045	0.007
CR6	2	CR113	0.019	0.981	0.006	0.971	0.019	0.005
CR7	1	CR114	0.016	0.984	0.005	0.976	0.015	0.004
CR7	1	CR115	0.049	0.951	0.006	0.06	0.922	0.012

CR7	1	Cr116	0.021	0.979	0.004	0.084	0.907	0.005
CR7	1	Cr117	0.135	0.865	0.017	0.206	0.745	0.032
CR7	1	Cr118	0.216	0.784	0.106	0.382	0.473	0.038
CR7	1	Cr119	0.281	0.719	0.181	0.091	0.675	0.053
CR7	1	Cr120	0.045	0.955	0.009	0.12	0.863	0.009
CR7	2	Cr160	0.031	0.969	0.009	0.217	0.759	0.014
CR7	2	Cr161	0.159	0.841	0.014	0.106	0.8	0.08
CR7	2	Cr162	0.022	0.978	0.004	0.01	0.982	0.004
CR7	2	Cr163	0.194	0.806	0.014	0.013	0.941	0.032
CR7	2	Cr164	0.028	0.972	0.007	0.069	0.903	0.021
CR7	2	Cr165	0.072	0.928	0.006	0.022	0.965	0.008
CR7	2	Cr166	0.105	0.895	0.03	0.021	0.936	0.014
CR7	2	Cr167	0.119	0.881	0.021	0.035	0.908	0.036
CR7	2	Cr168	0.051	0.949	0.012	0.142	0.82	0.025
CR7	2	Cr170	0.281	0.719	0.085	0.024	0.882	0.008
CR7	2	Cr171	0.07	0.93	0.01	0.025	0.942	0.022
CR7	3	Cr172	0.316	0.684	0.013	0.029	0.76	0.197
CR7	3	Cr173	0.929	0.071	0.078	0.062	0.04	0.82
CR7	3	Cr174	0.375	0.625	0.014	0.016	0.881	0.09
CR7	3	Cr175	0.25	0.75	0.021	0.014	0.953	0.013
CR7	3	Cr176	0.279	0.721	0.019	0.011	0.961	0.009
CR8	1	Cr130	0.061	0.939	0.007	0.024	0.941	0.028
CR8	1	Cr131	0.03	0.97	0.006	0.038	0.941	0.016
CR8	1	Cr132	0.031	0.969	0.007	0.046	0.939	0.008
CR8	1	Cr133	0.02	0.98	0.006	0.069	0.92	0.005
CR8	1	Cr134	0.072	0.928	0.013	0.038	0.929	0.02
CR8	1	Cr135	0.092	0.908	0.031	0.09	0.871	0.008
CR8	1	Cr136	0.095	0.905	0.046	0.069	0.859	0.026
CR8	1	Cr137	0.157	0.843	0.019	0.013	0.95	0.017
CR8	1	Cr138	0.039	0.961	0.014	0.566	0.398	0.022
CR8	1	Cr139	0.41	0.59	0.277	0.303	0.299	0.12
CR8	1	Cr140	0.25	0.75	0.02	0.077	0.627	0.277
CR8	1	Cr141	0.415	0.585	0.037	0.044	0.721	0.198
CR8	1	Cr142	0.072	0.928	0.009	0.032	0.943	0.015
CR8	1	Cr143	0.163	0.837	0.013	0.019	0.941	0.026
CR8	1	Cr144	0.119	0.881	0.006	0.019	0.737	0.237
CR8	1	Cr145	0.137	0.863	0.028	0.017	0.942	0.013
CR8	2	Cr146	0.062	0.938	0.009	0.015	0.968	0.008
CR8	2	Cr147	0.065	0.935	0.007	0.009	0.975	0.009
CR8	2	Cr148	0.087	0.913	0.038	0.169	0.788	0.005
CR8	2	Cr149	0.07	0.93	0.01	0.032	0.905	0.054
CR8	2	Cr150	0.117	0.883	0.015	0.227	0.604	0.154

CR8	2	Cr151	0.025	0.975	0.007	0.345	0.636	0.012
CR8	3	Cr152	0.971	0.029	0.004	0.004	0.005	0.987
CR8	3	Cr153	0.768	0.232	0.007	0.013	0.026	0.954
CR8	4	Cr154	0.443	0.557	0.096	0.109	0.567	0.228
CR8	4	Cr155	0.174	0.826	0.009	0.241	0.566	0.184
CR8	4	Cr156	0.573	0.427	0.373	0.016	0.594	0.016
CR8	4	Cr157	0.409	0.591	0.34	0.401	0.226	0.034
CR8	4	Cr158	0.171	0.829	0.066	0.16	0.76	0.013
CR8	4	Cr159	0.35	0.65	0.102	0.024	0.853	0.021
NI1	1	NI2	0.119	0.881	0.035	0.911	0.035	0.02
NI1	1	NI3	0.251	0.749	0.037	0.625	0.172	0.166
NI1	1	NI4	0.391	0.609	0.754	0.153	0.086	0.007
NI1	1	NI6	0.183	0.817	0.089	0.645	0.25	0.016
NI1	1	NI7	0.614	0.386	0.641	0.137	0.157	0.065
NI1	1	NI8	0.195	0.805	0.227	0.558	0.19	0.025
NI1	1	NI9	0.695	0.305	0.849	0.099	0.035	0.017
NI1	1	NI10	0.428	0.572	0.722	0.102	0.158	0.018
NI1	1	NI11	0.091	0.909	0.048	0.731	0.164	0.057
NI1	1	NI12	0.307	0.693	0.242	0.359	0.388	0.011
NI2	2	NI13	0.836	0.164	0.594	0.069	0.019	0.318
NI2	1	NI14	0.559	0.441	0.273	0.106	0.544	0.077
NI2	1	NI16	0.611	0.389	0.544	0.102	0.281	0.074
NI2	1	NI17	0.27	0.73	0.28	0.468	0.191	0.061
NI2	1	NI18	0.639	0.361	0.117	0.446	0.048	0.389
NI2	1	NI19	0.362	0.638	0.059	0.249	0.428	0.263
NI2	1	NI20	0.493	0.507	0.059	0.336	0.272	0.333
NI2	1	NI21	0.354	0.646	0.434	0.146	0.412	0.008
NI2	1	NI22	0.857	0.143	0.596	0.116	0.021	0.267
NI2	1	NI23	0.603	0.397	0.419	0.206	0.258	0.117
NI2	1	NI24	0.611	0.389	0.769	0.075	0.144	0.012
NI2	1	NI25	0.828	0.172	0.645	0.067	0.064	0.223
NI2	1	NI26	0.542	0.458	0.635	0.142	0.21	0.013
NI2	1	NI27	0.323	0.677	0.415	0.535	0.035	0.015
NI2	1	NI28	0.775	0.225	0.342	0.106	0.107	0.445
NI2	1	NI29	0.659	0.341	0.688	0.192	0.037	0.083
NI2	1	NI30	0.119	0.881	0.023	0.025	0.941	0.011
NI2	1	NI31	0.466	0.534	0.556	0.189	0.225	0.029
NI2	1	NI33	0.715	0.285	0.893	0.061	0.033	0.012
NI2	2	NI34	0.603	0.397	0.491	0.129	0.319	0.061
NI2	2	NI35	0.514	0.486	0.609	0.271	0.099	0.021
NI2	2	NI36	0.609	0.391	0.896	0.072	0.017	0.014
NI3	1	NI37	0.666	0.334	0.721	0.091	0.085	0.103

NI3	1	NI38	0.965	0.035	0.047	0.009	0.008	0.935
NI3	1	NI39	0.96	0.04	0.042	0.018	0.011	0.929
NI3	1	NI40	0.958	0.042	0.022	0.013	0.011	0.954
NI3	2	NI41	0.884	0.116	0.954	0.017	0.016	0.013
NI3	2	NI42	0.955	0.045	0.978	0.01	0.007	0.005
NI3	2	NI43	0.434	0.566	0.63	0.302	0.058	0.009
NI3	2	NI44	0.723	0.277	0.919	0.05	0.021	0.01
NI3	2	NI45	0.867	0.133	0.961	0.021	0.013	0.005
NI3	2	NI46	0.897	0.103	0.948	0.021	0.016	0.014
NI3	2	NI47	0.924	0.076	0.788	0.028	0.052	0.132
NI3	2	NI48	0.962	0.038	0.259	0.012	0.013	0.716
NI4	1	NI49	0.963	0.037	0.01	0.007	0.007	0.976
NI4	1	NI50	0.886	0.114	0.881	0.028	0.041	0.05
NI4	1	NI51	0.732	0.268	0.917	0.067	0.011	0.005
NI4	1	NI52	0.811	0.189	0.934	0.028	0.031	0.008
NI4	1	NI53	0.953	0.047	0.965	0.009	0.012	0.014
NI4	1	NI54	0.942	0.058	0.973	0.01	0.012	0.005
NI4	1	NI55	0.849	0.151	0.782	0.022	0.186	0.009
NI4	1	NI56	0.95	0.05	0.964	0.008	0.017	0.011
NI4	1	NI57	0.974	0.026	0.97	0.006	0.012	0.012
NI4	1	NI58	0.941	0.059	0.948	0.015	0.025	0.013
NI4	1	NI59	0.972	0.028	0.975	0.008	0.008	0.009
NI4	1	NI60	0.898	0.102	0.959	0.018	0.015	0.009
NI4	1	NI61	0.932	0.068	0.965	0.013	0.012	0.009
NI5	1	NI62	0.975	0.025	0.973	0.006	0.007	0.014
NI5	1	NI63	0.972	0.028	0.96	0.007	0.01	0.023
NI5	1	NI64	0.955	0.045	0.847	0.018	0.01	0.125
NI5	1	NI65	0.959	0.041	0.857	0.016	0.014	0.113
NI5	2	NI66	0.978	0.022	0.304	0.007	0.009	0.681
NI5	2	NI67	0.97	0.03	0.766	0.008	0.018	0.208
NI5	2	NI68	0.881	0.119	0.917	0.04	0.02	0.023
NI5	2	NI69	0.98	0.02	0.98	0.005	0.005	0.011
NI5	2	NI70	0.982	0.018	0.983	0.004	0.005	0.008
NI5	2	NI71	0.922	0.078	0.942	0.014	0.031	0.013
NI5	2	NI72	0.915	0.085	0.892	0.026	0.038	0.044
NI5	2	NI73	0.679	0.321	0.099	0.059	0.26	0.582
NI5	2	NI74	0.499	0.501	0.251	0.249	0.252	0.248
NI5	2	NI75	0.984	0.016	0.929	0.005	0.005	0.061
NI5	2	NI76	0.964	0.036	0.799	0.01	0.014	0.177
NI5	2	NI77	0.956	0.044	0.975	0.009	0.008	0.008
NI5	2	NI78	0.896	0.104	0.884	0.02	0.085	0.011
NI5	3	NI79	0.957	0.043	0.975	0.01	0.007	0.007

NI5	3	NI81	0.861	0.139	0.925	0.032	0.034	0.01
NI5	3	NI82	0.885	0.115	0.921	0.037	0.009	0.032
NI5	3	NI83	0.7	0.3	0.514	0.132	0.237	0.117
NI5	3	NI84	0.845	0.155	0.895	0.061	0.02	0.024
NI5	3	NI85	0.957	0.043	0.939	0.011	0.009	0.04
NI5	3	NI86	0.971	0.029	0.978	0.007	0.008	0.007
NI5	3	NI87	0.869	0.131	0.953	0.034	0.007	0.007
NI5	3	NI88	0.952	0.048	0.973	0.011	0.009	0.008
NI5	3	NI89	0.986	0.014	0.912	0.004	0.004	0.08
NI5	3	NI90	0.978	0.022	0.972	0.006	0.007	0.014
NI5	4	NI91	0.978	0.022	0.98	0.005	0.005	0.01
NI5	4	NI92	0.946	0.054	0.916	0.013	0.013	0.057
NI5	4	NI93	0.974	0.026	0.943	0.007	0.005	0.044
NI5	4	NI94	0.853	0.147	0.937	0.039	0.014	0.01
NI5	4	NI95	0.96	0.04	0.951	0.012	0.005	0.032
NI5	4	NI97	0.824	0.176	0.92	0.044	0.029	0.007
NI5	4	NI98	0.974	0.026	0.98	0.006	0.009	0.005
NI5	4	NI99	0.933	0.067	0.967	0.013	0.011	0.008
NI5	4	NI100	0.697	0.303	0.819	0.061	0.11	0.01
Cultivar		H928	0.728	0.272	0.045	0.015	0.652	0.288
Cultivar		H164	0.911	0.089	0.018	0.021	0.058	0.903
Cultivar		H196	0.948	0.052	0.02	0.02	0.024	0.937
Cultivar		H27	0.968	0.032	0.005	0.005	0.006	0.984
Cultivar		918H	0.968	0.032	0.006	0.004	0.005	0.984
Cultivar		CoH	0.854	0.146	0.006	0.009	0.033	0.953
Cultivar		Drewm	0.86	0.14	0.31	0.033	0.116	0.541
Cultivar		H302	0.945	0.055	0.003	0.005	0.006	0.986
Cultivar		Hcar14	0.951	0.049	0.015	0.012	0.014	0.959
Cultivar		KD	0.956	0.044	0.006	0.005	0.013	0.976
Cultivar		KN	0.966	0.034	0.012	0.005	0.007	0.975
Cultivar		Hcar207	0.849	0.151	0.011	0.067	0.017	0.905
Cultivar		No31F	0.908	0.092	0.077	0.032	0.086	0.804
Cultivar		H11f	0.743	0.257	0.009	0.139	0.042	0.811
Cultivar		H116F	0.853	0.147	0.01	0.058	0.02	0.912
Cultivar		SunUpH	0.979	0.021	0.005	0.003	0.004	0.987

Table S7. Percentage of shared ancestry of Costa Rican and Nicaraguan regional populations with cultivar accessions, based on STRUCTURE analysis of K=4.

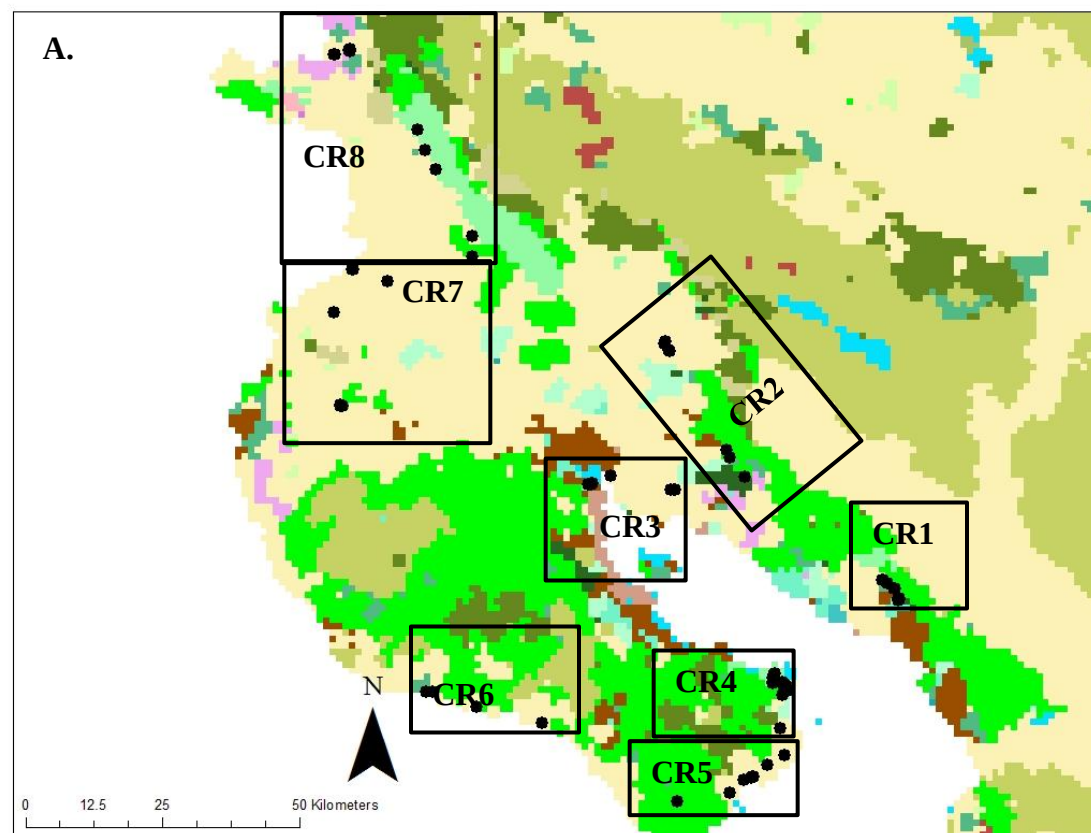
	n	Number of individuals with minimum percent shared cultivar ancestry of:			Percent of individuals with minimum percent shared cultivar ancestry of:		
		20%	50%	80%	20%	50%	80%
CR1	27	4	0	0	15%	0%	0%
CR2a	5	0	0	0	0%	0%	0%
CR2b	9	4	3	2	44%	33%	22%
CR3	29	0	0	0	0%	0%	0%
CR4	25	0	0	0	0%	0%	0%
CR5	13	0	0	0	0%	0%	0%
CR6	10	0	0	0	0%	0%	0%
CR7	23	1	1	1	4%	4%	4%
CR8	30	5	2	2	17%	7%	7%
NI1	10	0	0	0	0%	0%	0%
NI2	22	7	0	0	32%	0%	0%
NI3	12	4	4	3	33%	33%	25%
NI4	13	1	1	1	8%	8%	8%
NI5	37	4	2	0	11%	5%	0%
Cultivar	16	16	15	14	100%	94%	88%

SUPPLEMENTAL FIGURE LEGENDS

Figure S1. Original vegetation maps before reclassification for A. Costa Rica and B. Nicaragua.

Legend

	Urban/Vegetation Complex
	Urban/Industrial
	Tropical Swamp Scrub/Shrub
	Tropical Swamp Forest
	Tropical Perennial Gramminoid Grassland
	Tropical Needleleaf Evergreen Woodland
	Tropical Needleleaf Evergreen Savanna
	Tropical Needleleaf Evergreen Forest
	Tropical Herbaceous Wetland
	Tropical Cactus/Thorn Shrub
	Tropical Broadleaf/Needleleaf Woodland
	Tropical Broadleaf/Needleleaf Evergreen Forest
	Tropical Broadleaf Evergreen Woodland
	Tropical Broadleaf Evergreen Scrub/Shrub
	Tropical Broadleaf Evergreen Savanna
	Tropical Broadleaf Evergreen Forest
	Tropical Broadleaf Deciduous Woodland
	Tropical Broadleaf Deciduous Forest
	Palm Forest
	Marine
	Mangroves
	Inland Water
	Forest-Woodland-Agriculture Complex
	Barron Rock, Sand, and Soil
	Agriculture



Legend

- Urban/Vegetation Complex
- Urban/Industrial
- Tropical Swamp Scrub/Shrub
- Tropical Swamp Forest
- Tropical Perennial Gramminoid Grassland
- Tropical Needleleaf Evergreen Woodland
- Tropical Needleleaf Evergreen Savanna
- Tropical Needleleaf Evergreen Forest
- Tropical Herbaceous Wetland
- Tropical Cactus/Thorn Shrub
- Tropical Broadleaf/Needleleaf Woodland
- Tropical Broadleaf/Needleleaf Evergreen Forest
- Tropical Broadleaf Evergreen Woodland
- Tropical Broadleaf Evergreen Scrub/Shrub
- Tropical Broadleaf Evergreen Savanna
- Tropical Broadleaf Evergreen Forest
- Tropical Broadleaf Deciduous Woodland
- Tropical Broadleaf Deciduous Forest
- Palm Forest
- Marine
- Mangroves
- Inland Water
- Forest-Woodland-Agriculture Complex
- Barron Rock, Sand, and Soil
- Agriculture

