SUPPORTING FIGURES

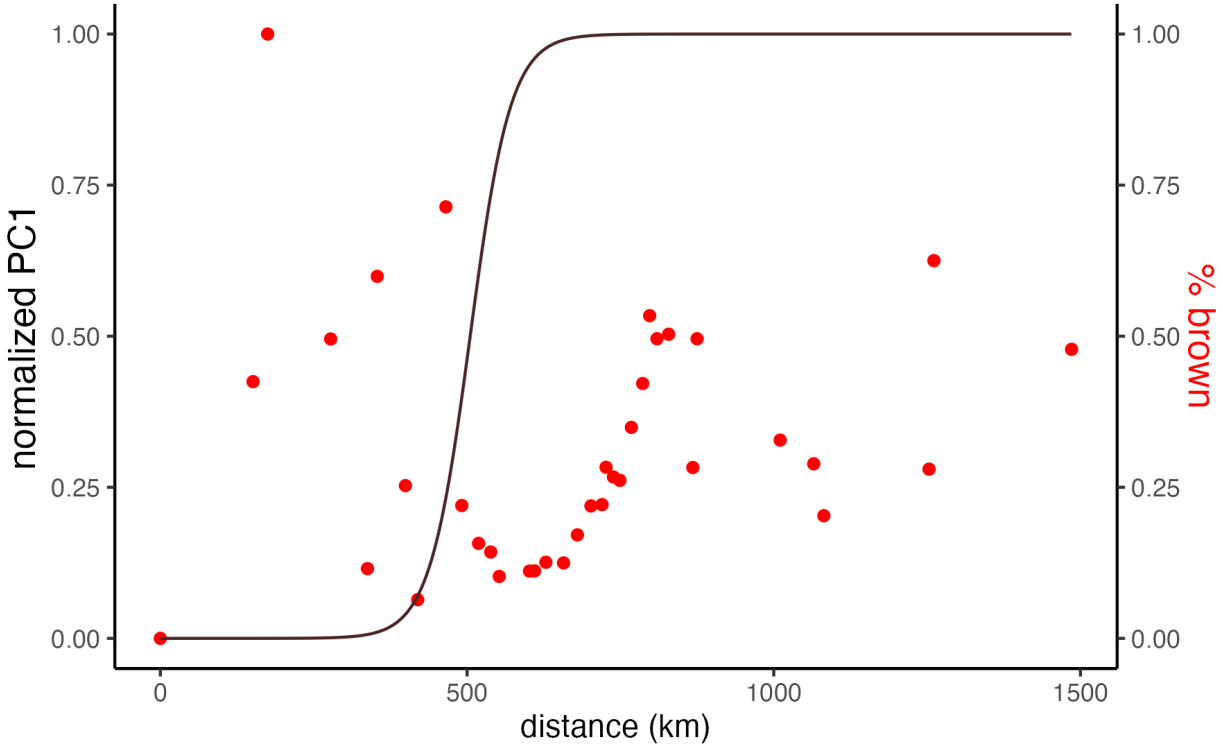

Figure S1: Along the north-south transect in *Encelia farinosa*, the principal component axis 1 of climate data (shown by red dots) does not show a clear trend across geographic distance or with disk floret color (shown by the black line).This lack of association suggests a possible independence between climate PC1 and the pigmentation of the disk florets in the studied populations.

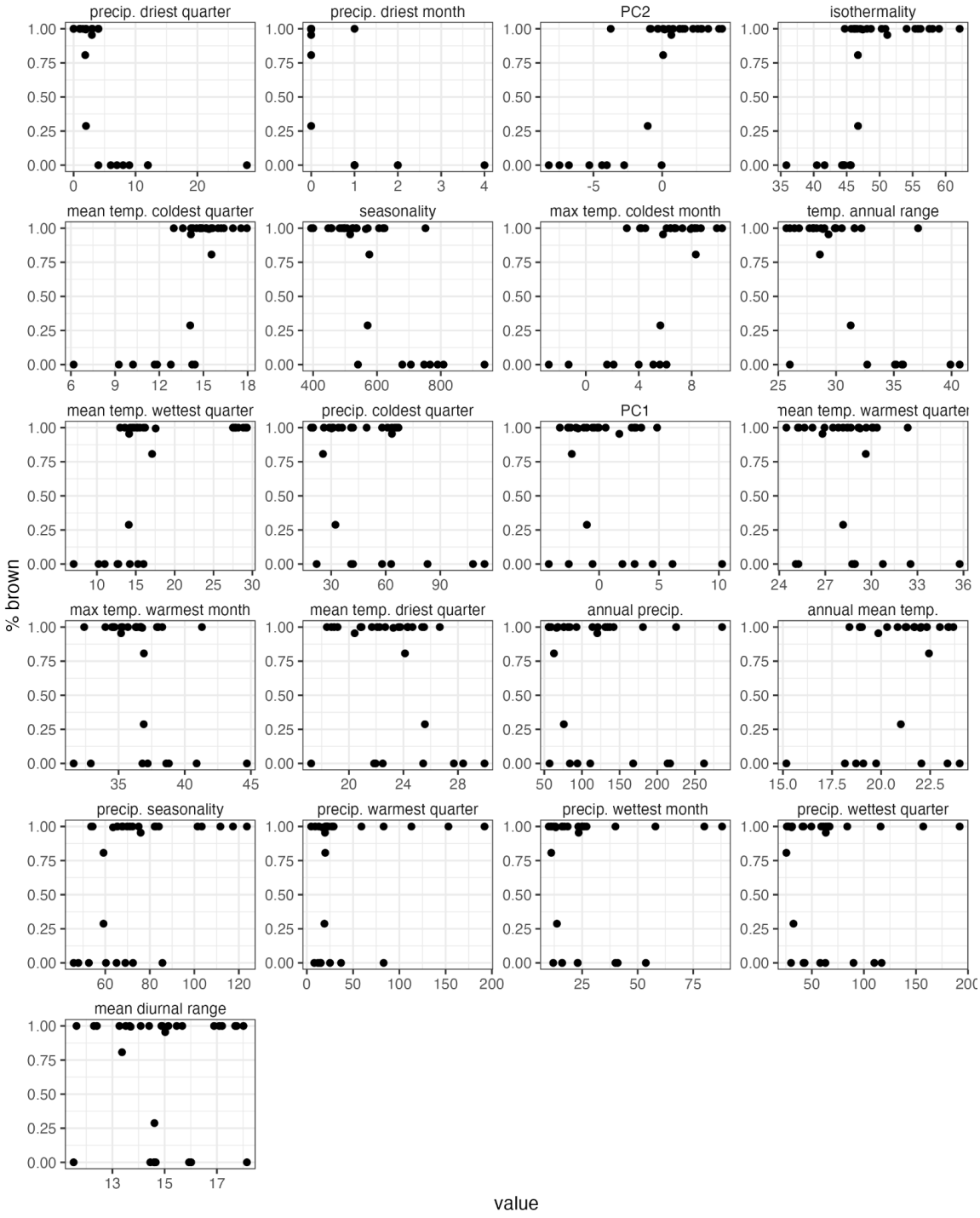

Figure S2: Relationship between bioclimatic variables (including their ordination via principal component axis 1 and 2) and the percent of florets that are brown in *Encelia farinosa*. Bioclimatic variables are in descending order of how well they predict flower color (see Appendix S1: Table S3).

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SUPPORTING TABLES

Table S1: Data on individuals sampled in Mexico for genetic data.

Individual	Color	Latitude	Longitude	State	Region	Locality	SRA
FAR02	black	29.1553	-114.1453	BC	Laguna Chapala	MX1 S of Laguna Chapala	SAMN41264818
FAR03	black	29.1553	-114.1453	BC	Laguna Chapala	MX1 S of Laguna Chapala	SAMN41264819
FAR04	black	29.304	-114.2576	BC	Laguna Chapala	MX1 just S of Laguna Chapala, E side of Rd.	SAMN41264820
FAR05	black	29.304	-114.2576	BC	Laguna Chapala	MX1 just S of Laguna Chapala, E side of Rd.	SAMN41264821
FAR08	black	29.4474	-114.3329	BC	Laguna Chapala	MX5 north of Laguna Chapala	SAMN41264822
FAR09	black	29.4474	-114.3329	BC	Laguna Chapala	MX5 north of Laguna Chapala	SAMN41264823
FAR10	yellow	29.4474	-114.3329	BC	Laguna Chapala	MX5 north of Laguna Chapala	SAMN41264824
FAR11	black	29.4474	-114.3329	BC	Laguna Chapala	MX5 north of Laguna Chapala	SAMN41264825
FAR19	black	29.4554	-114.3324	BC	Laguna Chapala	MX5 north of Laguna Chapala; north side of road	SAMN41264826
FAR20	black	29.4554	-114.3324	BC	Laguna Chapala	MX5 north of Laguna Chapala; north side of road	SAMN41264827
FAR21	black	29.4554	-114.3324	BC	Laguna Chapala	MX5 north of Laguna Chapala; north side of road	SAMN41264828
FAR43	black	29.5818	-114.3792	BC	Central Desert	MX5, S side, N of bridge	SAMN41264829
FAR44	black	29.5818	-114.3792	BC	Central Desert	MX5, S side, N of bridge	SAMN41264830
FAR45	black	29.5818	-114.3792	BC	Central Desert	MX5, S side, N of bridge	SAMN41264831
FAR46	black	29.6453	-114.4101	BC	Bahia Gonzaga	MX5, E of KM166, N side after pavement begins	SAMN41264832
FAR47	black	29.6453	-114.4101	BC	Bahia Gonzaga	MX5, E of KM166, N side after pavement begins	SAMN41264833
FAR48	black	29.6538	-114.411	BC	Bahia Gonzaga	MX5, S side of Rd	SAMN41264834
FAR49	black	29.6572	-114.4115	BC	Bahia Gonzaga	MX5, N side of Rd	SAMN41264835
FAR50	black	29.6572	-114.4115	BC	Bahia Gonzaga	MX5, N side of Rd	SAMN41264836
FAR52	black	29.838	-114.4305	BC	Bahia Gonzaga	MX5, N side of Rd, N of checkpoint	SAMN41264837
FAR53	black	29.838	-114.4305	BC	Bahia Gonzaga	MX5, N side of Rd, N of checkpoint	SAMN41264838
FAR54	black	29.8409	-114.4336	BC	Bahia Gonzaga	MX5, E side of Rd, in wash off the highway down dirt road about 100m	
FAR55	black	29.8409	-114.4336	BC	Bahia Gonzaga	MX5, E side of Rd, in wash off the highway down dirt road about 100m	
FAR57	black	29.8772	-114.4512	BC	Bahia Gonzaga	MX5, N side of Rd	SAMN41264841
FAR58	black	29.877	-114.4491	BC	Bahia Gonzaga	MX5, a bit off Rd to the S	SAMN41264842
FAR59	black	29.9097	-114.4872	BC	Bahia Gonzaga	MX5	SAMN41264843
FAR60	black	30.0162	-114.5666	BC	Bahia Gonzaga	MX5, KM115 (approx), down spur dirt Rd to E, near beach	SAMN41264844
FAR61	black	30.2073	-114.6669	BC	Puertocitos	MX5, off E side, on Rd to campsite beach	SAMN41264845
FAR62	black	30.3946	-114.6439	BC	Puertocitos	MX5, N side of Rd	SAMN41264846
FAR63	yellow	30.4149	-114.6429	BC	Puertocitos	MX5, S side of Rd	SAMN41264847
FAR64	black	30.4149	-114.6429	BC	Puertocitos	MX5, S side of Rd	SAMN41264848
FAR65	yellow	30.434	-114.6489	BC	Puertocitos	MX5, N side, between here and 0068	SAMN41264849
FAR66	yellow	30.4384	-114.6504	BC	Puertocitos	MX5, just N of KM66, S side of Rd	SAMN41264850
FAR67	yellow	30.5421	-114.6938	BC	Puertocitos	MX5, between here and 0074	SAMN41264851
FAR68	black	30.8789	-114.736	BC	San Felipe	MX5	SAMN41264852
FAR70	yellow	31.5998	-115.0725	BC	Rio Colorado	MX5, N side of Rd, next to mine	SAMN41264853
FAR71	black	31.5998	-115.0725	BC	Rio Colorado	MX5, N side of Rd, next to mine	SAMN41264854
FAR72	yellow	31.5998	-115.0725	BC	Rio Colorado	MX5, N side of Rd, next to mine	SAMN41264855
FAR73	black	31.5998	-115.0725	BC	Rio Colorado	MX5, N side of Rd, next to mine	SAMN41264856

FAR74	yellow	31.6394	-115.07	BC	Rio Colorado	MX5, N side of Rd	SAMN41264857
FAR75	black	31.6394	-115.07	BC	Rio Colorado	MX5, N side of Rd	SAMN41264858
FAR76	yellow	32.0117	-115.2315	BC	Rio Colorado	MX5, S side of Rd	SAMN41264859
FAR77	yellow	32.0605	-115.2474	BC	Rio Colorado	MX5, S side of Rd	SAMN41264860
FAR78	yellow	32.1543	-115.7893	BC	Canyon de Guadalupe	Canyon de Guadalupe, entrance to campgrounds with gates	SAMN41264861
FAR79	yellow	32.1606	-115.7844	BC	Canyon de Guadalupe	Rd to Canyon de Guadalupe	SAMN41264862
FAR80	yellow	32.1543	-115.7893	BC	Canyon de Guadalupe	Rd to Canyon de Guadalupe	SAMN41264863

Table S2: The 19 bioclimatic variables and loadings on principal component axes 1 and 2 (PC1, PC2).

variable	PC1	PC2	description
bioclim01	-0.326	0.068	annual mean temperature
bioclim02	0.066	-0.103	mean diurnal range
bioclim03	0.104	0.306	isothermality
bioclim04	-0.077	-0.406	seasonality
bioclim05	-0.265	-0.216	maximum temperature warmest month
bioclim06	-0.207	0.33	maximum temperature coldest month
bioclim07	-0.025	-0.381	temperature annual range
bioclim08	-0.158	0.095	mean temperature wettest quarter
bioclim09	-0.226	-0.122	mean temperature driest quarter
bioclim10	-0.289	-0.179	mean temperature warmest quarter
bioclim11	-0.218	0.334	mean temperature coldest quarter
bioclim12	0.35	0.008	annual precipitation
bioclim13	0.272	0.128	precipitation wettest month
bioclim14	0.249	-0.235	precipitation driest month
bioclim15	0.107	0.278	precipitation seasonality
bioclim16	0.301	0.11	precipitation wettest quarter
bioclim17	0.261	-0.288	precipitation. driest quarter
bioclim18	0.133	0.119	precipitation warmest quarter
bioclim19	0.324	-0.021	precipitation coldest quarter

Table S3: The 19 bioclimatic variables and their ordination by principal component axes 1 and 2 (PC1, PC2) and how well they predict percentage of brown flowers, as measured by the sum of squared residuals.

Variable	Description	Sum squared residuals
bioclim17	precipitation driest quarter	1.429
bioclim14	precipitation driest month	1.476
PC2	PC2	2.022
bioclim03	isothermality	2.062
bioclim11	mean temperature coldest quarter	2.512
bioclim04	seasonality	2.583
bioclim06	maximum temperature coldest month	3.634
bioclim07	temperature annual range	3.829
bioclim08	mean temp. wettest quarter	5.017
bioclim19	precipitation coldest quarter	5.223
PC1	PC1	5.586
bioclim10	mean temperature warmest quarter	5.841
bioclim05	maximum temperature warmest month	5.847
bioclim09	mean temperature driest quarter	5.911
bioclim12	annual precipitation	5.941
bioclim01	annual mean temp.	6.196
bioclim15	precipitation seasonality	6.221
bioclim18	precipitation warmest quarter	6.311
bioclim13	precipitation wettest month	6.385
bioclim16	precipitation wettest quarter	6.555
bioclim02	mean diurnal range	6.586

Table S4: Cross-validation (CV) error across runs of ADMIXTURE with varying numbers of genetic clusters (*K*). Lower CV values are generally considered to reflect a model with better fit, thus our data are best modeled as consisting of one genetic cluster (K = 1).

K	CV value
1	0.395
2	0.461
3	0.530
4	0.624
5	0.688