S1 Table. Locality records used for validating the CLIMEX and DDRP climatic suitability models for *Neoleucinodes elegantalis.* The two-letter country code, locality name (if known), state or province, latitude, longitude, and reference for each record is indicated. The "Approx." column indicates whether geographic coordinates were approximated from specific location information such as a city name (Approx. = 1), or if they were reported by the study or database (Apprx. = 0).

Country	Locality	State/Province	Latitude	Longitude	Approx.	Reference
AR	Posadas	Misiones	-27.233	-55.567	0	1
AR	Orán	Salta	-22.871	-64.363	0	2
BR		Algoas	-10.371	-36.995	0	3
BR	Manaus	Amazonas	-3.120	-60.022	1	4
BR	Empresa Brasileira de Pesquisa Agropecuaria	Brasília	-15.462	-47.576	1	5
BR	Jardim Botanico de Brasília	Brasília	-15.862	-47.830	1	5
BR	Reserva Ecologica do IBGE	Brasília	-15.949	-47.878	1	5
BR	Camocim de São Félix	Ceará	-8.347	-35.774	1	6
BR	Croatá	Ceará	-4.400	-40.900	0	7
BR	Guaraciaba do Norte	Ceará	-4.170	-40.730	0	7
BR	Jaburuna, Ubajara	Ceará	-3.854	-40.921	0	8
BR	Tiangua	Ceará	-3.734	-40.996	1	9
BR	Alegre	Espírito Santo	-20.752	-41.489	0	10
BR	Domingos Martins	Espírito Santo	-20.364	-40.658	1	11
BR	Vargem Alta	Espírito Santo	-20.673	-41.010	1	11
BR	Fazenda Agua Limpa	Goiás	-15.330	-47.416	0	12
BR	Fazenda Andreia, Abadia de Goiás	Goiás	-16.836	-49.456	0	13
BR	Fazenda Experimental da empresa Unilever, Goiaia	Goiás	-16.718	-49.414	0	13
BR	Fazenda Santa Rosa das Flores, Palminopolis	Goiás	-16.766	-50.106	0	13
BR	Goianápolis	Goiás	-16.505	-49.021	1	14
BR	Universidade Federal de Goiás, Goiania	Goiás	-16.600	-49.278	1	15
BR	Dourados	Mato Grosso do Sul	-22.23	-54.802	1	16
BR	Coimbra	Minas Gerais	-20.857	-42.469	0	17
BR	Rio Paranaiba	Minas Gerais	-19.223	-46.205	0	18
BR	Vicosa	Minas Gerais	-20.813	-42.938	0	19
BR	Rodovia Transamazonica (Altamira/Itaituba)	Pará	-3.463	-52.895	1	20
BR	São José dos Pinhais	Paraná	-25.535	-49.206	0	21
BR	Encruzilhada de São João	Pernambuco	-8.244	-35.767	1	6

Country	Locality	State/Province	Latitude	Longitude	Approx.	Reference
BR	Garanhuns	Pernambuco	-8.883	-36.496	1	6
BR	Petrolina	Pernambuco	-9.383	-40.503	1	6
BR	Cha-Grande	Pernambuco	-8.233	-35.462	0	22
BR	Camocim de São Felix	Pernambuco	-8.359	-35.762	0	23
BR	Experimental Station of Vitória de Santo Antão	Pernambuco	-8.114	-35.291	0	24
BR	Serra Talhada	Pernambuco	-7.938	-38.313	0	25
BR	Centro de Pesquisa Mokiti Okada, Ipeúna	Rio de Janeiro	-22.402	-47.681	1	26
BR	Federal Rural University of Rio de Janeiro, Seropedica	Rio de Janeiro	-22.750	-43.683	0	27
BR	Itaperuna	Rio de Janeiro	-21.199	-41.892	1	28
BR		Rio de Janeiro	-22.451	-42.771	0	29
BR		Rio Grande do Sul	-28.054	-51.196	0	29
BR	University of Santa Maria campus Frederico Westphalen	Rio Grande do Sul	-27.397	-53.429	0	30
BR		Santa Catarina	-27.685	-48.497	0	29
BR	Experimental Station of Epagri, Lages	Santa Catarina	-27.800	-50.317	0	31
BR	São José do R. Pardo	São Paulo	-21.602	-46.904	1	6
BR	Divinolândia	São Paulo	-21.661	-46.735	1	32
BR	Taiúva	São Paulo	-21.124	-48.454	1	32
BR	Piracicaba	São Paulo	-22.823	-47.757	0	33
BR	Pongai	São Paulo	-21.733	-49.367	1	34
BR	Urupes	São Paulo	-21.202	-49.294	1	35
BR	Itabaiana	Sergipe	-10.689	-37.432	1	36
CO	El Peñol, La Piedra, El Porvenir	Antioquia	6.222	-75.179	0	2
CO	El Peñol, Santa Inés, La Gabriela	Antioquia	6.258	-75.273	0	2
CO	Jardín, La Linda, La Clara	Antioquia	5.614	-75.830	0	2
CO	El Penol, Santa Ines	Antioquia	6.257	-75.271	0	37
CO	Jardin, El Tapado/El Llano	Antioquia	5.601	-75.838	0	37
CO	Santo Domingo	Antioquia	6.477	-75.137	0	37
CO	Piedra Gorda	Antioquia	6.240	-75.480	1	38
CO	San Rafael	Antioquia	6.305	-75.025	0	39
CO	Buenavista, Patiño	Boyacá	5.496	-73.952	0	2
CO	Anserma, Palo Blanco Alto	Caldas	5.255	-75.769	0	2
CO	Anserma, San Pedro	Caldas	5.256	-75.797	0	2
CO	Manizales, El Rosario	Caldas	5.028	-75.583	0	2
CO	Manizales, San Peregrino	Caldas	5.057	-75.579	0	2
CO	Palestina, La Parroquia	Caldas	5.012	-75.631	0	2

Country	Locality	State/Province	Latitude	Longitude	Approx.	Reference
CO	Villa María, Tejares, Bachué	Caldas	5.032	-75.516	0	2
CO	Reserva Ecologico Rio Blanco	Caldas	5.126	-75.447	0	29
CO	Chinchina, San Andres/Los Alpes	Caldas	4.934	-75.614	0	37
CO	Manizales, Bajo Tablazo Hoyo Frio/Los Eucaliptos	Caldas	5.021	-75.533	0	37
CO	Inza, Belén	Cauca	2.473	-76.020	0	2
CO	Inza, Pedregal	Cauca	2.523	-76.000	0	2
CO	Nueva Estrella	Cordoba	9.288	-76.073	1	38
CO	Fusagasugá, Espinalito, La Poderosa	Cundinamarca	4.315	-74.417	0	2
CO	Fusagasugá, La Isla, El Recuerdo	Cundinamarca	4.349	-74.401	0	2
CO	San Bernardo, Pirineos bajos, Buenavista	Cundinamarca	4.151	-74.426	0	2
CO	Silvania, San Luis bajo	Cundinamarca	4.384	-74.630	0	2
CO	Silvania, San Luís bajo, Villa	Cundinamarca	4.704	-74.618	0	2
CO	Silvania, Santa Rita, Las Brisas	Cundinamarca	4.409	-74.361	0	2
CO	Silvania, Victoria Alta	Cundinamarca	4.424	-74.357	0	2
CO	Filandia, La Julia, Las Delicias	Departamento del Quindío	4.698	-75.682	0	2
CO	Pijao, La Playa, El Billar	Departamento del Quindío	4.335	-75.712	0	2
CO	Garzón, Fátima	Huila	2.181	-75.563	0	2
CO	Gigante, Bajo Corozal	Huila	2.339	-75.516	0	2
CO	Gigante, Tres Esquinas, La Ondina	Huila	2.310	-75.509	0	2
CO	Santa Marta, Minca, El Campano	Magdalena	11.124	-74.098	0	2
CO	Santa Marta, San Isidro, La Sirena	Magdalena	11.186	-74.009	0	2
CO	San Pedro de Cartago	Nariño	1.545	-77.116	0	2
CO	Arboleda	Nariño	5.583	-75.150	0	40
CO	La Florida	Nariño	1.302	-77.411	0	40
CO	La Union	Nariño	1.605	-77.134	0	40
CO	San Pedro de Cartago	Nariño	1.550	-77.119	0	40
CO	Tangua	Nariño	1.095	-77.394	0	40
CO	Yacuanquer	Nariño	1.115	-77.401	0	40
CO	Abrego, Llano Alto	Norte de Santander	8.077	-73.211	0	2
CO	Abrego, Los Piñitos	Norte de Santander	8.094	-73.238	0	2
CO	Ocaña, Llano Verde, Piedra gorda	Norte de Santander	8.405	-73.340	0	2
CO	Ocaña, Llano Verde, Piedra gorda	Norte de Santander	8.237	-73.357	0	2
CO	Pamplona, La Unión, La Morena	Norte de Santander	7.264	-72.577	0	2
CO	Silos, Cherqueta, La Vega	Norte de Santander	7.170	-72.742	0	2
CO	Dosquebradas, La Fría, Las Veraneras	Risaralda	4.854	-75.709	0	2

Country	Locality	State/Province	Latitude	Longitude	Approx.	Reference
CO	Dosquebradas, La Fría, Las Veraneras	Risaralda	4.855	-75.710	0	2
CO	Santa Rosa de Cabal, San Andrés, Los Alpes	Risaralda	4.935	-75.613	0	2
CO	Sta Rosa de Cabal/El Embol	Risaralda	4.920	-75.633	0	2
CO	Jesús María, Alto Grande, La Vega	Santander	5.879	-73.787	0	2
CO	Mesa de los Santos, Acuarela	Santander	6.759	-73.106	0	2
CO	Mesa de los Santos, Tabacal, El Alto	Santander	6.792	-73.056	0	2
CO	Pie de Cuesta, Sevilla	Santander	7.026	-72.994	0	2
CO	Cajamarca, Arenillal, La Esperanza	Tolima	4.391	-75.483	0	2
CO	Cajamarca, Arenillal, Mazatlán	Tolima	4.389	-75.484	0	2
CO	Cajamarca, La Esperanza	Tolima	4.440	-75.403	0	2
CO	Cajamarca, San Lorenzo Alto, Los Geranios	Tolima	4.447	-75.396	0	2
CO	Líbano, Santa Bárbara, Ambato	Tolima	4.944	-75.010	0	2
CO	Darién, La Playa	Valle del Cauca	3.959	-76.461	0	2
CO	Darién, La Unión, La Isabela	Valle del Cauca	3.956	-76.469	0	2
CO	Darién, La Unión, La Violeta	Valle del Cauca	3.925	-76.494	0	2
CO	La Unión, Córcega, Berlín	Valle del Cauca	4.534	-76.105	0	2
CO	Palmira, Corpoica	Valle del Cauca	3.517	-76.300	0	37
CR		Cartago	9.831	-83.563	0	29
CR		Cartago	9.784	-83.751	0	29
CU	Topes de Collantes	Sancti Spiritus	21.856	-79.990	0	41
EC	Caluma	Bolívar	-1.631	-79.258	1	42
EC	Chillanes	Bolívar	-1.944	-79.066	1	42
EC	Rioverde	Carchi	0.837	-78.372	0	2
EC		Carchi	0.840	-78.376	0	43
EC	La Maná	Cotopaxi	-0.941	-79.232	1	42
EC	Peñaherrera	Imbabura	0.350	-78.535	1	42
EC	Garcia Moreno	Imbabura	0.264	-78.646	1	42
EC	Palora	Morona Santiago	-1.699	-77.962	1	42
EC	Sucua	Morona Santiago	-2.456	-78.166	1	42
EC	Gualaquiza	Morona Santiago	-3.406	-78.572	1	42
EC		Morona Santiago	-1.460	-78.143	0	43
EC	AguaYaku, Salazar	Napo	-0.897	-77.770	0	2
EC	Cotundo, Aviles	Napo	-0.712	-77.585	0	2
EC	El Chaco, Llerena	Napo	-0.406	-77.838	0	2
EC	El Chaco, Sarrias	Napo	-0.359	-77.811	0	2

Country	Locality	State/Province	Latitude	Longitude	Approx.	Reference
EC	Guagua Sumaco	Napo	-0.736	-77.561	0	2
EC		Napo	-0.366	-77.817	0	43
EC		Napo	-0.904	-77.771	0	43
EC	Puyo	Pastaza	-1.494	-77.999	1	42
EC		Pastaza	-1.673	-77.960	0	43
EC	Pomona	Pastaza	-1.520	-77.371	0	44
EC	Los Bancos, Dr Chang	Pichincha	-0.013	-78.890	0	2
EC	Los Bancos, San Martín	Pichincha	-0.100	-79.013	0	2
EC	Tandapi	Pichincha	-0.414	-78.799	1	42
EC		Pichincha	-0.023	-78.894	0	43
EC	Saloya	Pichincha	-0.313	-78.710	0	44
EC	Cutuglagua, Mejia	Pichincha	-0.366	-78.550	0	45
EC	El Reventador	Sucumbíos	-0.035	-77.529	1	42
EC	Gonzalo Pizarro	Sucumbíos	0.016	-77.378	1	42
EC		Tungurahua	-1.426	-78.203	0	43
EC	Zamora	Zamora Chinchipe	-4.062	-78.950	1	42
GF			4.098	-52.680	0	29
GF			4.536	-52.123	0	29
GT		Jalapa	14.597	-89.983	0	29
GT	Suchitepe-quez, Santa Barbara Ref Quetzal UVG		14.541	-91.197	0	29
HN	Comayagua		14.460	-87.650	0	2
HO	Pico Bonito, Estación CURLA		15.697	-86.901	0	46
HO	Valle de Comayagua		14.336	-87.666	1	47
MX		Jalisco	20.337	-105.345	0	29
MX		Oaxaca	15.926	-96.418	0	29
MX		Veracruz	19.520	-96.942	0	29
MX	Misantla	Veracruz	19.925	-96.851	0	29
MX	Orizaba	Veracruz	18.848	-97.105	0	29
MX	Presidio	Veracruz	19.068	-96.973	0	29
PE	La Universidad Nacional Agraria de la Selva		-9.286	-75.998	0	48
PE	Nauto		-4.504	-73.583	1	49
PE	Loreto		-5.066	-73.851	1	49
PE	Tingo María, Huánuco		-9.896	-76.279	1	49
SR	Calcutta	Saramacca	5.833	-55.745	1	50
SR		Sipaliwini	5.067	-54.441	0	29

Country	Locality	State/Province	Latitude	Longitude	Approx.	Reference
TT	Curepe, Trinidad, W.I.		10.630	-61.400	0	29
TT	Morne Bleu Textel Installation, Trinidad		10.720	-61.290	0	29
TT	Palmiste, Trinidad, W.I.		10.240	-61.450	0	29
VE	Pao de Zarate	Aragua	10.114	-67.248	1	51
VE	Villa de Cura	Aragua	10.033	-67.493	1	52
VE	Valle del Turbio, Iribarren	Lara	10.066	-69.333	0	2
VE	El Tocuyo	Lara	9.783	-69.790	1	52
VE	El Cuji, Barquisimeto	Lara	10.156	-69.306	1	53
VE	El Molino, Jimenez	Lara	9.849	-69.613	1	54
VE	la Depresion de Quibor	Lara	9.933	-69.609	1	55
VE	San Juan de Lagunillas	Merida	8.499	-71.347	1	56
VE	El Corozo, Caripe	Monagas	9.694	-63.368	1	57
VE	Cordero	Táchira	7.855	-72.180	1	58
VE	Los Rios, Seboruco	Táchira	8.121	-72.157	0	59

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