

**Table S1.** Haplotype designation for individuals of *Aedes albopictus* collected in six localities of Ecuador

Accession N°	ECUs	Organism	Country	Locality	Latitude	Longitude	Collection Date	Sex	Haplotype	Trap	Reference
OK266899	ECU27416	<i>Aedes albopictus</i>	Ecuador	Cachaco	0,8337	-78,4023	24/10/2018	Female	H2	Ovitrap	This study
OK266900	ECU27417	<i>Aedes albopictus</i>	Ecuador	Cachaco	0,8337	-78,4023	24/10/2018	Male	H2	Ovitrap	This study
OK266901	ECU27418	<i>Aedes albopictus</i>	Ecuador	Cachaco	0,8337	-78,4023	24/10/2018	Male	H2	Ovitrap	This study
OK266902	ECU27419	<i>Aedes albopictus</i>	Ecuador	Cachaco	0,8337	-78,4023	12/05/2018	Male	H2	Ovitrap	This study
OK266903	ECU27420	<i>Aedes albopictus</i>	Ecuador	Cachaco	0,8337	-78,4023	12/05/2018	Male	H2	Ovitrap	This study
OK266904	ECU27421	<i>Aedes albopictus</i>	Ecuador	Cachaco	0,8337	-78,4023	13/02/2019	Female	H2	Ovitrap	This study
OK266905	ECU27422	<i>Aedes albopictus</i>	Ecuador	Cachaco	0,8337	-78,4023	13/02/2019	Female	H2	Ovitrap	This study
OK266906	ECU27423	<i>Aedes albopictus</i>	Ecuador	Cachaco	0,8337	-78,4023	13/02/2019	Male	H2	Ovitrap	This study
OK266907	ECU27424	<i>Aedes albopictus</i>	Ecuador	Cachaco	0,8337	-78,4023	07/11/2018	Female	H2	Ovitrap	This study
OK266908	ECU27425	<i>Aedes albopictus</i>	Ecuador	Cachaco	0,8337	-78,4023	07/11/2018	Female	H2	Ovitrap	This study
OK266909	ECU27426	<i>Aedes albopictus</i>	Ecuador	Cachaco	0,8337	-78,4023	28/01/2021	Male	H2	Ovitrap	This study
OK266910	ECU27427	<i>Aedes albopictus</i>	Ecuador	Cachaco	0,8337	-78,4023	14/01/2021	Male	H2	Ovitrap	This study
OK266911	ECU27428	<i>Aedes albopictus</i>	Ecuador	Guadual	0,8918	-78,5022	07/01/2021	Female	H2	Rubber tire	This study
OK266912	ECU27429	<i>Aedes albopictus</i>	Ecuador	Guadual	0,8918	-78,5022	07/01/2021	Female	H2	Rubber tire	This study
OK266913	ECU27430	<i>Aedes albopictus</i>	Ecuador	Guadual	0,8918	-78,5022	28/01/2021	Male	H2	Ovitrap	This study
OK266914	ECU27431	<i>Aedes albopictus</i>	Ecuador	Guadual	0,8918	-78,5022	28/01/2021	Female	H2	Ovitrap	This study
OK266915	ECU27432	<i>Aedes albopictus</i>	Ecuador	Guadual	0,8918	-78,5022	28/01/2021	Female	H2	Rubber tire	This study
OK266916	ECU27433	<i>Aedes albopictus</i>	Ecuador	Guadual	0,8918	-78,5022	28/01/2021	Female	H2	Ovitrap	This study
OK266917	ECU27434	<i>Aedes albopictus</i>	Ecuador	Guadual	0,8918	-78,5022	28/01/2021	Female	H2	Rubber tire	This study
OK266918	ECU27435	<i>Aedes albopictus</i>	Ecuador	Guadual	0,8918	-78,5022	28/01/2021	Male	H2	Ovitrap	This study
OK266919	ECU27436	<i>Aedes albopictus</i>	Ecuador	Guadual	0,8918	-78,5022	04/02/2021	Male	H2	Rubber tire	This study
OK266920	ECU27437	<i>Aedes albopictus</i>	Ecuador	Guadual	0,8918	-78,5022	28/01/2021	Male	H2	Ovitrap	This study
OK266921	ECU27438	<i>Aedes albopictus</i>	Ecuador	Lita	0,8337	-78,4017	20/02/2019	Female	H2	Ovitrap	This study
OK266922	ECU27439	<i>Aedes albopictus</i>	Ecuador	Lita	0,8337	-78,4017	20/02/2019	Female	H2	Ovitrap	This study
OK266923	ECU27440	<i>Aedes albopictus</i>	Ecuador	Lita	0,8337	-78,4017	20/02/2019	Female	H2	Ovitrap	This study
OK266924	ECU27441	<i>Aedes albopictus</i>	Ecuador	Lita	0,8337	-78,4017	20/02/2019	Female	H2	Ovitrap	This study
OK266925	ECU27442	<i>Aedes albopictus</i>	Ecuador	Lita	0,8337	-78,4017	20/02/2019	Female	H2	Ovitrap	This study
OK266926	ECU27444	<i>Aedes albopictus</i>	Ecuador	Lita	0,8337	-78,4017	20/02/2019	Male	H2	Ovitrap	This study

**Table S1.** Continue

Accession N°	ECUs	Organism	Country	Locality	Latitude	Longitude	Collection Date	Sex	Haplotype	Trap	Reference
OK266927	ECU27462	<i>Aedes albopictus</i>	Ecuador	Lita	0,8337	-78,4017	20/02/2019	Male	H2	Ovitrap	This study
OK266928	ECU27463	<i>Aedes albopictus</i>	Ecuador	Lita	0,8337	-78,4017	20/02/2019	Male	H2	Ovitrap	This study
OK266929	ECU27464	<i>Aedes albopictus</i>	Ecuador	Lita	0,8337	-78,4017	20/02/2019	Male	H2	Ovitrap	This study
OK266930	ECU27465	<i>Aedes albopictus</i>	Ecuador	Lita	0,8337	-78,4017	20/02/2019	Male	H2	Ovitrap	This study
OK266931	ECU27466	<i>Aedes albopictus</i>	Ecuador	Lita	0,8337	-78,4017	20/02/2019	Male	H2	Ovitrap	This study
OK266932	ECU27467	<i>Aedes albopictus</i>	Ecuador	Lita	0,8337	-78,4017	20/02/2019	Male	H2	Ovitrap	This study
OK266933	ECU27468	<i>Aedes albopictus</i>	Ecuador	Guayaquil	-2,1633	-79,8938	20/04/2017	Male	H1	BG Centinet	This study
OK266934	ECU27469	<i>Aedes albopictus</i>	Ecuador	Guayaquil	-2,1633	-79,8938	27/04/2017	Male	H1	BG Centinet	This study
OK266935	ECU27470	<i>Aedes albopictus</i>	Ecuador	Guayaquil	-2,1633	-79,8938	11/05/2017	Male	H1	Rubber tire	This study
OK266936	ECU27471	<i>Aedes albopictus</i>	Ecuador	Guayaquil	-2,1633	-79,8938	28/04/2017	Male	H1	BG Centinet	This study
OK266937	ECU27472	<i>Aedes albopictus</i>	Ecuador	Guayaquil	-2,1633	-79,8938	26/04/2017	Female	H1	BG Centinet	This study
OK266938	ECU27473	<i>Aedes albopictus</i>	Ecuador	Guayaquil	-2,1633	-79,8938	27/04/2017	Female	H1	BG Centinet	This study
OK266939	ECU27474	<i>Aedes albopictus</i>	Ecuador	Guayaquil	-2,1633	-79,8938	09/05/2017	Female	H1	BG Centinet	This study
OK266940	ECU27475	<i>Aedes albopictus</i>	Ecuador	Guayaquil	-2,1633	-79,8938	04/05/2017	Female	H1	Hollow rock	This study
OK266941	ECU27476	<i>Aedes albopictus</i>	Ecuador	Guayaquil	-2,1633	-79,8938	21/04/2017	Female	H1	BG Centinet	This study
OK266942	ECU27303	<i>Aedes albopictus</i>	Ecuador	Guayaquil	-2,1633	-79,8938	09/05/2017	Female	H1	Immature	This study
OK266943	ECU27317	<i>Aedes albopictus</i>	Ecuador	Francisco de Orellana	-0,4412	-77,0048	30/05/2018	Female	H1	Metal tube	This study
OK266944	ECU27309	<i>Aedes albopictus</i>	Ecuador	Francisco de Orellana	-0,4412	-77,0048	30/05/2018	Female	H1	Metal tube	This study
OK266945	ECU27313	<i>Aedes albopictus</i>	Ecuador	Francisco de Orellana	-0,4412	-77,0048	30/05/2018	Male	H1	Metal tube	This study
OK266946	ECU27310	<i>Aedes albopictus</i>	Ecuador	Francisco de Orellana	-0,4412	-77,0048	30/05/2018	Male	H1	Metal tube	This study
OK266947	ECU27311	<i>Aedes albopictus</i>	Ecuador	Francisco de Orellana	-0,4412	-77,0048	30/05/2018	Male	H1	Metal tube	This study
OK266948	ECU27314	<i>Aedes albopictus</i>	Ecuador	Francisco de Orellana	-0,4412	-77,0048	30/05/2018	Male	H1	Metal tube	This study
OK266949	ECU27316	<i>Aedes albopictus</i>	Ecuador	Francisco de Orellana	-0,4412	-77,0048	30/05/2018	Male	H1	Metal tube	This study

**Table S2.** Reported *Aedes albopictus* sequences for COI mitochondrial marker used for phylogenetic relationship analysis

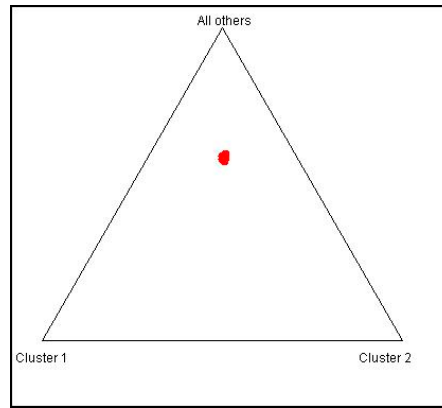
Accession N°	Organism	Locality	Cluster	Haplotype	Reference
KJ012173.1	<i>Culex quinquefasciatus</i>	Turkey	Outgroup	---	Gunay et al., unpublished
MK890402.1	<i>Aedes aegypti</i>	Ecuador: Guayaquil	Outgroup	---	Ponce et al., 2021
MK890435.1	<i>Aedes aegypti</i>	Ecuador: Lita	Outgroup	---	Ponce et al., 2021
KX886324.1	<i>Aedes albopictus</i>	China: Hainan	Ancestral	---	Guo and Zheng, unpublished
KF406456.1	<i>Aedes albopictus</i>	Pakistan: Punjab	Ancestral	---	Ashfaq et al., 2014
MK505590.1	<i>Aedes albopictus</i>	Malaysia	Ancestral	---	Hernandez-Triana et al., 2019
AB690835.1	<i>Aedes albopictus</i>	Japan	Base	---	Kuwata et al., 2012
AB907801.1	<i>Aedes albopictus</i>	Panama	Base	H72	Futami et al., 2015
OK266937.1	<i>Aedes albopictus</i>	Ecuador: Guayaquil	Base	---	This study
HQ398900.1	<i>Aedes albopictus</i>	Viet Nam	Base	---	Cook et al., 2010
JQ412504.1	<i>Aedes albopictus</i>	Turkey: Edirne, Ipsala	Base	---	Oter et al., 2013
JX679374.1	<i>Aedes albopictus</i>	Italy	Base	---	Shaikevich and Talbalaghi, 2013
KC690927.1	<i>Aedes albopictus</i>	Singapore	Base	H32	Zhong et al., 2013
KF406409.1	<i>Aedes albopictus</i>	Pakistan	Base	---	Ashfaq et al., 2014
KM613097.1	<i>Aedes albopictus</i>	Thailand	Base	---	Ruangsittichai et al., unpublished
KU319443.1	<i>Aedes albopictus</i>	Spain	Base	H01	Brustolin et al., unpublished
KU522419.1	<i>Aedes albopictus</i>	Morocco: Rabat	Base	---	Bennouna et al., unpublished
KU926300.1	<i>Aedes albopictus</i>	Mauritius	Base	H01	Walther et al., 2016
KX266678.1	<i>Aedes albopictus</i>	China: Shanghai	Base	H42	Gao et al., 2016 (Direct submission)
KX383931.1	<i>Aedes albopictus</i>	Albania	Base	A1a2a1	Battaglia et al., 2016
KX886284.1	<i>Aedes albopictus</i>	China: Fujian	Base	---	Guo and Zheng, unpublished
KX886311.1	<i>Aedes albopictus</i>	China: Hainan	Base	---	Guo and Zheng, unpublished
MF622084.1	<i>Aedes albopictus</i>	USA: Ohio	Base	H3	Giordano et al., unpublished
MF990905.1	<i>Aedes albopictus</i>	Portugal	Base	---	Osorio et al., 2018
MG871392.1	<i>Aedes albopictus</i>	South Korea	Base	H28	Lee, E. et al., 2020
MH817490.1	<i>Aedes albopictus</i>	Russia: Adler	Base	---	Fedorova and Shaikevich, unpublished
MK297326.1	<i>Aedes albopictus</i>	India	Base	---	Lakshmi et al., unpublished
MK439903.1	<i>Aedes albopictus</i>	Czech Republic	Base	---	Kurikova, unpublished
MK505570.1	<i>Aedes albopictus</i>	Montenegro: Radovici Village	Base	---	Hernandez-Triana et al., 2019

**Table S2.** Continue

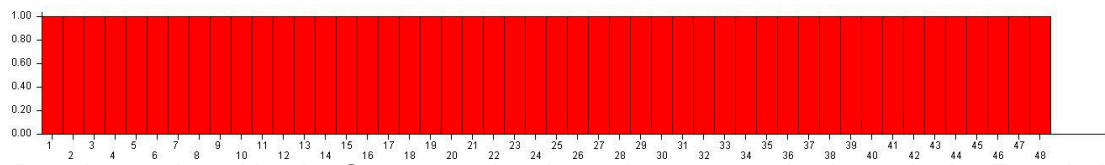
Accession N°	Organism	Locality	Cluster	Haplotype	Reference
MK518354.1	<i>Aedes albopictus</i>	Serbia: Novi Sad	Base	---	Gojkovic et al., 2019
MK575475.1	<i>Aedes albopictus</i>	Brazil	Base	---	Lorenz et al., unpublished
MN005054.1	<i>Aedes albopictus</i>	Greece	Base	---	Bisia et al., unpublished
MN080720.1	<i>Aedes albopictus</i>	Lao PDR	Base	---	Motoki et al., 2019
MN103394.1	<i>Aedes albopictus</i>	Austria: Tyrol, Kufstein	Base	---	Fuehrer and Walder, unpublished
MN509201.1	<i>Aedes albopictus</i>	USA: New York	Base	---	Lee, A. et al., 2019 (Direct submission)
MN997607.1	<i>Aedes albopictus</i>	Colombia: Choco, Bellavista	Base	---	Acosta et al., 2020 (Direct submission)
OK266946	<i>Aedes albopictus</i>	Ecuador: Francisco de Orellana	Base	---	This study
AB907796.1	<i>Aedes albopictus</i>	Costa Rica	1	---	Futami et al., 2015
KM457524.1	<i>Aedes albopictus</i>	Netherlands	1	---	van de Vossenbergh et al., 2015
KX886334.1	<i>Aedes albopictus</i>	China: Hainan	2	---	Guo and Zheng, unpublished
MN080732.1	<i>Aedes albopictus</i>	Lao PDR	2	H67	Motoki et al., 2019
LC054326.1	<i>Aedes albopictus</i>	Japan	3	---	Maekawa et al., 2016
MG871396.1	<i>Aedes albopictus</i>	South Korea	3	---	Lee, E. et al., 2020
KC690954.1	<i>Aedes albopictus</i>	USA: Texas	4	---	Zhong et al., 2013
MN103393.1	<i>Aedes albopictus</i>	Austria: Tyrol, Weer Sud	4	---	Fuehrer and Walder, unpublished
KM457544.1	<i>Aedes albopictus</i>	Netherlands	5	---	van de Vossenbergh et al., 2015
KU319445.1	<i>Aedes albopictus</i>	Spain	5	---	Brustolin et al., unpublished
KF406404.1	<i>Aedes albopictus</i>	Pakistan: Punjab	6	---	Ashfaq et al., 2014
MG572237.1	<i>Aedes albopictus</i>	Bangladesh	6	---	Aslam et al., unpublished
KU495082.1	<i>Aedes albopictus</i>	Australia	7	---	Batovska et al., 2016
MH025948.1	<i>Aedes albopictus</i>	Republic of the Congo: Gamboma	7	---	Kamgnag et al., unpublished
MH330192.1	<i>Aedes albopictus</i>	Sri Lanka: Negombo	7	---	Hapuarachchi et al., unpublished
KX886314.1	<i>Aedes albopictus</i>	China: Hainan	8	---	Guo and Zheng, unpublished
KX886327.1	<i>Aedes albopictus</i>	China: Hainan	8	---	Guo and Zheng, unpublished
MH330189.1	<i>Aedes albopictus</i>	Sri Lanka: Kiribathgoda	8	---	Hapuarachchi et al., unpublished
OK266909.1	<i>Aedes albopictus</i>	Ecuador: Cachaco	9	---	This study
OK266918.1	<i>Aedes albopictus</i>	Ecuador: Guadual	9	---	This study
KC690922.1	<i>Aedes albopictus</i>	Singapore	9	H27	Zhong et al., 2013

**Table S2.** Continue

Accession N°	Organism	Locality	Cluster	Haplotype	Reference
OK266923.1	<i>Aedes albopictus</i>	Ecuador: Lita	9	---	This study
MF148286.1	<i>Aedes albopictus</i>	Malaysia: Selangor	9	H38	Adilah-Amrannudin et al., unpublished
MH921569.1	<i>Aedes albopictus</i>	Cameroon	9	H02	Kamgang et al., unpublished
MN997608.1	<i>Aedes albopictus</i>	Colombia: Antioquia, Murind	9	---	Acosta et al., 2020 (Direct submission)
MN997609.1	<i>Aedes albopictus</i>	Colombia: Antioquia, Vigia del Fuerte	9	---	Acosta et al., 2020 (Direct submission)
MN997610.1	<i>Aedes albopictus</i>	Colombia: Choco, Bellavista	9	---	Acosta et al., 2020 (Direct submission)
MN997611.1	<i>Aedes albopictus</i>	Colombia: Antioquia, Murindo	9	---	Acosta et al., 2020 (Direct submission)
MT345357.1	<i>Aedes albopictus</i>	Democratic Republic of the Congo: Kinshasa	9	---	Wat'senga Tezzo et al., 2021
MT345358.1	<i>Aedes albopictus</i>	Democratic Republic of the Congo: Kinshasa	9	---	Wat'senga Tezzo et al., 2021



**Figure S1.** Triangular plot produced by the Structure, showing only one genetic cluster in the Ecuadorian populations of *Aedes albopictus*.



**Figure S2.** Bar plot produced by the Structure, showing only one genetic cluster in the Ecuadorian populations of *Aedes albopictus*.