

Coconut lethal yellowing-like diseases: Insights from predicting potential distribution under different climate change scenarios

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Table S1. Occurrence points for phytoplasmas, causal agent of lethal yellowing disease in the study areas including towns, strains and source of collection.

Country	Location	Latitude	Longitude	Strain	Source
Ghana					
	Cape 3 points	5.8272222	0.9694444	16SrXXII-B	Survey
	Dzalukope	5.8897222	0.9872222	16SrXXII-B	Survey
	Keta	5.9027778	0.9863889	16SrXXII-B	Survey
	Adina	6.0333333	1.0669444	16SrXXII-B	Survey
	Denu	6.0955556	1.1522222	16SrXXII-B	Survey
	Agbozume	6.0716667	1.0344444	16SrXXII-B	Survey
	Woe	5.8213889	0.9558333	16SrXXII-B	Survey
	Tegbi	5.8505556	0.9775	16SrXXII-B	Survey
	Aflao	6.1138889	1.1983333	16SrXXII-B	Survey
	Kedzi	5.9783333	1.0183333	16SrXXII-B	Survey
	Morea	5.1302778	-1.2036111	16SrXXII-B	Survey
	Abakrampa	5.2463889	-1.2308333	16SrXXII-B	Survey
	Eguafo	5.1313889	-1.2794444	16SrXXII-B	Survey
	Apam	5.2941667	-0.7394444	16SrXXII-B	Survey
	Abuesi	4.9869444	-1.64	16SrXXII-B	Survey
	Hemang	5.4516667	-2.1288889	16SrXXII-B	Survey
	Eduma	5.9552778	-0.9766667	16SrXXII-B	Survey
	Asebu	5.21	-1.1694444	16SrXXII-B	Survey
	Asuansi	5.3008333	-1.2597222	16SrXXII-B	Survey
	Narkwu	5.2088889	-0.9355556	16SrXXII-B	Survey
	Mumford	5.2627778	-0.7577778	16SrXXII-B	Survey
	Efutu Breman	5.2033333	-1.3216667	16SrXXII-B	Survey
	Abura Gyabenkrom	5.3380556	-1.1711111	16SrXXII-B	Survey
	Mankrong junction	5.6405556	-0.6166667	16SrXXII-B	Survey

	Awutu Nfafo	5.6986111	-0.6069444	16SrXXII-B	Survey
	Akrabong	5.6	-0.5497222	16SrXXII-B	Survey
	Obrachire	5.6547222	-0.5813889	16SrXXII-B	Survey
	Kissi	5.0855556	-1.5125	16SrXXII-B	Survey
	Domnase	5.3444444	-1.0883333	16SrXXII-B	Survey
	Kokoado	5.1208333	-1.2494444	16SrXXII-B	Survey
	Agona Swedro	5.5330556	-0.7061111	16SrXXII-B	Survey
	Cape 3 Points	4.7430556	-2.0902778	16SrXXII-B	Survey
	Princes Town	4.7955556	-2.1338889	16SrXXII-B	Survey
	Dixcove	4.7947222	-1.9469444	16SrXXII-B	Survey
	AxIM	4.8663889	-2.2405556	16SrXXII-B	Survey
	Akwidoa	4.7616667	-2.0322222	16SrXXII-B	Survey
	Funko	4.8741667	-1.8133333	16SrXXII-B	Survey
	Apowu	4.8958333	-1.8166667	16SrXXII-B	Survey
	Amanfulkuma	4.8780556	-1.7902778	16SrXXII-B	Survey
	Asanta	4.9111111	-2.2858333	16SrXXII-B	Survey
	Sekondi Takoradi	4.9022222	-1.7830556	16SrXXII-B	Survey
	Banso	5.0522222	-1.8969444	16SrXXII-B	Survey
	Beahy	4.8963889	-1.8469444	16SrXXII-B	Survey
	Tumentu	4.8819444	-2.0616667	16SrXXII-B	Survey
	Aboadze	4.9716667	-1.6588889	16SrXXII-B	Survey
	Shama	5.0202778	-1.6266667	16SrXXII-B	Survey
	Miemia	4.8091667	-2.1686111	16SrXXII-B	Survey
	Domunli	4.8166667	-2.1769444	16SrXXII-B	Survey
	Ejan	4.8369444	-2.205	16SrXXII-B	Survey
	Beyin	4.9894444	-2.5783333	16SrXXII-B	Survey
	Esiana	4.935	-2.3572222	16SrXXII-B	Survey
	Atuabo	4.9961111	-2.625	16SrXXII-B	Survey
	Adubrim	5.1030556	-2.3388889	16SrXXII-B	Survey
	Eikube	4.9647222	-2.4708333	16SrXXII-B	Survey

	Agona	4.8886111	-1.9663889	16SrXXII-B	Survey
	Nkroful	4.9663889	-2.3236111	16SrXXII-B	Survey
	Kikam	4.9325	-2.3358333	16SrXXII-B	Survey
	Telekubokaze	4.9775	-2.32	16SrXXII-B	Survey
	Elubo	5.2883333	-2.7727778	16SrXXII-B	Survey
	Bobroma	4.9236111	-2.3155556	16SrXXII-B	Survey
	Bomoakpole	4.9888889	-2.3277778	16SrXXII-B	Survey
	Apemenyim	4.9213889	-1.9802778	16SrXXII-B	Survey
	Bawjiase	5.6813889	-0.5541667	16SrXXII-B	Survey
	Ketan	4.9519444	-1.7302778	16SrXXII-B	Survey
	Elmina	5.1055556	-1.7252778	16SrXXII-B	Survey
	Kisi	5.0875	-1.5127778	16SrXXII-B	Survey
	Komenda	5.0555556	-1.4930556	16SrXXII-B	Survey
	Anaji	4.9313889	-1.7769444	16SrXXII-B	Survey
	Cape Coast	5.1319444	-1.2791667	16SrXXII-B	Survey
	Kwesimintim	4.9130556	-1.7888889	16SrXXII-B	Survey
	Kansaworodo	4.9336111	-1.7486111	16SrXXII-B	Survey
	Benso	5.1608333	-1.8911111	16SrXXII-B	Survey
	Apremdo	4.9052778	-1.7963889	16SrXXII-B	Survey
	Alomatype	5.0588889	-2.9330556	16SrXXII-B	Survey
	Gyawu Wharf	5.0855556	-2.9405556	16SrXXII-B	Survey
	Half Assini	5.0519444	-2.8791667	16SrXXII-B	Survey
	Ahobre	5.0411111	-2.835	16SrXXII-B	Survey
	Old Edabo	5.0475	-2.8647222	16SrXXII-B	Survey
	Kanga	5.0063889	-2.6747222	16SrXXII-B	Survey
	Bakanta	4.9755556	-2.5211111	16SrXXII-B	Survey
	Daboase	5.1383333	-1.6588889	16SrXXII-B	Survey
	Yamaransa	5.1663889	-1.1994444	16SrXXII-B	Survey
	Fanti Nyankumasi	5.3788889	-1.1530556	16SrXXII-B	Survey
	Abura Dunkwa	5.3375	-1.1713889	16SrXXII-B	Survey

	Abakrampa	5.2463889	-1.2308333	16SrXXII-B	Survey
	Nyakrom	5.6333333	-0.8827778	16SrXXII-B	Survey
	Dwabor	5.1775	-1.4852778	16SrXXII-B	Survey
	Mpohor	4.9716667	-1.8938889	16SrXXII-B	Survey
Tanzania			α		
	Newala	-10.636111	39.236667	16SrIV-C	International Workshop on Lethal Yellowing Diseases on Coconut, Ghana, Accra, 3-6 June 2008
	Tandahi	-10.730833	39.571389	16SrIV-C	International Workshop on Lethal Yellowing Diseases on Coconut, Ghana, Accra, 3-6 June 2008
	Lindi	-9.9855556	39.698611	16SrIV-C	International Workshop on Lethal Yellowing Diseases on Coconut, Ghana, Accra, 3-6 June 2008
	Mkuranga	-7.1219444	39.203889	16SrIV-C	International Workshop on Lethal Yellowing Diseases on Coconut, Ghana, Accra, 3-6 June 2008
	Mafia	-7.8683333	39.754167	16SrIV-C	International Workshop on Lethal Yellowing Diseases on Coconut, Ghana, Accra, 3-6 June 2008
	Kibaha	-6.7811111	38.992778	16SrIV-C	International Workshop on Lethal Yellowing Diseases on Coconut, Ghana, Accra, 3-6 June 2008
	Kinondoni	-6.7030556	39.112222	16SrIV-C	International Workshop on Lethal Yellowing Diseases on Coconut, Ghana, Accra, 3-6 June 2008
	Temeke	-6.9461111	39.444444	16SrIV-C	International Workshop on Lethal Yellowing Diseases on Coconut, Ghana, Accra, 3-6 June 2008

	Ilala	-6.925	39.132778	16SrIV-C	International Workshop on Lethal Yellowing Diseases on Coconut, Ghana, Accra, 3-6 June 2008
	Agamoyo	-6.4452778	38.898889	16SrIV-C	International Workshop on Lethal Yellowing Diseases on Coconut, Ghana, Accra, 3-6 June 2008
	Pangani	-5.4252778	38.975833	16SrIV-C	International Workshop on Lethal Yellowing Diseases on Coconut, Ghana, Accra, 3-6 June 2008
	Muheza	-5.1758333	38.791667	16SrIV-C	International Workshop on Lethal Yellowing Diseases on Coconut, Ghana, Accra, 3-6 June 2008
	Tanga	-5.0883333	39.102222	16SrIV-C	International Workshop on Lethal Yellowing Diseases on Coconut, Ghana, Accra, 3-6 June 2008
	Korogwe	-5.1563889	39.448056	16SrIV-C	International Workshop on Lethal Yellowing Diseases on Coconut, Ghana, Accra, 3-6 June 2008
	Kilwa	-8.9655556	39.496944	16SrIV-C	International Workshop on Lethal Yellowing Diseases on Coconut, Ghana, Accra, 3-6 June 2008
	Rufigi	-7.8763889	38.818333	16SrIV-C	International Workshop on Lethal Yellowing Diseases on Coconut, Ghana, Accra, 3-6 June 2008
	Ulanga	-8.9730556	36.780556	16SrIV-C	International Workshop on Lethal Yellowing Diseases on Coconut, Ghana, Accra, 3-6 June 2008
	Mtrara	-10.311111	40.175833	16SrIV-C	International Workshop on Lethal Yellowing Diseases on Coconut, Ghana, Accra, 3-6 June 2008

	Bayamoyo	-6.4455556	38.898889	16SrIV-C	International Workshop on Lethal Yellowing Diseases on Coconut, Ghana, Accra, 3-6 June 2008
	Morogoro	-6.8266667	37.658889	16SrIV-C	International Workshop on Lethal Yellowing Diseases on Coconut, Ghana, Accra, 3-6 June 2008
MOZAMBIQUE					International Workshop on Lethal Yellowing Diseases on Coconut, Ghana, Accra, 3-6 June 2008
	Chine	-25.523333	32.452222	16SrXXII-A, IV-B, IV-C	International Workshop on Lethal Yellowing Diseases on Coconut, Ghana, Accra, 3-6 June 2008
	Inhassunge	-18.115	36.852222	16SrXXII-A	International Workshop on Lethal Yellowing Diseases on Coconut, Ghana, Accra, 3-6 June 2008
	Maguival	-17.835556	37.1225	16SrXXII-A	International Workshop on Lethal Yellowing Diseases on Coconut, Ghana, Accra, 3-6 June 2008
	Macuse	-17.716944	37.191389	16SrXXII-A	International Workshop on Lethal Yellowing Diseases on Coconut, Ghana, Accra, 3-6 June 2008
	Mabala	-17.501389	36.340556	16SrXXII-A	International Workshop on Lethal Yellowing Diseases on Coconut, Ghana, Accra, 3-6 June 2008
	Raraga	-17.449722	37.681667	16SrXXII-A	International Workshop on Lethal Yellowing Diseases on Coconut, Ghana, Accra, 3-6 June 2008
	Pebane	-17.270833	38.155556	16SrXXII-A	International Workshop on Lethal Yellowing Diseases on Coconut, Ghana, Accra, 3-6 June 2008

	Naburi	-16.7825	38.880556	16SrXXII-A	International Workshop on Lethal Yellowing Diseases on Coconut, Ghana, Accra, 3-6 June 2008
	Moma	-16.751111	39.233056	16SrXXII-A	International Workshop on Lethal Yellowing Diseases on Coconut, Ghana, Accra, 3-6 June 2008
	Larde	-16.481389	39.7175	16SrXXII-A	International Workshop on Lethal Yellowing Diseases on Coconut, Ghana, Accra, 3-6 June 2008
	Angoche	-16.215833	39.913889	16SrXXII-A	International Workshop on Lethal Yellowing Diseases on Coconut, Ghana, Accra, 3-6 June 2008
	Micaune	-18.257778	36.653611	16SrXXII-A	International Workshop on Lethal Yellowing Diseases on Coconut, Ghana, Accra, 3-6 June 2008
TOGO					International Workshop on Lethal Yellowing Diseases on Coconut, Ghana, Accra, 3-6 June 2008
	Aneho	6.2275	1.5813889	16SrXXII -A	International Workshop on Lethal Yellowing Diseases on Coconut, Ghana, Accra, 3-6 June 2008
	Loare	6.125	1.5088889	16SrXXII-A	International Workshop on Lethal Yellowing Diseases on Coconut, Ghana, Accra, 3-6 June 2008
	Tiogoville	6.2258333	1.4752778	16SrXXII-A	International Workshop on Lethal Yellowing Diseases on Coconut, Ghana, Accra, 3-6 June 2008
	Lavangile	6.2344444	1.6163889	16SrXXII-A	International Workshop on Lethal Yellowing Diseases on Coconut, Ghana, Accra, 3-6 June 2008

	Wogbo	6.2883333	1.5058333	16SrXXII-A	International Workshop on Lethal Yellowing Diseases on Coconut, Ghana, Accra, 3-6 June 2008
	Vogan	6.3338889	1.5277778	16SrXXII-A	International Workshop on Lethal Yellowing Diseases on Coconut, Ghana, Accra, 3-6 June 2008
	Aklakou	6.3444444	1.7125	16SrXXII-A	International Workshop on Lethal Yellowing Diseases on Coconut, Ghana, Accra, 3-6 June 2008
	Anfoin	6.3338889	1.6088889	16SrXXII-A	International Workshop on Lethal Yellowing Diseases on Coconut, Ghana, Accra, 3-6 June 2008
	Badougbe	6.24	1.5141667	16SrXXII-A	International Workshop on Lethal Yellowing Diseases on Coconut, Ghana, Accra, 3-6 June 2008
	Abodrafo	6.2075	1.4755556	16SrXXII-A	International Workshop on Lethal Yellowing Diseases on Coconut, Ghana, Accra, 3-6 June 2008
	Kagome	6.1672222	1.3	16SrXXII-A	International Workshop on Lethal Yellowing Diseases on Coconut, Ghana, Accra, 3-6 June 2008
	Baguida	6.1627778	1.3283333	16SrXXII-A	International Workshop on Lethal Yellowing Diseases on Coconut, Ghana, Accra, 3-6 June 2008
	Agbodrafo	6.2	1.4627778	16SrXXII-A	International Workshop on Lethal Yellowing Diseases on Coconut, Ghana, Accra, 3-6 June 2008
	Loeator	6.2325	1.6091667	16SrXXII-A	International Workshop on Lethal Yellowing Diseases on Coconut, Ghana, Accra, 3-6 June 2008

IVORY COAST	Grand-Lahou	5.1363889	-5.0261111	16SrXXII-B	Arocha-Rosete et al. (2014),International Workshop on Lethal Yellowing Diseases on Coconut, Ghana, Accra, 3-6 June 2008
	Grand-Lahou	5.1352778	-5.0327778	16SrXXII-B	Arocha-Rosete et al. (2014),International Workshop on Lethal Yellowing Diseases on Coconut, Ghana, Accra, 3-6 June 2008
	Grand-Lahou	5.1344444	-5.0369444	16SrXXII-B	Arocha-Rosete et al. (2014),International Workshop on Lethal Yellowing Diseases on Coconut, Ghana, Accra, 3-6 June 2008
	Grand-Lahou	5.1355556	-5.0219444	16SrXXII-B	Arocha-Rosete et al. (2014),International Workshop on Lethal Yellowing Diseases on Coconut, Ghana, Accra, 3-6 June 2008
	Grand-Lahou	5.1355556	-5.0169444	16SrXXII-B	Arocha-Rosete et al. (2014),International Workshop on Lethal Yellowing Diseases on Coconut, Ghana, Accra, 3-6 June 2008
	Grand-Lahou	5.1361111	-5.0108333	16SrXXII-B	Arocha-Rosete et al. (2014),International Workshop on Lethal Yellowing Diseases on Coconut, Ghana, Accra, 3-6 June 2008
	Braffedon	5.1383333	-4.9911111	16SrXXII-B	Arocha-Rosete et al. (2014),International Workshop on Lethal Yellowing Diseases on Coconut, Ghana, Accra, 3-6 June 2008
	Braffedon	5.1380556	-4.9897222	16SrXXII-B	Arocha-Rosete et al. (2014),International Workshop on Lethal Yellowing Diseases on Coconut, Ghana, Accra, 3-6 June 2008
	Braffedon	5.1380556	-4.9880556	16SrXXII-B	Arocha-Rosete et al. (2014),International Workshop on Lethal Yellowing Diseases on Coconut, Ghana, Accra, 3-6 June 2008
	Braffedon	5.1383333	-4.9861111	16SrXXII-B	Arocha-Rosete et al. (2014),International Workshop on Lethal Yellowing Diseases on Coconut, Ghana, Accra, 3-6 June 2008

	Braffedon	5.1383333	-4.9841667	16SrXXII-B	Arocha-Rosete et al. (2014),International Workshop on Lethal Yellowing Diseases on Coconut, Ghana, Accra, 3-6 June 2008
	LOCATION 12	5.1383333	-4.9816667	16SrXXII-B	Arocha-Rosete et al. (2014),International Workshop on Lethal Yellowing Diseases on Coconut, Ghana, Accra, 3-6 June 2008
NIGERIA	Awka	7.0825	6.2225	16SrXXII-A	Ojomo and Osagie(1996), Osagie and Asemota (1994), Eziashi and Omamor (2010),Ojomo et al. (2001), International Workshop on Lethal Yellowing Diseases on Coconut, Ghana, Accra, 3-6 June 2008
	Abak	7.7772222	5	16SrXXII-A	Ojomo and Osagie(1996), Osagie and Asemota (1994), Eziashi and Omamor (2010),Ojomo et al. (2001), International Workshop on Lethal Yellowing Diseases on Coconut, Ghana, Accra, 3-6 June 2008
	Ubakda	7.4861111	5.5161111	16SrXXII-A	Ojomo and Osagie(1996), Osagie and Asemota (1994), Eziashi and Omamor (2010),Ojomo et al. (2001), International Workshop on Lethal Yellowing Diseases on Coconut, Ghana, Accra, 3-6 June 2008
	Igbarim	6.9491667	6.4	16SrXXII-A	Ojomo and Osagie(1996), Osagie and Asemota (1994), Eziashi and Omamor (2010),Ojomo et al. (2001), International Workshop on Lethal Yellowing Diseases on Coconut, Ghana, Accra, 3-6 June 2008

	Ubiaja	6.3966667	6.6791667	16SrXXII-A	Ojomo and Osagie(1996), Osagie and Asemota (1994), Eziashi and Omamor (2010),Ojomo et al. (2001), International Workshop on Lethal Yellowing Diseases on Coconut, Ghana, Accra, 3-6 June 2008
	Nufor	5.6	6.3386111	16SrXXII-A	Ojomo and Osagie(1996), Osagie and Asemota (1994), Eziashi and Omamor (2010),Ojomo et al. (2001), International Workshop on Lethal Yellowing Diseases on Coconut, Ghana, Accra, 3-6 June 2008
	Usen	5.3866667	6.7341667	16SrXXII-A	Ojomo and Osagie(1996), Osagie and Asemota (1994), Eziashi and Omamor (2010),Ojomo et al. (2001), International Workshop on Lethal Yellowing Diseases on Coconut, Ghana, Accra, 3-6 June 2008
	Loaton	7.0733333	6.0375	16SrXXII-A	Ojomo and Osagie(1996), Osagie and Asemota (1994), Eziashi and Omamor (2010),Ojomo et al. (2001), International Workshop on Lethal Yellowing Diseases on Coconut, Ghana, Accra, 3-6 June2008
	Rogany	6.8352778	6.105	16SrXXII-A	Ojomo and Osagie(1996), Osagie and Asemota (1994), Eziashi and Omamor (2010),Ojomo et al. (2001), International Workshop on Lethal Yellowing Diseases on Coconut, Ghana, Accra, 3-6 June2008

	Igbarian	6.9366667	6.4016667	16SrXXII-A	OjomoandOsagie(1996), Osagie and Asemota (1994), Eziashi and Omamor (2010),Ojomo et al. (2001), International Workshop on Lethal Yellowing Diseases on Coconut, Ghana, Accra, 3-6 June2008
	Umunedo	6.3063889	6.2580556	16SrXXII-A	Ojomo and Osagie(1996), Osagie and Asemota (1994), Eziashi and Omamor (2010),Ojomo et al. (2001), International Workshop on Lethal Yellowing Diseases on Coconut, Ghana, Accra, 3-6 June2008
	Ogwashi	6.5125	6.2063889	16SrXXII-A	Ojomo and Osagie(1996), Osagie and Asemota (1994), Eziashi and Omamor (2010),Ojomo et al. (2001), International Workshop on Lethal Yellowing Diseases on Coconut, Ghana, Accra, 3-6 June 2008
	Umouahia	7.4822222	5.5208333	16SrXXII-A	Ojomo and Osagie(1996), Osagie and Asemota (1994), Eziashi and Omamor (2010),Ojomo et al. (2001), International Workshop on Lethal Yellowing Diseases on Coconut, Ghana, Accra, 3-6 June 2021
	Badagry	2.8872222	6.4313889	16SrXXII-A	OjomoandOsagie(1996), Osagieand Asemota (1994), Eziashi and Omamor (2010),Ojomo et al. (2001), International Workshop on Lethal Yellowing Diseases on Coconut, Ghana, Accra, 3-6 June 2008
CAMEROON	Sosonre	9.9002778	2.9202778	16SrXXII-A	Dollet et al. (1977)

	Biro	9.9041667	2.93	16SrXXII-A	Dollet et al. (1977)
	Biro	9.9152778	2.9269444	16SrXXII-A	Dollet et al. (1977)
	Biro	9.9105556	2.94	16SrXXII-A	Dollet et al. (1977)
	Biro	9.9097222	2.9525	16SrXXII-A	Dollet et al. (1977)
	Biro	9.9294444	2.95	16SrXXII-A	Dollet et al. (1977)
	Biro	9.9113889	2.9569444	16SrXXII-A	Dollet et al. (1977)
Antigua and Barbuda		17.052798	-61.895418	16SrIV-A	CABI, 2014, Gur et al. 2016
Bahamas		25.043246	-77.34855	16SrIV-A	CABI, 2014, Gur et al. 2016
Belize		17.164428	-88.491148	16SrIV-A	CABI, 2014, Gur et al. 2016
Cayman Island		19.28761	-81.251132	16SrIV-A	CABI, 2014, Gur et al. 2016
Cuba		21.563604	-77.041908	16SrIV-F, IV-A	CABI, 2014, Gur et al. 2016
Dominican Republic		15.600971	-61.398852	16SrIV-Ec, IV-A	CABI, 2014, Gur et al. 2016
Guadeloupe		16.242489	-61.522762	16SrIV-A	CABI, 2014, Gur et al. 2016
Guatemala		14.61815	-92.317058	16SrIV-A	CABI, 2014, Gur et al. 2016
Haiti		18.229823	-72.420181	16SrIV-A	CABI, 2014, Gur et al. 2016
Honduras		15.266183	-83.771049	16SrIV-A	CABI, 2014, Gur et al. 2016
Jamaica		17.963877	-76.795886	16SrIV-A	CABI, 2014, Gur et al. 2016
Mexico		20.63939	-105.233840	16SrIV-D	CABI, 2014, Gur et al. 2016

Netherlands Antilles		12.173287	-68.288568	16Sr IV-A	EPPO, 2020
St. Kitts and Nevis		17.374276	-62.851754	16Sr IV-A	CABI, 2014, Gur et al. 2016
USA	Florida	27.083435	-80.123245	16Sr IV-F	CABI, 2014, Gur et al. 2016
	Louisiana	30.218549	-93.37657	16Sr IV-D	CABI, 2014, Gur et al. 2016
	Texas	26.108225	-97.167038	16Sr IV-D	CABI, 2014, Gur et al. 2016

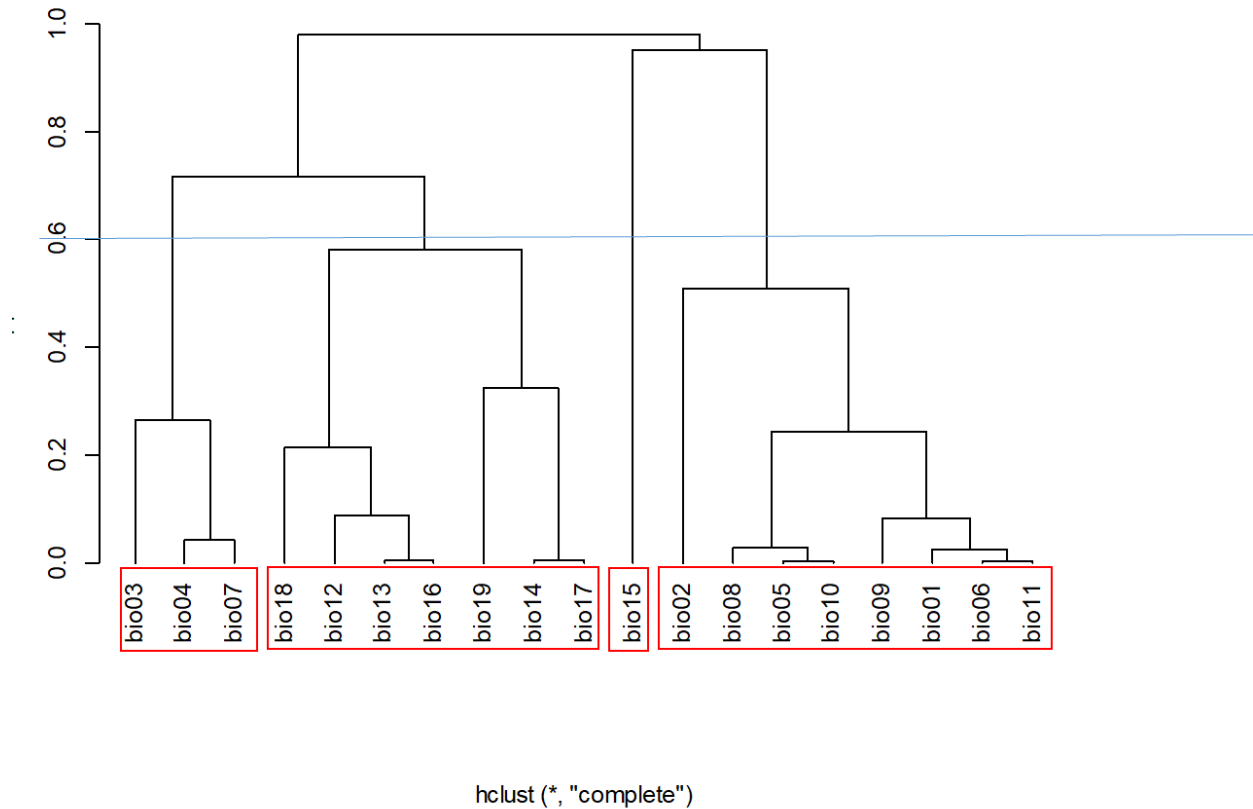


Figure S1. Cluster dendrogram of bioclimatic variables intercorrelation based on the $1-|rp|$ similarity. Pearson correlation for predictor climatic variables used for modelling the ecological niche for phytoplasma, the causal agent of lethal yellowing-like diseases of coconut, with which minimum temperature of coldest month (bio6), temperature seasonality (bio4), precipitation seasonality (bio15), Precipitation of warmest quarter (bio16) were selected for MaxEnt modelling.