

**Additional File 2: OrthoMCL clustering results.**

<p style="text-align: center;"><b>MaPKS1 (MANI_014762) Backbone gene*</b></p>	AcI EAW12049.1	AcI EAW12177.1	Afi EAW17018.1	
	Afi EAW19983.1	Afu EAL84933.1	Afu EAL86540.1	
	Ani XP001390084.2	Ani XP001393501.2		
	Ani XP001395291.2	Ano KNG83914.1	Ano KNG86665.1	
	Ano KNG91356.1	Aot XP002843683.1	Aot XP002846669.1	
	Aot XP002848394.1	Aud GAO81768.1	Aud GAO86048.1	
	Aud GAO89462.1	Aud GAO90476.1	Cim EAS31602.3	
	Cim EAS32138.2	Cim EAS33665.3	Cim EAS34547.3	
	Cpo EFW13280.1	Cpo EFW17356.1	Cpo EFW20973.1	
	Cpo EFW23245.1	Cps KMM68116.1	Cps KMM70187.1	
	Cps KMM71002.1	Cps KMM72476.1	Csu KDN60752.1	
	Csu KDN67932.1	Csu KDN68948.1	Csu KDN72002.1	
	Mac EFY84249.1	Mac EFY85737.1	Mac EFY89365.1	
	MANI_006324	MANI_020781	Mbr KID60724.1	
	Mbr KID72947.1	Mbr KID74158.1	Mgu KID81974.1	
	Mgu KID82773.1	Mgu KID83470.1	Mgu KID84064.1	
	Mma KID95125.1	Mma KID96266.1	Mma KID99274.1	
	Mmy KXX79183.1	Mmy KXX79217.1	Mro EFY94576.2	
	Mro EFY96642.1	Mro EFY96950.1	Oma KIM92947.1	
	Oma KIM94086.1	Oma KIM97742.1	Oma KIN05207.1	
	Pdi EKV06857.1	Pdi EKV16250.1	Pte EFQ90032.1	
	Pte EFQ91438.1	Pte EFQ92321.1	Tce GAM33949.1	
	Tce GAM33954.1	Tce GAM33973.1	Tce GAM35873.1	
	Tce GAM41193.1	Tce GAM41694.1	The CEJ81468.1	
	The CEJ90349.1	The CEJ91591.1	Tis CRG86486.1	
	Tis CRG88297.1	Tis CRG91771.1	Tis CRG91775.1	
	Tis CRG92018.1	Tma KFX42009.1	Tma KFX41537.1	
	Tma KFX45541.1	Tma KFX45542.1	Tma KFX46688.1	
	Tma KFX46693.1	Top KND87339.1	Top KND88239.1	
	Top KND93702.1	Top KND93710.1	Top KND93709.1	
	Tst EED12110.1	Tst EED12124.1	Tst EED18001.1	
	Tst EED22580.1	Tst EED22651.1	Tst EED22678.1	
	Tst EED22683.1	Tte AEO64805.1	Tte AEO67399.1	
	Tte AEO68597.1	Tte AEO67410.1	Abe EFE29950.1	
	Ach KFH44362.1	Ani XP001393524.2	Lma XP003842913.1	
	Mal KHN98032.1	Mgy EFR04739.1	Npa EOD53036.1	
	Psp KFX98702.1	Sap KEZ43375.1	Tin EZF36181.1	
	Tru EGD89109.2	Tso EZF74361.1	Tve EFE42799.1	
	Ano KNG83518.1	Lma XP003842914.1	Psp KFX99638.1	
	<p style="text-align: center;"><b>MaNRPS-PKS2 (MANI_018878) Backbone gene*</b></p>	Abe EFE30182.1	Abe EFE31625.1	Abe EFE33181.1
		Abe EFE33214.1	Abe EFE33589.1	Abe EFE34630.1
		Abe EFE36394.1	Ach KFH40504.1	Ach KFH40639.1
		Ach KFH40913.1	Ach KFH41335.1	Ach KFH42117.1
		Ach KFH43187.1	Ach KFH43887.1	Ach KFH43961.1
		Ach KFH44143.1	Ach KFH44396.1	Ach KFH44962.1

Ach KFH45102.1	Ach KFH45393.1	Ach KFH45702.1
Ach KFH46614.1	Ach KFH47519.1	Ach KFH44074.1
Ach KFH42871.1	Ach KFH45364.1	Ach KFH40930.1
Ach KFH44047.1	Ach KFH44869.1	Acl EAW07064.1
Acl EAW07624.1	Acl EAW08895.1	Acl EAW09019.1
Acl EAW09117.1	Acl EAW11760.1	Acl EAW12170.1
Acl EAW12336.1	Acl EAW12416.1	Acl EAW13625.1
Acl EAW14856.1	Acl EAW08950.1	Acl EAW10019.1
Acl EAW13520.1	Acl EAW13531.1	Acl EAW15062.1
Afi EAW16387.1	Afi EAW16886.1	Afi EAW17052.1
Afi EAW17483.1	Afi EAW19759.1	Afi EAW21094.1
Afi EAW23638.1	Afi EAW23793.1	Afi EAW16804.1
Afi EAW20415.1	Afu EAL85113.2	Afu EAL86424.2
Afu EAL89230.2	Afu EAL91103.2	Afu EAL85129.1
Afu EAL87227.2	Afu EAL92117.1	Afu EAL87813.1
Ani XP001388555.2	Ani XP001389118.2	Ani XP001390513.2
Ani XP001391193.2	Ani XP001393447.2	
Ani XP001393508.2	Ani XP001394029.2	
Ani XP001394423.2	Ani XP001394543.2	Ani XP001395346.2
Ani XP001395352.1	Ani XP001397040.2	Ani XP001398521.2
Ani XP001400073.2	Ani XP001389116.2	Ani XP001390395.2
Ani XP001394387.1	Ani XP001394579.1	Ani XP001396949.2
Ani XP001392496.2	Ani XP001394581.2	Ani XP001396381.2
Ani XP001396752.1	Ani XP001397313.2	Ani XP001401800.2
Ani XP001402359.2	Ani XP001393844.2	Ani XP003188554.1
Ani XP001394625.2	Ani XP001396431.2	Ani XP001399961.2
Ani XP001400817.2	Ani XP003188850.1	Ani XP001395761.2
Ano KNG81069.1	Ano KNG81092.1	Ano KNG81162.1
Ano KNG82131.1	Ano KNG83279.1	Ano KNG83443.1
Ano KNG83684.1	Ano KNG84539.1	Ano KNG85249.1
Ano KNG87291.1	Ano KNG88285.1	Ano KNG88668.1
Ano KNG88685.1	Ano KNG90368.1	Ano KNG90587.1
Ano KNG90606.1	Ano KNG90940.1	Ano KNG91513.1
Ano KNG89430.1	Ano KNG91625.1	Ano KNG84699.1
Ano KNG85583.1	Ano KNG90546.1	Ano KNG91681.1
Aot XP002842735.1		
Aot XP002843368.1	Aot XP002843704.1	Aot XP002844003.1
Aot XP002846667.1	Aot XP002846808.1	Aot XP002847329.1
Aot XP002847685.1	Aot XP002850361.1	Aot XP002842777.1
Aot XP002843932.1	Aot XP002847170.1	Aud GAO81200.1
Aud GAO81231.1	Aud GAO81330.1	Aud GAO81771.1
Aud GAO81964.1	Aud GAO82999.1	Aud GAO83635.1
Aud GAO85953.1	Aud GAO85988.1	Aud GAO86083.1
Aud GAO86285.1	Aud GAO87672.1	Aud GAO87681.1
Aud GAO88286.1	Aud GAO90373.1	Aud GAO90494.1
Aud GAO90565.1	Aud GAO81540.1	Aud GAO86271.1
Cim EAS31150.3	Cim EAS34545.3	Cim EAS31990.3

Cim EAS37044.3	Cpo EFW14129.1	Cpo EFW17358.1
Cpo EFW16137.1	Cpo EFW22349.1	Cps KMM64104.1
Cps KMM71000.1	Cps KMM67662.1	Cps KMM72316.1
Csu KDN60538.1	Csu KDN64005.1	Csu KDN68160.1
Csu KDN68596.1	Csu KDN71930.1	Csu KDN72402.1
Csu KDN61564.1	Csu KDN62563.1	Csu KDN65093.1
Csu KDN68946.1	Csu KDN65693.1	Csu KDN67074.1
Csu KDN70595.1	Csu KDN72279.1	Csu KDN68224.1
Csu KDN70032.1	Csu KDN66389.1	Csu KDN70949.1
Csu KDN71389.1	Csu KDN66474.1	Csu KDN67432.1
Csu KDN68757.1	Csu KDN69972.1	Csu KDN70187.1
Csu KDN70914.1	Csu KDN71859.1	Csu KDN72352.1
Csu KDN72099.1	Csu KDN67744.1	Csu KDN70961.1
Lma XP003834096.1	Lma XP003842471.1	
Lma XP003843013.1	Lma XP003845353.1	
Lma XP003834103.1	Lma XP003838273.1	
Lma XP003844080.1	Lma XP003844958.1	
Lma XP003844774.1	Mac EFY84462.1	Mac EFY85749.1
Mac EFY88029.1	Mac EFY85592.1	Mac EFY92873.1
Mal KHN93792.1	Mal KHN96044.1	Mal KHO00577.1
Mal KHN94261.1	Mal KHN94311.1	Mal KHN94379.1
MANI_001950	MANI_020791	MANI_004781
MANI_006158	MANI_006250	MANI_006783
MANI_110051	MANI_121659	MANI_023437
MANI_110978	MANI_012054	MANI_020125
MANI_021529	MANI_022470	MANI_025650
MANI_029455	Mbr KID59724.1	Mbr KID61511.1
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Mgu KID81791.1	Mgu KID82218.1	Mgu KID82736.1
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Mgu KID91268.1	Mgu KID84061.1	Mgu KID87248.1
Mgu KID91408.1	Mgu KID86000.1	Mgu KID86016.1
Mgy EFQ96791.1	Mgy EFQ96831.1	Mgy EFQ96902.1
Mgy EFQ96996.1	Mgy EFQ97313.1	Mgy EFQ98465.1
Mgy EFR01005.1	Mgy EFR01671.1	Mgy EFQ99795.1
Mgy EFR00806.1	Mgy EFR04190.1	Mgy EFR04320.1
Mgy EFR04828.1	Mma KID98764.1	Mma KID97497.1
Mma KID90834.1	Mma KID94120.1	Mma KID94121.1
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Mmy KXX74576.1	Mmy KXX79732.1	Mmy KXX75271.1
Mmy KXX75424.1	Mmy KXX75968.1	Mmy KXX76480.1
Mmy KXX76491.1	Mmy KXX77494.1	Mmy KXX79710.1
Mmy KXX82443.1	Mmy KXX74770.1	Mmy KXX77535.1
Mmy KXX82904.1	Mmy KXX75016.1	Mmy KXX76983.1
Mmy KXX79394.1	Mmy KXX80750.1	Mmy KXX81008.1
Mmy KXX82176.1	Mmy KXX75870.1	Mmy KXX83260.1
Mmy KXX82669.1	Mmy KXX80977.1	Mro EFY94315.2
Mro EFY94437.2	Mro EFY94573.1	Mro EFY95891.1
Mro EFY96026.1	Mro EFY96062.1	Mro EFY96790.1
Mro EFY98483.1	Mro EFZ00678.1	Mro EFZ03715.1
Mro EFY94872.2	Mro EFY96172.2	Mro EFY96241.2
Mro EFZ02044.1	Mro EFZ03354.1	Mro EFZ04272.1
Mro EFY94490.2	Mro EFY97775.2	Mro EFZ02119.2
Mro KHO10995.1	Mro KHO10996.1	Npa EOD43154.1
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Npa EOD47371.1	Npa EOD51041.1	Oma KIM92741.1
Oma KIM92842.1	Oma KIM93266.1	Oma KIM93865.1
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Oma KIM94801.1	Oma KIM95579.1	Oma KIM95626.1
Oma KIM97074.1	Oma KIM97314.1	Oma KIM98589.1
Oma KIM99715.1	Oma KIM99782.1	Oma KIN00612.1
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Oma KIN06913.1	Oma KIN09038.1	Oma KIM92883.1
Oma KIM94486.1	Oma KIM97138.1	Oma KIM97381.1
Oma KIM99830.1	Oma KIN02399.1	Pdi EKV04424.1
Pdi EKV05514.1	Pdi EKV06858.1	Pdi EKV11465.1
Pdi EKV12048.1	Pdi EKV13466.1	Pdi EKV17385.1
Pdi EKV10561.1	Pdi EKV19716.1	Pdi EKV06097.1
Pdi EKV13495.1	Pdi EKV13692.1	Pdi EKV18177.1
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Psp KFY03516.1	Psp KFX98753.1	Psp KFY01188.1
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Pte EFQ87243.1	Pte EFQ88351.1	Pte EFQ91289.1
Pte EFQ92322.1	Pte EFQ92956.1	Pte EFQ93721.1
Pte EFQ94415.1	Pte EFQ85730.1	Pte EFQ90137.1
Pte EFQ90138.1	Pte EFQ87497.1	Pte EFQ88531.1
Pte EFQ89733.1	Pte EFQ92739.1	Pte EFQ95051.1
Sap KEZ39405.1	Sap KEZ40049.1	Sap KEZ40612.1
Sap KEZ41293.1	Sap KEZ45498.1	Sap KEZ45627.1
Sap KEZ46536.1	Sap KEZ40559.1	Sap KEZ40819.1
Sap KEZ42792.1	Sap KEZ43366.1	Tce GAM33530.1

Tce GAM35872.1	Tce GAM36828.1	Tce GAM37528.1
Tce GAM37666.1	Tce GAM41922.1	Tce GAM42808.1
Tce GAM44116.1	Tce GAM35366.1	Tce GAM41187.1
Tce GAM42162.1	Tce GAM42968.1	Tce GAM38546.1
Tce GAM41899.1	Tce GAM41924.1	Tce GAM42258.1
Tce GAM42393.1	Tce GAM40954.1	The CEJ80659.1
The CEJ86142.1	The CEJ86637.1	The CEJ86639.1
The CEJ91944.1	The CEJ92557.1	The CEJ81082.1
The CEJ90334.1	The CEJ94083.1	The CEJ81590.1
The CEJ86573.1	The CEJ82961.1	The CEJ82962.1
The CEJ91945.1	Tin EZF33319.1	Tin EZF33403.1
Tin EZF33994.1	Tin EZF35978.1	Tin EZF36261.1
Tis CRG82770.1	Tis CRG86478.1	Tis CRG86497.1
Tis CRG86530.1	Tis CRG87308.1	Tis CRG87892.1
Tis CRG89167.1	Tis CRG89192.1	Tis CRG90947.1
Tis CRG90972.1	Tis CRG92461.1	Tis CRG92673.1
Tis CRG92715.1	Tis CRG83422.1	Tis CRG83700.1
Tis CRG83761.1	Tis CRG86029.1	Tis CRG87956.1
Tis CRG90802.1	Tis CRG90967.1	Tis CRG91166.1
Tis CRG91965.1	Tis CRG92280.1	Tis CRG92723.1
Tis CRG85198.1	Tis CRG90265.1	Tma KFX41168.1
Tma KFX41169.1	Tma KFX44029.1	Tma KFX41560.1
Tma KFX41251.1	Tma KFX41252.1	Tma KFX41383.1
Tma KFX46785.1	Tma KFX51797.1	Tma KFX52865.1
Tma KFX43763.1	Tma KFX43764.1	Tma KFX44733.1
Tma KFX48303.1	Tma KFX52867.1	Top KND86883.1
Top KND86893.1	Top KND87119.1	Top KND87310.1
Top KND87695.1	Top KND88257.1	Top KND89917.1
Top KND92549.1	Top KND94632.1	Top KND87975.1
Tru EGD84902.1	Tru EGD85602.1	Tru EGD86527.2
Tru EGD86562.1	Tru EGD91141.1	Tso EZF68845.1
Tso EZF71267.1	Tso EZF72769.1	Tso EZF72812.1
Tso EZF77964.1	Tst EED11515.1	Tst EED11953.1
Tst EED12350.1	Tst EED13058.1	Tst EED13571.1
Tst EED13647.1	Tst EED14251.1	Tst EED14366.1
Tst EED14393.1	Tst EED14463.1	Tst EED15402.1
Tst EED15547.1	Tst EED15709.1	Tst EED15802.1
Tst EED16637.1	Tst EED18128.1	Tst EED18841.1
Tst EED21572.1	Tst EED24614.1	Tst EED16635.1
Tst EED19830.1	Tst EED21266.1	Tte AEO62906.1
Tte AEO67408.1	Tte AEO63908.1	Tte AEO67303.1
Tte AEO68365.1	Tte AEO64476.1	Tte AEO67427.1
Tte AEO68274.1	Tve EFE38442.1	Tve EFE41038.1
Tve EFE44178.1	Tve EFE40994.1	Tve EFE41543.1
Tve EFE44717.1	Tve EFE41155.1	Tin EZF33402.1
Cim KJF61407.1	Cpo EFW19798.1	Cps KMM72254.1
Cps KMM72255.1	Mma KID90835.1	Tru KFL60619.1

	Tso EZF68429.1 Mgy EFQ96957.1 Tin EZF34624.1 The CEJ93554.1 Psp KFY00590.1 Mbr KID61232.1 Top KND87976.1 Aot XP002847311.1 Ani XP003188800.1 Afi EAW24573.1 Ani XP003188851.1 Npa EOD45514.1 Npa EOD51963.1 Mac EFY91835.1 MANI_0115518 Mbr KID75468.1 Pdi EKV18176.1	Tso EZF68430.1 Mgy EFQ96958.1 Tru EGD86700.2 Mac EFY92579.1 Mac EFY84245.1 Tce GAM41182.1 MANI_001951 Afu EAL86536.1 Afi EAW19771.1 Afu EAL86636.1 Ano KNG83926.1 Mac EFY88214.1 Mac EFY88213.1 Mma KID95486.1 Mro KHO10625.1 Mro EFY94354.1 Tce GAM36740.1	Mgy EFQ96956.1 Sap KEZ40857.1 Tso EZF72989.1 Oma KIM92884.1 Mma KID96522.1 Mma KID96523.1 Aud GAO90371.1 Ani XP003188799.1 Csu KDN72130.1 Ani XP003188601.1 Aot XP002845180.1 Lma XP003841875.1 Pdi EKV13493.1 Tst EED13941.1 Mbr KID73295.1 Pdi EKV14022.1
<b>MaTERP1 (MANI_010532) Backbone gene*</b>	Ach KFH43011.1 Aot XP002843072.1 Mgu KID82793.1 Mro EFY97806.1	Afi EAW24654.1 Aud GAO81617.1 Mgy EFQ96702.1	Afu EAL89316.1 Mbr KID65418.1 Mma KID93904.1
<b>MaTERP1 (MANI_010531) Backbone gene*</b>	Ach KFH43021.1 Aot XP002843067.1 Mgu KID82789.1 Mro EFY97802.2	Afi EAW24653.1 Aud GAO81618.1 Mgy EFQ96706.1	Afu EAL89317.1 Mbr KID65414.1 Mma KID93897.1
<b>MaTERP1 (MANI_010536)*</b>	Ach KFH40562.1 Aud GAO81614.1 Mma KID93907.1	Afi EAW24657.1 Mbr KID65421.1 Mro EFY97809.1	Afu EAL89313.1 Mgu KID82796.1
<b>MaTERP1 (MANI_010527) Backbone gene*</b>	Ach KFH40555.1 Aud GAO81615.1 Mma KID93908.1	Afi EAW24656.1 Mbr KID65422.1 Mro EFY97810.1	Afu EAL89314.2 Mgu KID82797.1
<b>MaTERP1 (MANI_010537)*</b>	Ach KFH43032.1 Aot XP002843073.1 Mgu KID82794.1 Mro EFY97807.1	Afi EAW24659.1 Aud GAO81612.1 Mgy EFQ96701.1	Afu EAL89311.1 Mbr KID65419.1 Mma KID93905.1
<b>MaTERP1 (MANI_010530) Backbone gene*</b>	Ach KFH43043.1 Aot XP002843068.1 Mgu KID82790.1 Mro EFY97803.1	Afi EAW24658.1 Aud GAO81613.1 Mgy EFQ96705.1	Afu EAL89312.1 Mbr KID65415.1 Mma KID93898.1
<b>MaTERP1 (MANI_010495)*</b>	Ach KFH43040.1 Aud GAO81619.1 Mgy EFQ96704.1	Afi EAW24652.1 Mbr KID65416.1 Mma KID93899.1	Afu EAL89318.1 Mgu KID82791.1 Mro EFY97804.1
<b>MaTERP1 (MANI_010512)*</b>	MANI_025019 Mgu KID82795.1 Mro EFY97808.1 Afi EAW24660.1	Mbr KID63604.1 Mgu KID85770.1 Abe EFE36095.1 Afu EAL89310.1	Mbr KID65420.1 Mro EFY95587.1 Ach KFH43984.1 Aot XP002846965.1

	Aud GAO81611.1 Mgy EFQ99030.1 Oma KIM93336.1 Top KND92088.1 Aud GAO90117.1 Top KND92083.	Mac EFY86899.1 Mma KID93906.1 The CEJ93288.1 Tso EZF72233.1 Oma KIM93571.1	Mal KHN94024.1 Npa EOD52809.1 Tin EZF34275.1 Tve EFE43788.1 Mma KID80879.1
<b>MaTERP1 (MANI_010594)*</b>	Ach KFH43025.1 Aot XP002843071.1 Mgu KID82792.1 Mro EFY97805.1	Afi EAW24655.1 Aud GAO81616.1 Mgy EFQ96703.1	Afu EAL89315.1 Mbr KID65417.1 Mma KID93903.1
<b>Transcription factor embedded in MaPKS1 cluster (MANI_112402)</b>	Tma KFX45543.1 Tma KFX45546.1 Ach KFH44401.1 Cim EAS31607.3 Lma XP003843017.1 Mmy KXX77532.1 Psp KFY01609.1 Top KND87343.1 Ani XP001395307.2 Mgu KID83467.1 Pte EFQ92323.1 Top KND88237.1 Aud GAO81772.1 Tce GAM33972.1	Tma KFX45544.1 Tma KFX45547.1 Acl EAW15012.1 Cpo EFW23250.1 Mal KHN98029.1 Npa EOD53046.1 Tce GAM33907.1 Tst EED13248.1 Mac EFY89368.1 Mro EFY96639.1 The CEJ92460.1 Ani XP001393502.1 The CEJ91586.1 Tst EED22652.1	Tma KFX45545.1 Ani XP001395290.1 Ano KNG91357.1 Cps KMM68122.1 Mma KID99277.1 Oma KIM94093.1 Tis CRG91749.1 Tte AEO67302.1 Mbr KID72944.1 Pdi EKV19054.1 Tma KFX46639.1 Ano KNG85002.1 Tst EED12116.1
<b>Transcription factor embedded in MaNRPS- PKS2 cluster (MANI_018928)</b>	Afi EAW19778.1 Ano KNG84526.1 Top KND88287.1	Afu EAL85124.1 Mbr KID73871.1 Tte AEO64233.1	Aud GAO86281.1 Mro EFY96238.2

**Table 1:** Abe| *Arthroderma benhamiae* CBS 112371, Ach| *Acremonium chrysogenum* ATCC 11550, Acl| *Aspergillus clavatus* NRRL 1, Afi| *Aspergillus fischeri* NRRL 181, Afu| *Aspergillus fumigatus* Af293, Ani| *Aspergillus niger* CBS 513.88, Ano| *Aspergillus nomius* NRRL 13137, Aot| *Arthroderma otae* CBS 113480, Aud| *Aspergillus udagawae*, Cim| *Coccidioides immitis* RS, Cpo| *Coccidioides posadasii str. Silveira*, Cps| *Coccidioides posadasii* RMSCC 3488, Csu| *Colletotrichum sublineola*, Lma| *Leptosphaeria maculans* JN3, Mac| *Metarhizium acridum* CQMa 102, Mal| *Metarhizium album* ARSEF 1941, MANI *Metarhizium anisopliae* E6, Mbr| *Metarhizium brunneum* ARSEF 3297, Mgu| *Metarhizium guizhouense* ARSEF 977, Mgy| *Microsporium gypseum* CBS 118893, Mma| *Metarhizium majus* ARSEF 297, Mmy| *Madurella mycetomatis*, Mro| *Metarhizium robertsii* ARSEF 23, Npa| *Neofusicoccum parvum* UCRNP2, Oma| *Oidiodendron maius* Zn, Pdi| *Penicillium digitatum* PHI26, Psp| *Pseudogymnoascus sp.* VKM F-3557, Pte| *Pyrenophora teres f. teres* 0-1, Sap| *Scedosporium*

*apiospermum*, Tce| *Talaromyces cellulolyticus*, The| *Torrubiella hemipterigena*, Tin| *Trichophyton interdigitale* H6, Tis| *Talaromyces islandicus*, Tma| *Talaromyces marneffe* PM1, Top| *Tolypocladium ophioglossoides* CBS 100239, Tru| *Trichophyton rubrum* CBS 118892, Tso| *Trichophyton soudanense* CBS 452.61, Tst| *Talaromyces stipitatus* ATCC 10500, Tte| *Thielavia terrestris* NRRL 8126, Tve| *Trichophyton verrucosum* HKI 0517. \*Only genes with  $\geq 45$  % identity were used for phylogeny;