

**Combined Metabarcoding and Multi-locus approach for
Genetic characterization of *Colletotrichum* species associated
with common walnut (*Juglans regia*) anthracnose in France.**

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Supplementary Table 1. Information about the final alignments used for phylogenetic analyses

Locus	boundaries	conserved	parsimony info	singleton	best substitution model
<i>Colletotrichum acutatum</i> species complex					
ITS	1-500	454	21	20	K2P+G
CHS-1	501-763	224	24	15	K2P+G
TUB2	764-1255	362	69	60	K2P+G
ACT	1256-1496	159	43	38	K2P+G
HIS3	1497-1875	274	82	22	TN93+G
GAPDH	1876-2124	118	64	53	K2P+G
Concatenated	1-2124	1591	303	208	-
<i>Colletotrichum gloeosporioides</i> species complex					
ITS	1-615	523	21	61	K2P+G
CHS-1	616-916	231	35	35	K2P+G
CAL	917-1705	590	95	93	K2P+G
ACT	1706-2006	162	38	84	K2P
SOD2	2007-2380	278	51	45	K2P+G
TUB2	2381-3363	666	115	160	K2P+G
GS	3364-4369	590	122	204	T92+G
GAPDH	4370-4678	113	82	93	K2P
ApMAT	4679-5716	505	209	276	K2P
Concatenated	1-5716	3658	768	1051	-

Supplementary Table 2. Reference sequences used in the phylogenetic analyses.

Species	strain	ITS	GAPDH	TUB2	CHS-1	ACT	HIS3	GS	CAL	ApMAT
<i>C. abscissum</i>	CBS 134727	KC204988	KC205022	KC205056	KC205039	KC205073	KC205003	-	-	-
<i>C. acerbum</i>	CBS 128530	JQ948459	JQ948790	JQ950110	JQ949120	JQ949780	JQ949450	-	-	-
<i>C. acutatum</i>	CBS 112996	JQ005776	JQ948677	JQ005860	JQ005797	JQ005839	JQ005818	-	-	-
<i>C. australe</i>	CBS 116478	JQ948455	JQ948786	JQ950106	JQ949116	JQ949776	JQ949446	-	-	-
<i>C. brisbanense</i>	CBS 292.67	JQ948291	JQ948621	JQ949942	JQ948952	JQ949612	JQ949282	-	-	-
<i>C. cairnsense</i>	CBS 140847	KU923672	KU923704	KU923688	KU923710	KU923716	KU923722	-	-	-
<i>C. carthami</i>	MAFF 239358	•	•	•	•	•	•	-	-	-
<i>C. chrysanthemi</i>	CBS 126518	JQ948271	JQ948601	JQ949922	JQ948932	JQ949592	JQ949262	-	-	-
<i>C. citri</i>	ZJUC41	KC293581	KC293741	KC293661		KC293621		-	-	-
<i>C. cosmi</i>	CBS 853.73	JQ948274	JQ948604	JQ949925	JQ948935	JQ949595	JQ949265	-	-	-
<i>C. costaricense</i>	CBS 330.75	JQ948180	JQ948510	JQ949831	JQ948841	JQ949501	JQ949171	-	-	-
<i>C. cuscutae</i>	IMI 304802	JQ948195	JQ948525	JQ949846	JQ948856	JQ949516	JQ949186	-	-	-
<i>C. fioriniae</i>	IMI 504882	+	+	+	+	+	+	-	-	-
<i>C. godetiae</i>	CBS 133.44	JQ948402	JQ948733	JQ950053	JQ949063	JQ949723	JQ949393	-	-	-
<i>C. guajavae</i>	IMI 350839	JQ948270	JQ948600	JQ949921	JQ948931	JQ949591	JQ949261	-	-	-
<i>C. indonesiense</i>	CBS 127551	JQ948288	JQ948618	JQ949939	JQ948949	JQ949609	JQ949279	-	-	-
<i>C. johnstonii</i>	IMI 357027	JQ948443	JQ948774	JQ950094	JQ949104	JQ949764	JQ949434	-	-	-
<i>C. kinghornii</i>	CBS 198.35	JQ948454	JQ948785	JQ950105	JQ949115	JQ949775	JQ949445	-	-	-
<i>C. laticiphilum</i>	CBS 112989	JQ948289	JQ948619	JQ949940	JQ948950	JQ949610	JQ949280	-	-	-
<i>C. limetticola</i>	CBS 114.14	JQ948193	JQ948523	JQ949844	JQ948854	JQ949514	JQ949184	-	-	-
<i>C. lupini</i>	CBS 109225	JQ948155	JQ948485	JQ949806	JQ948816	JQ949476	JQ949146	-	-	-
<i>C. melonis</i>	CBS 159.84	JQ948194	JQ948524	JQ949845	JQ948855	JQ949515	JQ949185	-	-	-
<i>C. nymphaeae</i>	IMI 504889	+	+	+	+	+	+	-	-	-
<i>C. paranaense</i>	IMI 384185	JQ948191	JQ948521	JQ949842	JQ948852	JQ949512	JQ949182	-	-	-
<i>C. paxtonii</i>	IMI 165753	JQ948285	JQ948615	JQ949936	JQ948946	JQ949606	JQ949276	-	-	-
<i>C. phormii</i>	CBS 118194	JQ948446	JQ948777	JQ950097	JQ949107	JQ949767	JQ949437	-	-	-
<i>C. pyricola</i>	CBS 128531	JQ948445	JQ948776	JQ950096	JQ949106	JQ949766	JQ949436	-	-	-
<i>C. rhombiforme</i>	CBS 129953	JQ948457	JQ948788	JQ950108	JQ949118	JQ949778	JQ949448	-	-	-
<i>C. salicis</i>	CBS 607.94	+	+	+	+	+	+	-	-	-
<i>C. scovillei</i>	CBS 126529	JQ948267	JQ948597	JQ949918	JQ948928	JQ949588	JQ949258	-	-	-
<i>C. simmondsii</i>	CBS 122122	+	+	+	+	+	+	-	-	-
<i>C. sloanei</i>	IMI 364297	JQ948287	JQ948617	JQ949938	JQ948948	JQ949608	JQ949278	-	-	-
<i>C. tamarilloi</i>	CBS 129814	JQ948184	JQ948514	JQ949835	JQ948845	JQ949505	JQ949175	-	-	-
<i>C. walleri</i>	CBS 125472	JQ948275	JQ948605	JQ949926	JQ948936	JQ949596	JQ949266	-	-	-
<i>Colletotrichum</i> sp.	CBS 101611	JQ948196	JQ948526	JQ949847	JQ948857	JQ949517	JQ949187	-	-	-
<i>Colletotrichum</i> sp.	CBS 129810	JQ948179	JQ948509	JQ949830	JQ948840	JQ949500	JQ949170	-	-	-

Species	strain	ITS	GAPDH	TUB2	CHS-1	ACT	HIS3	GS	CAL	ApMAT
<i>Colletotrichum</i> sp.	CBS 129820	JQ948183	JQ948513	JQ949834	JQ948844	JQ949504	JQ949174	-	-	-
<i>Colletotrichum</i> sp.	CBS 129821	JQ948182	JQ948512	JQ949833	JQ948843	JQ949503	JQ949173	-	-	-
<i>Colletotrichum</i> sp.	CBS 129823	JQ948192	JQ948522	JQ949843	JQ948853	JQ949513	JQ949183	-	-	-
<i>C. orchidophilum</i>	CBS 632.80	JQ948152	JQ948482	JQ949803	JQ948813	JQ949473	JQ949143	-	-	-
<i>C. aenigma</i>	ICMP 18608	JX010244	JX010044	JX010389	JX009774	JX009443	-	JX010078	JX009683	KM360143
<i>C. aeshynomenes</i>	ICMP 17673	JX010176	JX009930	JX010392	JX009799	JX009483	-	JX010081	JX009721	-
<i>C. alatae</i>	ICMP 17919	JX010190	JX009990	JX010383	JX009837	JX009471	-	JX010065	JX009738	KC888932
<i>C. alienum</i>	ICMP 12071	JX010251	JX010028	JX010411	JX009882	JX009572	-	JX010101	JX009654	KM360144
<i>C. aotearoa</i>	ICMP 18537	JX010205	JX010005	JX010420	JX009853	JX009564	-	JX010113	JX009611	KC888930
<i>C. asianum</i>	ICMP 18580	FJ972612	JX010053	JX010406	JX009867	JX009584	-	JX010096	FJ917506	FR718814
<i>C. camelliae</i>	CGMCC 3.14925	KJ955081	KJ954782	KJ955230	-	KJ954363	-	KJ954932	KJ954634	KJ954497
<i>C. changpingense</i>	MFLUCC 15-0022	KP683152	KP852469	KP852490	KP852449	KP683093	-	-	-	-
<i>C. clidemiae</i>	ICMP 18658	JX010265	JX009989	JX010438	JX009877	JX009537	-	JX010129	JX009645	KC888929
<i>C. conoides</i>	CGMCC 3.17615	KP890168	KP890162	KP890174	KP890156	KP890144	-	-	KP890150	-
<i>C. cordylinicola</i>	ICMP 18579	JX010226	JX009975	JX010440	JX009864	HM470235	-	JX010122	HM470238	JQ899274
<i>C. endophytica</i>	MFLUCC 13-0418	KC633854	KC832854	-	-	KF306258	-	-	KC810018	-
<i>C. fructicola</i>	ICMP 18581	JX010165	JX010033	JX010405	JX009866	FJ907426	-	JX010095	FJ917508	JQ807838
<i>C. fructivorum</i>	CBS 133125	JX145145	-	JX145196	-	-	-	-	-	JX145300
<i>C. gloeosporioides</i>	CBS 112999	JQ005152	JQ005239	JQ005587	JQ005326	JQ005500	-	JX010085	JQ005673	JQ807843
<i>C. grevilleae</i>	CBS 132879	KC297078	KC297010	KC297102	KC296987	KC296941	-	KC297033	KC296963	-
<i>C. grossum</i>	CGMCC3.17614	KP890165	KP890159	KP890171	KP890153	KP890141	-	-	KP890147	-
<i>C. hebeiense</i>	MFLUCC13-0726	KF156863	KF377495	KF288975	KF289008	KF377532	-	-	-	-
<i>C. henanense</i>	CGMCC 3.17354	KJ955109	KJ954810	KJ955257	-	KM023257	-	KJ954960	KJ954662	KJ954524
<i>C. horii</i>	ICMP 10492	GQ329690	GQ329681	JX010450	JX009752	JX009438	-	JX010137	JX009604	JQ807840
<i>C. jiangxiense</i>	CGMCC 3.17363	KJ955201	KJ954902	KJ955348	-	KJ954471	-	KJ955051	KJ954752	KJ954607
<i>C. kahawae</i> subsp. <i>ciggaro</i>	ICMP 18539	JX010230	JX009966	JX010434	JX009800	JX009523	-	JX010132	JX009635	-
<i>C. kahawae</i> subsp. <i>kahawae</i>	ICMP 17816	JX010231	JX010012	JX010444	JX009813	JX009452	-	JX010130	JX009642	JQ894579
<i>C. musae</i>	ICMP 19119	JX010146	JX010050	HQ596280	JX009896	JX009433	-	JX010103	JX009742	KC888926
<i>C. nupharicola</i>	ICMP 18187	JX010187	JX009972	JX010398	JX009835	JX009437	-	JX010088	JX009663	JX145319
<i>C. proteae</i>	CBS 132882	KC297079	KC297009	KC297101	KC296986	KC296940	-	-	KC296960	-
<i>C. psidii</i>	ICMP 19120	JX010219	JX009967	JX010443	JX009901	JX009515	-	JX010133	JX009743	KC888931
<i>C. queenslandicum</i>	ICMP 1778	JX010276	JX009934	JX010414	JX009899	JX009447	-	JX010104	JX009691	KC888928
<i>C. rhexiae</i>	CBS 133134	JX145128	-	JX145179	-	-	-	-	-	JX145290
<i>C. salsolae</i>	ICMP 19051	JX010242	JX009916	JX010403	JX009863	JX009562	-	JX010093	JX009696	KC888925
<i>C. siamense</i>	ICMP 18578	JX010171	JX009924	JX010404	JX009865	FJ907423	-	JX010094	FJ917505	JQ899289
<i>C. syzygicola</i>	MFLUCC 10-0624	KF242094	KF242156	KF254880	-	KF157801	-	KF242125	KF254859	-
<i>C. temperatum</i>	CBS 133122	JX145159	-	JX145211	-	-	-	-	-	JX145298
<i>C. theobromicola</i>	ICMP 18649	JX010294	JX010006	JX010447	JX009869	JX009444	-	JX010139	JX009591	KC790726
<i>C. ti</i>	ICMP 4832	JX010269	JX009952	JX010442	JX009898	JX009520	-	JX010123	JX009649	KM360146

Species	strain	ITS	GAPDH	TUB2	CHS-1	ACT	HIS3	GS	CAL	ApMAT
<i>C. tropicale</i>	ICMP 18653	JX010264	JX010007	JX010407	JX009870	JX009489	-	JX010097	JX009719	KC790728
<i>C. viniferum</i>	GZAAS 5.08601	JN412804	JN412798	JN412813	-	JN412795	-	JN412787	JQ309639	-
<i>C. wuxiense</i>	CGMCC 3.17894	KU251591	KU252045	KU252200	KU251939	KU251672	-	KU252101	KU251833	KU251722
<i>C. xanthorrhoeae</i>	ICMP 17903	JX010261	JX009927	JX010448	JX009823	JX009478	-	JX010138	JX009653	KC790689
<i>C. sydowii</i>	CBS 135819	KY263783	KY263785	KY263793	KY263787	KY263791	-	-	-	-

• = Sequences retrieved directly from the genome deposited on NARO database (<http://www.gene.affrc.go.jp/>)

+ = Sequences retrieved directly from the genome deposited on NCBI database (<http://www.ncbi.nlm.nih.gov/>)