

Table S1. List of morphotypes from the previous year's leaf petioles of *Fraxinus excelsior* in five forest stands, in southern Poland in 2017. Sequences deposited in GenBank. Reference sequences from GenBank. Results of interactions of test fungi with two isolates of *Hymenoscyphus fraxineus* (Hf 1/Hf 2) *in vitro*.

Taxa	Strain No.	ITS Accession	BLAST	Identities %	Interaction Type Hf 1/Hf 2 ¹	Growth Reduction of Hf 1/Hf 2 ²	Reduction of Growth of Test Fungus with Hf 1/Hf 2 ³
Agaricomycetes sp.	FeF179	MZ493076	KC588730	95.99	A/A	b/c	b/a
Agaricomycetes sp.	FeF183	MZ493077	KC588730	95.31	A/A	b/b	a/a
<i>Alternaria</i> sp. 1	FeF152	MZ492922	MK910060	100.00	A/A	c/c	b/b
<i>Alternaria</i> sp. 1	FeF83	MZ492923	MK910060	100.00	A/A	c/c	b/b
<i>Alternaria</i> sp. 1	FeF98	MZ492924	MK910060	100.00	A/A	c/c	b/b
<i>Alternaria</i> sp. 1	FeF12	MZ492925	MK910060	100.00	A/A	c/c	b/b
<i>Alternaria</i> sp. 2	FeF21	MZ492919	MN077468	100.00	A/A	c/c	b/b
<i>Alternaria</i> sp. 3	FeF182	MZ492920	MK460776	100.00	A/A	c/d	a/a
<i>Alternaria</i> sp. 4	FeF11	MZ492921	JX454532	99.84	A/A	c/c	a/a
<i>Athelia</i> sp.	FeF124	MZ493075	GU187504	100.00	Bm/Bm	c/c	b/b
<i>Aureobasidium pullulans</i>	FeF16	MZ493028	MK460802	99.83	Bm/Bm	c/c	c/b
<i>Boeremia exigua</i>	FeF131	MZ492929	MF599108	99.82	Bw/Bw	c/c	b/a
<i>Boeremia</i> sp.	FeF151	MZ492926	MN540289	100.00	A/A	b/c	b/b
<i>Boeremia</i> sp.	FeF174	MZ492927	MN540289	100.00	A/A	c/c	b/b
<i>Boeremia</i> sp.	FeF123	MZ492928	MN540289	100.00	A/A	c/c	b/b
<i>Chaetomium globosum</i>	FeF113	MZ493042	MG098250	99.66	A/A	b/c	b/b
<i>Chromelosporium</i> sp.	FeF10	MZ493102	MG098273	99.53	A/A	c/c	b/b
<i>Cladosporium</i> sp. 1	FeF156	MZ493026	MH047193	100.00	A/A	b/b	b/b
<i>Cladosporium</i> sp. 2	FeF38	MZ493027	MT466517	100.00	A/A	b/b	b/b
<i>Clonostachys rosea</i>	FeF195	MZ493031	AJ876484	100.00	C/C	c/c	a/a
<i>Colletotrichum acutatum</i>	FeF33	MZ493039	AJ301971	99.83	A/A	c/c	b/b
<i>Coniochaeta angustispora</i>	FeF36	MZ493043	MH859528	99.83	Bv/Bv	c/c	f/f
<i>Coniochaeta</i> sp. 1	FeF5	MZ493048	LC431571	100.00	Bs/Bs	c/c	b/b
<i>Coniochaeta</i> sp. 1	FeF40	MZ493049	LC431571	100.00	Bm/Bm	c/c	b/b
<i>Coniochaeta</i> sp. 1	FeF159	MZ493047	LC431571	100.00	Bs/Bs	c/c	b/b

<i>Coniochaeta</i> sp. 1	FeF220	MZ493050	LC431571	99.66	Bs/Bs	c/c	b/b
<i>Coniochaeta</i> sp. 2	FeF157	MZ493044	AY198390	99.17	A/A	c/c	b/b
<i>Coniochaeta</i> sp. 7	FeF7	MZ493045	AY198390	99.83	Bs/Bs	b/b	b/b
<i>Coniochaeta</i> sp. 7	FeF25	MZ493046	AY198390	99.83	Bs/Bs	c/c	a/a
<i>Coniothyrium</i> cf. <i>dispersellum</i>	FeF65	MZ492931	MH860812	99.45	A/A	b/b	a/a
<i>Coniothyrium</i> cf. <i>dispersellum</i>	FeF71	MZ492932	MH860812	99.45	A/A	b/b	a/a
<i>Coniothyrium</i> cf. <i>dispersellum</i>	FeF94b	MZ492930	MH860812	99.45	A/A	b/b	f/a
<i>Coprinellus disseminatus</i>	FeF87	MZ493093	MN540299	99.60	Bm/Bm	b/c	b/b
<i>Coprinellus disseminatus</i>	FeF231	MZ493094	MN540299	99.73	Bs/Bs	c/c	b/b
<i>Coprinellus micaceus</i>	FeF232	MZ493095	KU712252	99.71	Bm/Bm	b/c	b/b
<i>Cyathicula coronata</i>	FeF111	MZ492975	MH858141	99.82	Bm/Bm	c/c	f/a
<i>Cyathicula fraxinophila</i>	FeF255	MZ492981	MK584998	98.73	Bs/Bs	a/a	f/f
<i>Cyathicula fraxinophila</i>	FeF256	MZ492979	MK584998	99.07	Bs/Bs	a/a	f/f
<i>Cyathicula</i> sp. 2	FeF254	MZ492977	MK584998	98.70	Bs/Bs	b/b	b/b
<i>Cytospora pruinosa</i>	FeF155	MZ493054	MH854814	99.84	Bv/Bv	c/c	b/b
<i>Cytospora pruinosa</i>	FeF165	MZ493055	MH854814	99.84	Bv/Bv	c/c	b/b
<i>Cytospora</i> sp.	FeF116	MZ493053	FJ478099	99.53	Bm/Bm	d/d	b/b
<i>Dactylaria</i> sp.	FeF108a	MZ493066	JF449852	99.83	Bs/Bs	c/c	a/a
<i>Desmazierella acicola</i>	FeF42	MZ493073	MT790315	99.85	Bm/Bm	c/c	c/c
<i>Desmazierella acicola</i>	FeF119	MZ493072	MT790315	100.00	C/C	c/c	c/c
<i>Diaporthe eres</i>	FeF35	MZ493056	EU571099	100.00	A/A	c/c	b/b
<i>Discohainesia oenotherae</i>	FeF137	MZ493029	MH855313	100.00	Bm/Bm	c/c	b/b
<i>Discohainesia oenotherae</i>	FeF138	MZ493030	MH855313	99.79	Bm/Bm	c/c	b/b
<i>Epicoccum nigrum</i>	FeF75	MZ492941	FN868456	100.00	Bs/Bs	c/c	b/b
<i>Eupenicillium</i> sp.	FeF68	MZ493071	JX545183	99.17	Bs/Bs	b/b	b/b
<i>Fellozyma</i> sp.	FeF236	MZ493103	KY103411	99.05	Bs/Bs	b/b	a/a
<i>Fusariella</i> sp.	FeF257	MZ493041	FJ820737	99.34	A/A	a/a	f/f
<i>Fusarium lateritium</i>	FeF237	MZ493034	AF310980	100.00	Bw/Bw	c/c	b/a
<i>Fusarium</i> sp.	FeF132	MZ493032	MH931273	99.83	Bv/Bv	c/c	b/a
<i>Fusarium</i> sp.	FeF133	MZ493033	MH931273	99.83	Bv/Bm	b/c	a/a

<i>Graphilbum</i> sp.	FeF221	MZ492998	MH861928	99.47	Bm/Bm	b/b	f/f
<i>Gyrophthrix</i> sp.	FeF238	MZ493069	KC775756	96.15	A/A	a/a	f/f
<i>Helotiales</i> sp. 1	FeF9	MZ492994	GU174285	98.80	A/A	b/b	f/a
<i>Helotiales</i> sp. 1	FeF20	MZ492995	GU174285	98.97	A/Bs	b/c	f/a
<i>Helotiales</i> sp. 1	FeF189	MZ492993	GU174285	98.80	A/A	b/b	a/a
<i>Herpotrichia</i> sp.	FeF218	MZ492964	KT268517	99.18	A/A	c/c	a/a
<i>Hymenoscyphus caudatus</i>	FeF217	MZ492984	KM114539	99.79	A/A	b/b	b/b
<i>Hymenoscyphus fraxineus</i>	FeF164	MZ492991	LLCC00000000	100.00	A/A	b/b	b/b
<i>Hymenoscyphus scutula</i>	FeF239	MZ492988	MK674606	99.48	A/A	b/b	b/b
<i>Hymenoscyphus scutula</i>	FeF240	MZ492990	MH858736	100.00	A/A	c/c	b/b
<i>Hymenoscyphus</i> sp.	FeF177	MZ492986	MK674606	96.68	A/A	b/b	b/b
<i>Hypholoma fasciculare</i>	FeF241	MZ493083	FJ481034	99.86	C/C	c/c	f/f
<i>Hypoderma rubi</i>	FeF76	MZ493023	GU138735	96.36	Bs/Bs	b/b	b/b
<i>Hypoderma rubi</i>	FeF78a	MZ493020	GU138735	96.36	Bs/Bs	b/b	c/c
<i>Hypoderma rubi</i>	FeF184	MZ493021	GU138735	96.36	Bm/Bm	b/b	b/b
<i>Hypoderma rubi</i>	FeF203	MZ493024	GU138735	96.10	Bm/Bm	b/b	b/b
<i>Hypoderma rubi</i>	FeF224	MZ493022	GU138735	96.36	Bm/Bm	b/b	b/b
<i>Lanzia</i> sp.	FeF26	MZ493011	LT158431	96.96	Bv/Bv	c/c	a/a
<i>Lanzia</i> sp.	FeF248	MZ493012	LT158431	97.41	Bw/Bw	c/c	b/b
<i>Lasiosphaeriaceae</i> sp.	FeF219	MZ493051	KF527821	99.30	C/C	c/c	b/b
<i>Lasiosphaeriaceae</i> sp.	FeF198	MZ493052	KF527821	99.30	C/C	b/b	b/b
<i>Lemonniera</i> sp.	FeF88	MZ493010	KX096679	99.81	Bs/Bs	b/b	a/a
<i>Leptosphaeria conoidea</i>	FeF93	MZ492958	MH863856	100.00	A/A	b/b	b/c
<i>Leptosphaeria rubefaciens</i>	FeF120a	MZ492942	JF740242	100.00	A/A	b/b	a/a
<i>Leptosphaeria urticae</i>	FeF166	MZ492960	NR_164494	100.00	A/A	c/c	b/a
<i>Leptosphaeria</i> sp. 1	FeF188	MZ492955	KC965764	94.72	Bs/Bs	b/b	b/b
<i>Leptosphaeria</i> sp. 2	FeF242	MZ492956	KC965764	95.33	Bs/Bs	b/b	b/b
<i>Leptospora rubella</i>	FeF194	MZ492950	MH857603	99.83	Bm/Bm	b/b	b/b
<i>Leptospora</i> sp.	FeF200	MZ492951	KY031621	100.00	Bm/Bm	b/b	b/b
<i>Lophiostoma corticola</i>	FeF199	MZ492968	KU712227	100.00	Bs/Bs	c/c	a/a

<i>Malbranchea</i> sp.	FeF243	MZ493105	MN627785	94.16	Bv/Bv	d/d	f/f
<i>Microsphaeropsis</i> sp.	FeF92b	MZ492937	MH855867	100.00	A/A	c/c	b/b
<i>Mortierella</i> sp.	FeF180	MZ493104	MF423577	99.84	Bs/Bs	c/c	b/b
<i>Mycena citrinomarginata</i>	FeF197	MZ493086	MN992229	99.86	A/Bm	c/d	b/b
<i>Mycena citrinomarginata</i>	FeF129	MZ493087	MN992474	99.86	A/Bm	c/c	b/b
<i>Mycena</i> sp.	FeF4	MZ493088	JF908495	99.86	Bs/Bs	c/c	b/b
<i>Mycena</i> sp.	FeF244	MZ493089	JF908495	100.00	Bs/Bs	c/c	b/b
<i>Mycoarthritis</i> sp. 1	FeF160	MZ493003	KY660951	99.27	Bs/Bs	b/b	f/f
<i>Mycoarthritis</i> sp. 2	FeF171	MZ493004	JF449666	99.63	Bm/Bw	b/c	f/f
<i>Nemania diffusa</i>	FeF104	MZ493061	MH935016	100.00	C/C	c/c	a/a
<i>Nemania serpens</i>	FeF245	MZ493106	MF161316	100.00	C/C	b/b	b/b
<i>Nemania</i> sp.	FeF41	MZ493060	AF201704	99.66	Bs/Bs	c/c	b/b
<i>Neofabraea kienholzii</i>	FeF85	MZ492999	MH864120	100.00	Bw/Bw	b/c	b/b
<i>Neofabraea kienholzii</i>	FeF94a	MZ493000	MH864120	99.82	Bm/Bw	b/b	a/a
<i>Neonectria</i> sp. 1	FeF186	MZ493035	KR816357	99.64	A/A	b/c	b/b
<i>Neonectria</i> sp. 2	FeF19	MZ493036	JF735313	99.82	A/A	b/b	b/b
<i>Paracucurbitaria corni</i>	FeF77	MT547860	LT623219	99.47	Bm/Bm	b/b	b/b
<i>Paraophiobolus arundinis</i>	FeF202	MZ492952	MG520945	100.00	Bs/Bs	c/c	b/b
<i>Paraphaeosphaeria michotii</i>	FeF168	MZ492971	JX496079	100.00	Bm/Bm	c/c	a/a
<i>Paraphaeosphaeria neglecta</i>	FeF109	MZ492969	MH860924	99.83	Bw/Bw	c/c	a/a
<i>Paraphaeosphaeria neglecta</i>	FeF110	MZ492970	MH860924	99.32	Bw/Bw	c/c	b/f
<i>Peniophora incarnata</i>	FeF172	MZ493090	MH860518	99.37	C/C	c/c	b/b
<i>Peniophora incarnata</i>	FeF17	MZ493091	MH860518	99.53	C/C	c/c	a/a
<i>Peniophora incarnata</i>	FeF173	MZ493092	MH860518	99.84	C/C	c/c	f/f
<i>Periconia</i> sp. 1	FeF178a	MZ492966	MG098330	99.83	A/A	d/d	a/a
<i>Periconia</i> sp. 1	FeF178	MZ492967	MG098330	99.83	A/A	c/c	b/b
<i>Periconia</i> sp. 2	FeF32	MZ492965	MG098330	99.14	A/A	c/c	b/b
<i>Peziza ninguis</i>	FeF91	MZ493099	JF908536	100.00	Bv/Bw	c/c	b/b
<i>Peziza varia</i>	FeF6	MZ493101	KU061019	100.00	A/A	c/b	a/a
<i>Pezizomyces</i> sp.	FeF45	MZ493100	MK066897	99.84	A/A	b/b	f/f

<i>Phacidium lacerum</i>	FeF246	MZ493107	KU942438	100.00	Bs/Bs	c/c	b/b
<i>Phlyctema vagabunda</i>	FeF93a	MZ493002	KJ396077	100.00	Bm/Bm	b/b	b/b
<i>Phlyctema vagabunda</i>	FeF136	MZ493001	KJ396077	100.00	Bw/Bw	c/c	a/a
<i>Phoma</i> sp. 1	FeF170a	MZ492938	KT963795	100.00	A/A	c/c	b/b
<i>Phoma</i> sp. 2	FeF163	MZ492933	FN868459	99.65	Bw/Bw	c/c	b/b
<i>Phoma</i> sp. 3	FeF153a	MZ492939	JF817319	99.82	A/A	b/c	b/b
<i>Phoma</i> sp. 3	FeF162	MZ492940	JF817319	99.82	A/A	c/c	b/b
<i>Phoma</i> sp. 4	FeF89	MZ492934	MK066907	99.82	A/A	c/c	b/b
<i>Phoma</i> sp. 4	FeF158	MZ492935	MK066907	99.82	A/A	c/c	b/b
<i>Phoma</i> sp. 5	FeF61	MZ492936	MK066907	100.00	A/A	c/c	b/b
<i>Plectosphaerella cucumerina</i>	FeF161b	MZ493070	MK183802	99.65	Bs/Bs	d/d	a/a
<i>Plenodomus</i> sp. 1	FeF135	MZ492943	MK387923	94.26	Bv/Bv	d/d	b/b
<i>Pleospora</i> sp.	FeF48	MZ492944	KU973715	99.84	Bw/Bw	b/b	a/a
<i>Pleospora</i> sp.	FeF80	MZ492945	KU973715	99.84	Bm/Bm	b/b	a/a
<i>Pleospora</i> sp.	FeF80a	MZ492946	KU973715	99.84	Bm/Bm	b/b	a/a
<i>Psathyrella piluliformis</i>	FeF176	MZ493096	MF325991	99.86	A/A	b/b	b/b
<i>Pseudocoleophoma polygonicola</i>	FeF201	MZ492972	NR_154274	99.81	Bv/Bv	b/b	a/a
<i>Pseudocoleophoma polygonicola</i>	FeF247	MZ492974	NR_154274	99.62	Bv/Bv	b/b	a/a
<i>Pseudoophiobolus italicus</i>	FeF106	MZ492954	NR_156683	99.11	Bw/Bv	c/c	b/b
<i>Pseudoplectania nigrella</i>	FeF46	MZ493074	MN398980	99.86	A/A	b/b	b/b
<i>Pyrenochaeta</i> sp.	FeF13	MT547847	MT236853	99.32	A/A	b/b	b/a
<i>Pyrenochaetopsis leptospora</i>	FeF97	MZ492949	MF795793	100.00	A/A	B/B	b/b
<i>Pyrenopeziza petiolaris</i>	FeF223	MZ493014	MH857804	99.29	Bs/Bs	b/c	b/b
<i>Pyrenopeziza</i> sp.	FeF90	MZ493013	MH857804	98.94	A/A	c/c	a/a
<i>Rhexocercosporidium</i> sp.	FeF100	MZ493018	MK584945	99.39	A/A	c/b	b/c
<i>Rhexocercosporidium</i> sp.	FeF127	MZ493017	MK584945	99.39	A/A	b/c	c/c
<i>Rhexocercosporidium</i> sp.	FeF134	MZ493019	MK584945	99.80	A/A	c/c	b/a
<i>Rhexocercosporidium</i> sp.	FeF175	MZ493016	MK584945	99.59	A/Bs	c/c	b/b
<i>Rosellinia abscondita</i>	FeF125	MZ493062	KF719196	98.20	Bs/Bs	b/b	b/b
<i>Rosellinia corticium</i>	FeF167	MZ493068	MN984621	100.00	C/C	c/c	a/a

<i>Rosellinia necatrioides</i>	FeF187	MZ493063	MN984622	100.00	C/C	c/c	b/b
<i>Sistotrema</i> sp.	FeF130	MZ493078	KY430527	99.85	Bm/Bm	c/c	b/b
<i>Tetracladium</i> sp.	FeF92	MZ493006	MF615024	99.10	A/A	b/b	a/a
<i>Tetracladium</i> sp.	FeF94	MZ493007	MF615024	99.10	A/A	b/b	a/b
<i>Tilletiopsis washingtonensis</i>	FeF249	MZ493097	AF294696	99.85	A/A	a/a	a/a
<i>Trametes versicolor</i>	FeF63	MZ493082	MF782816	100.00	A/A	c/c	b/b
<i>Trichoderma viride</i>	FeF103	MZ493038	MH864422	100.00	C/C	d/d	f/f
<i>Truncatella</i> sp.	FeF122	MZ493067	KT963797	100.00	A/A	c/d	a/b
<i>Typhula</i> sp. 1	FeF128	MZ493084	KR673716	99.86	A/A	b/b	b/b
<i>Typhula</i> sp. 1	FeF62	MZ493085	KR673716	99.86	A/A	b/b	b/b
<i>Typhula</i> sp. 2	FeF99	MZ493080	NR_132792	88.67	A/A	c/c	b/b
<i>Umbelopsis</i> sp.	FeF50	MZ493098	JQ912671	100.00	A/A	c/c	b/b
<i>Vargamyces aquaticus</i>	FeF250	MZ492962	MK347818	99.57	A/A	b/b	a/a
<i>Venturia fraxini</i>	FeF251	MZ493108	EU035457	99.66	A/A	b/b	b/b
<i>Venturia fraxini</i>	FeF252	MZ493109	EU035457	99.83	A/A	b/b	b/b
<i>Verticillium dahliae</i>	FeF253	MZ493110	HE972023	100.00	Bm/Bm	c/c	f/f
<i>Xylaria polymorpha</i>	FeF30	MZ493064	MG098262	100.00	C/C	c/c	b/b
<i>Xylaria polymorpha</i>	FeF49	MZ493065	MG098262	100.00	C/C	c/c	b/b
<i>Xylaria</i> sp. 1	FeF97a	MZ493058	MF774332	97.57	C/C	b/b	b/b

¹⁻³ Hf 1/Hf 2 -two strains of *Hymenoscyphus fraxineus*. ¹ See Table 4, ²⁻³ See Table 5.