

Supplementary material to: Collin E, Pozzi T, Joyeau C et al. (ms. 2022).  
Monitoring of the incidence of Dutch Elm Disease and mortality  
in experimental plantations of French Ulmus minor conservation clones

Fig-S3-1- Map of plot-test #14 (Irstea-Inrae), Le Talonet, F45290 Nogent-sur-V.

Dead trees are in grey cells

Tree numbers (1 to 120) corresponding to data in Tab-S7 are indicated in red.


Plant coordinates according to Google Earth satellite photo 14 April 2020:

No 101: 47.839652 N, 2.762850 E

No 20: 47.839715 N, 2.762533 E

No 120: 47.840551N, 2.763123 E

No 1: 47.840590 N, 2.762863 E

S-77	S-295	S-295	S-295	S-295	S-295		S-77
S-77	S-77	S-77	S-77	S-77	S-77	S-77	S-77
S-77	101 F083	100 F250	61 Lutece	60 F032	21 TUS049	20 F077	S-77
S-77	102 F471	F072	F052	F085	22 F043	19 F041	S-77
S-77	103 F072	F041	F471	F083	23 Lutece	18 TUS049	S-77
S-77	104 F032	F077	F250	F043	24 F085	17 F052	S-77
S-77	105 F077	Lutece	TUS049	F083	25 F250	16 F471	S-77
S-77	106 F072	F052	F085	F041	26 F043	15 F032	S-77
S-77	107 TUS049		F032	Lutece	27 F471	14 F083	S-77
S-77	108 F041	F052	F250	F072	28 F085	13 F043	S-77
S-77	109 F043	F041	F471	F077	29 Lutece	12 F085	S-77
S-77	110 F083	F032	TUS049	F250	30 F052	11 F072	S-77
S-77	111 F052	Lutece	F041	F077	31 F250	10 F471	S-77
S-77	112 F043	F085	F083	F072	32 TUS049	9 F032	S-77
S-77	113 F041	F471	F077	F052	33 F083	8 Lutece	S-77
S-77	114 F250	F085	F072	TUS049	34 F032	7 F043	S-77
S-77	115 F032	F083	F041	F085	35 F072	6 F077	S-77
S-77	116 Lutece	TUS049	F043	F471	36 F052	5 F250	S-77
S-77	117 F077	F072	F052	F043	37 F471	4 F083	S-77
	118 TUS049	F032	F085	F250	38 F041	3 Lutece	S-77
S-77	119 Lutece	F043	F072	F471	39 F032	2 F052	S-77
	120 F085	81 TUS049	80 F077	41 F041	40 F083	1 F250	S-77
			S-77	S-77	S-77	S-77	S-77
S-295?	TUS017	S-295	cultivar	S-295	S-295	TUS005	S-77
S-77	S-295?	S-295?	S-295?	S-295?	S-295?	S-77	S-77
cultivar		cultivar		cultivar	cultivar	cultivar	cultivar
	cultivar		cultivar			cultivar	
cultivar		cultivar			cultivar		cultivar



Lutece = F426 ; TUS049 = Sem816

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**Fig-S3-2- Map of plot-test #21 (CG Calvados / Crepan) F14260 Banneville-sur-Ajon**

Dead trees are in grey cells

Plant numbers are in red.

Plant coordinates according to Google Earth satellite photo 3rd July 2019:

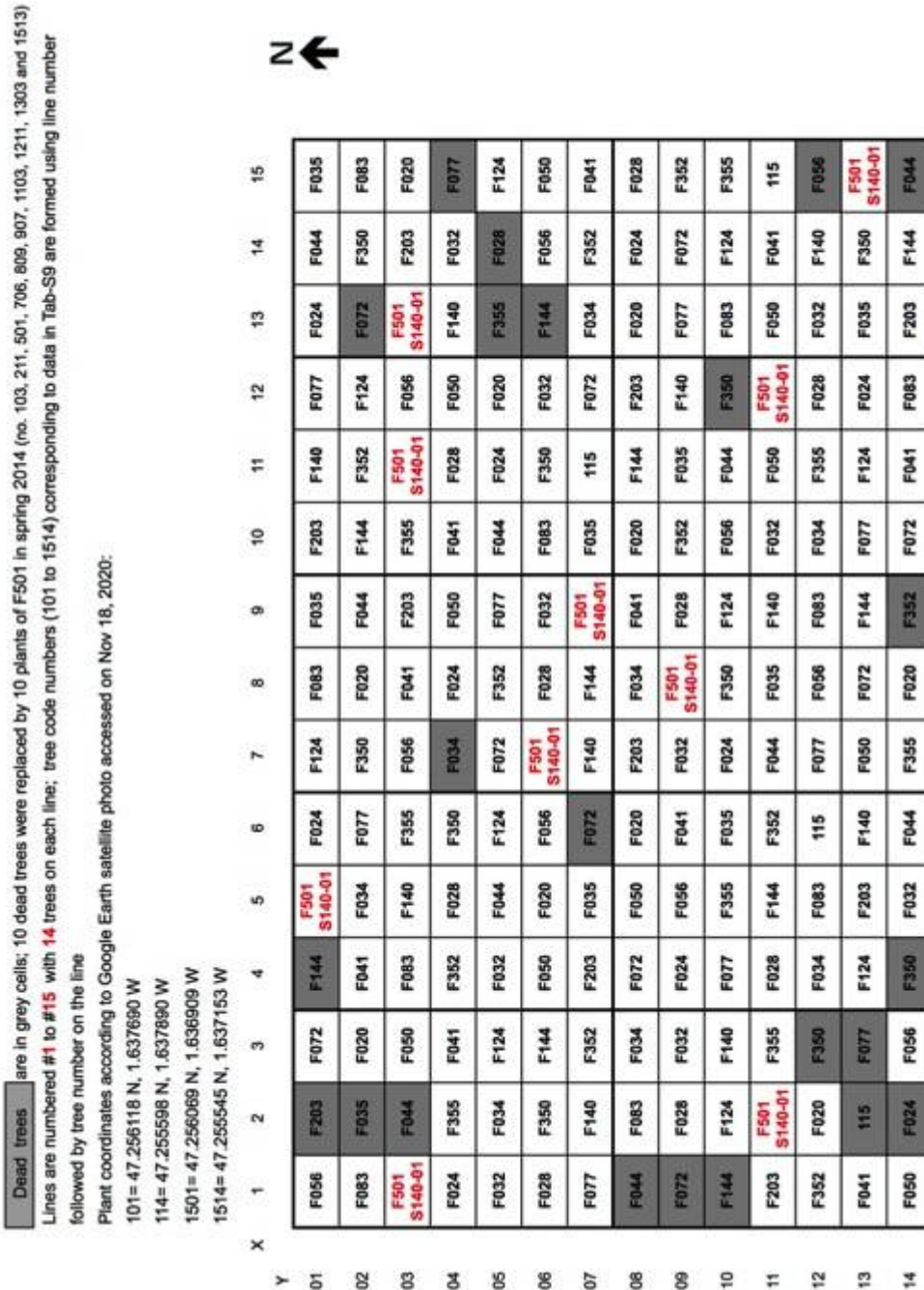
No 1: 49.070203 N, 0.559327 W      No 16: 49.069407 N, 0.560030 W  
 No 15: 49.069803 N, 0.560070 W      No 19: 49.069311 N, 0.560188 W  
 No 99: 49.070028 N, 0.559126 W      No 112: 49.069385 N, 0.559587 W  
 No 111: 49.069668 N, 0.559775 W      No 120: 49.069133 N, 0.559976 W

1 F083	20 F034	39 F056	58 F140	78 F115	99 F032
2 F020	F028	F024	F044	F072	F050
3 F032	F020	F115	F072	F050	F028
4 F034	F024	F140	F056	F044	F083
5 F140	F056	F083	F024	F032	F034
6 F044	F072	F028	F050	F115	F020
7 F072	F020	F115	F024	F140	F028
8 F083	F050	F032	F044	F056	F034
9 F050	F034	F044	F083	F056	F032
10 F024	F140	F072	F028	F115	F020
11 F028	F115	F024	F034	F072	F050
12 F056	F020	F032	F044	F140	F083
13 F044	F032	F020	70 F050	90 F034	111 F056
14 F028	F115	F024			
15 F072	34 F083	53 F140			
					112 F034
				91 F140	F072
			71 F050	F032	F024
			F044	F028	F020
			F056	F083	F115
16 F024	35 F032	54 F034	F020	F050	F056
17 F115	F072	F028	F083	F140	F044
18 F032	F083	F034	F115	F028	F050
19 F056	38 F044	57 F140	77 F020	98 F024	120 F072



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**Fig-S3-3: map of plot-test #31 (Irstea / P p. ONF Gu men -P.)  
at Lyc e J. Rieffel p72, F44800 Saint-Herblain**



**Supplementary material to: Collin E, Pozzi T, Joyeau C et al. (ms. 2022).  
Monitoring of the incidence of Dutch Elm Disease and mortality  
in experimental plantations of French *Ulmus minor* conservation clones**

**Tab-S3-1: data file of plot-test #14 (Irsea-Inrae) Le Talonet, F45290 Nogent-sur-V.**

tree number : see map in Fig-S3-1 and satellite photo Fig-S4-1

death\_year: e.g. 16 for death in 2016 ; 50 is the default value

analysable : 1 for undamaged trees ; 0 for accidently damaged trees excluded from data analysis

h.07 ; h19: e.g. h07= height after growth year 2007 ; h19 = height in growth year 2019

wilt15 : wilt % in growth year 2015

crown-loss-18 : total loss of crown % observed in 2018 (= dieback of branch architecture)

lines of DED infected trees are highlighted in dark yellow

tree number	clone	death_year	analysable	h.07	h.08	h.11	h.14	h.15	h.16	h.17	h.18	h.19	wilt15	wilt16	wilt18	wilt19	crown-loss-18	crown-loss-19
1	F250	50	1	105	110	115	260		410	500	500	414				0,6		
2	F052	50	1	125	135	145	160		265	290	300	300						
3	Lutece	50	1	110	110	115	90		55	120	120	165						
4	F083	50	1	80	80	80	155		270	320	320	370						
5	F250	50	1	100	120	130	260		470	610	610	605						
6	F077	50	1		110	165	295		470	620	620	607						
7	F043	50	1	90	90	110	195		380	445	445	437						
8	Lutece	50	1	105	115	130	330		460	600	600	625						
9	F032mg	50	1	45	50	65	230		390	550	550	600						
10	F471	50	1	70	75	120	10		220	308	308	350						
11	F072	50	1	85	95	120	210		320	460	460	472						
12	F085	50	1	90	90	130	280		530	790	790	760			0,05			
13	F043	50	1	75	85	100	220		340	350	350	373						
14	F083	50	1	105	120	135	230		390	540	540	544						
15	F032mg	50	1	90	95	140	240		445	612	612	610						
16	F471	50	1	85	110	140	245		385	481	481	533						
17	F052	50	1	45	65	150	235		490	600	600	589						
18	T049s	50	1	95	100	160	330		600	737	737	705						
19	F041gm	50	1	105	120	180	265		450	620	620	590						
20	F077	50	1		110	185	315		520	672	672	734						
21	T049s	50	1	125	130	140	285		500	622	622	677						
22	F043	50	1	90	105	155	315		560	640	640	700						
23	Lutece	50	1	110	135	165	350		540	670	670	725						
24	F085	16	1	80	85	185	305	255					0,95					
25	F250	50	1	85	115	175	330		585	709	709	776						
26	F043	50	1	100	110	120	165			190	190	204						
27	F471	50	1	45	65	115	185		320	432	432	490						
28	F085	50	1	70	90	165	290		480	440	440	378			0,5	0,4		0,8
29	Lutece	50	1	95	105	135	245		420	470	470	520						
30	F052	50	1	65	105	130	225		460	520	520	546						
31	F250	50	1	100	105	150	315		575	690	690	704						
32	T049s	50	1	110	165	235	415		585	660	660	730						
33	F083	50	1	85	105	170	305		560	654	654	705						
34	F032mg	50	1	85	85	105	215		470	570	570	615						
35	F072	50	1	100	125	150	265		420	510	510	539						
36	F052	50	1	110	125	160	250		470	520	520	545						
37	F471	50	1	65	75	100	205		345	440	440	475						

38	F041gm	50	1	80	100	120	185		305	340	340	359						
39	F032mg	50	1	70	85	140	245		390	440	440	474						
40	F083	50	1	70	70	80	195		300	355	355	394						
41	F041gm	50	1	65	80	60	115		225	235	235	245						
42	F471	50	1	35	35	85	10		165	223	223	224						
43	F250	50	1	85	95	120	200		370	440	440	485						
44	F043	50	1	75	90	100	210		320	340	340	355						
45	F471	50	1	55	65	120	220		360	430	430	469						
46	F085	50	1	55	65	140	245		375	485	485	540						
47	T049s	50	1	140	150	170	315		460	510	510	540						
48	F052	50	1	90	95	135	225		430	490	490	507						
49	F072	50	1	80	80	45	205		275	380	380	390						
50	F077	50	1		70	135	230		325	383	383	395						
51	F250	50	1	105	145	200	370		570	700	700	749				0,25		
52	F077	50	1		80	145	270		420	480	480	476			0,7	0,35		0,45
53	F072	50	1	80	110	175	375		540	600	600	635						
54	Lutece	50	1	95	110	160	350		540	633	633	630						
55	F041gm	50	1	135	170	205	275		445	530	530	556						
56	F083	50	1	70	80	140	290		535	586	586	613						
57	F043	50	1	115	125	130	260		510	620	620	619						
58	F083	50	1	70	85	145	270		610	784	784	863						
59	F085	50	1	75	85	155	350		625	726	726	780						
60	F032mg	50	1	90	150	205	395		510	550	550	604						
61	Lutece	50	1	120	120	145	340		615	686	686	717						
62	F052	50	0	75	85	165												
63	F471	50	1	20	50	60	220		330	460	460	515						
64	F250	50	1	75	85	160	325		580	760	760	800						
65	T049s	50	1	95	130	145	275		480	536	536	535						
66	F085	50	1	70	105	205	370		590	690	690	718						
67	F032mg	50	1	85	110	140	300		510	652	652	690						
68	F250	50	1	95	100	175	345		550	650	650	691						
69	F471	50	1	65	85	165	355		535	553	553	535						
70	T049s	50	1	95	130	200	390		575	666	666	690						
71	F041gm	50	1	145	180	175	185		290	340	340	330						
72	F083	50	1	95	105	125	220		415	449	449	513						
73	F077	50	1		85	200	340		435	491	491	490				0,2		
74	F072	50	1	110	135	140	225		320	390	390	412						
75	F041gm	50	1	130	155	195	265		320	370	370	362						
76	F043	50	1	80	90	90	170		245	264	264	274						
77	F052	50	0	55	85	100	160											
78	F085	50	1	95	95	130	305		430	530	530	573						
79	F072	50	1	70	70	80	200		350	440	440	475						
80	F077	50	1		140	155	190		325	380	380	400						
81	T049s	50	1	90	95	115	220		360	440	440	477						
82	F043	50	1	95	90	75	215		285	285	300	300						
83	F032mg	50	1		125	135	190		320	330	330	396						
84	F072	50	1	75	75	75	20		190	220	220	231						
85	T049s	50	1	105	120	135	235		350	397	397	430						
86	F083	50	1	70	75	80	150		235	260	300	312						

87	F085	50	1	65	50	60	10		170	196	196	225						
88	F471	50	1	35	60	100	10		210	239	239	277						
89	F085	50	1	70	90	155	265		360	400	400	445						
90	Lutece	50	1	110	125	130	230		360	435	435	494						
91	F032mg	50	1	65	80	95	225		330	440	440	463						
92	F041gm	50	1	50	65	100	160		220	220	220	252						
93	F052	50	1	75	85	90	195		315	341	341	356						
94	F077	50	1		95	120	220		335	470	470	492						
95	F052	50	0	50	70	100												
96	Lutece	50	1	110	115	145	280		505	616	616	640						
97	F077	50	0		95	110												
98	F041gm	50	1	105	135	180	320		480	640	640	656						
99	F072	18	1	80	90	165	320	300					0,7	0,15				
100	F250	15	1	115	140	210	440	465					0,99					
101	F083	50	1	85	95	195	365		695	830	830	845						
102	F471	50	1	80	135	215	450		675	850	850	745						
103	F072	50	1	100	150	200	335		440	482	482	510						
104	F032mg	50	1	100	105	160	350		600	820	820	790						
105	F077	50	1		75	150	275		460	585	585	605						
106	F072	50	1	95	115	130	240		385	464	464	534						
107	T049s	50	1	75	110	185	365		540	700	700	673						
108	F041gm	50	1	110	135	135	165		325	344	344	358						
109	F043	50	1	75	95	115	210		305	350	350	358						
110	F083	50	1	70	105	135	220		345	485	485	465						
111	F052	50	1	65	90	120	215		365	420	420	466						
112	F043	50	1	85	100	100	210		340	365	365	375						
113	F041gm	50	1		125	30	135		175	170	170	176						
114	F250	50	1	110	105	155	295		455	535	535	595						
115	F032mg	50	1	60	65	100	260		360	428	428	461						
116	Lutece	50	1	105	110	125	215		380	410	410	432						
117	F077	50	1		95	140	215		290	347	347	357						
118	T049s	50	1	105	120	135	190		335	362	362	399						
119	Lutece	50	1	105	105	110	225		355	430	430	472						
120	F085	50	1	75	75	125	235		365	455	455	480						

**Tab-S3-2: data file of plot-test #21 (CG Calvados / CREPAN), F14260 Banneville-sur-Ajon**

tree number : see map in Fig-S3-2 and satellite photo Fig-S4-2  
 death\_year: e.g. 16 for death in 2016 ; 50 is the default value  
 analysable : 1 for undamaged trees ; 0 for accidently damaged trees excluded from data analysis  
 h.06 : height after growth year 2006  
 h18: height in growth year 2018  
 ante-infection-h.18 : tree height before dieback in infection year 2018  
 wilt13 : wilt % in growth year 2013  
 crown-loss-18 : total loss of crown % observed in 2018 (= dieback of branch architecture)  
 lines of DED infected trees are highlighted in dark yellow  
 lines of trees with unclear or light symptoms of DED infection in 2018 are highlighted in pale yellow  
 lines of dead or missing trees are highlighted in grey

tree number	clone	death_year	analysable	h.06	h.07	h.08	h.09	h.10	h.11	h.14	ante-infection-h.18	h.18	wilt-13	wilt-14	wilt-15	wilt-16	wilt-17	wilt-18	crown-loss-18
1	F083	50	1	123	143	180	230	260	340	420		580							
2	F020	50	1	67	132	177	230	240	305	230		370							
3	F032 mg	50	1	149	229	255	270	300	360	530		715							
4	F034	50	1	121	188	224	265	310	420	520		640					0,01		0,01
5	F140	50	1	102	223	259	280	300	380	510	730	670						0,15	
6	F044	14	0	84	109	136	130	55											
7	F072	50	1	130	194	233	280	300	400	530		645							
8	F083	50	1	131	207	252	320	350	360	480		790							
9	F050	50	1	101	174	205	230	240	270	380		615							
10	F024	50	1	64	110	155	190	213	235	230		600							
11	F028	50	1	98	149	170	200	220	250	360		690							
12	F056	50	1	89	120	174	200	225	260	360		520							
13	F044	50	1	70	130	148	170	190	275	440		500							
14	F028	50	1	134	143	187	210	230	350	480		640							
15	F072	50	1	103	123	180	220	240	245	310		350					0,15		0,15
16	F024	50	1	73	133	171	210	250	290	360		620							
17	F115	14	0	59	48														
18	F032 mg	50	1	127	248	272	330	355	360	420		655							
19	F056	50	1	99	149	166	180	196	250	320	460	450						0,1	
20	F034	50	1	108	224	252	330	365	410	480		775							
21	F028	50	1	114	173	221	280	320	410	550		640							
22	F020	50	1	70	97	166	220	225	290	380		610							
23	F024	50	1	49	90	148	240	260	315	400		640							
24	F056	50	1	88	128	198	225	235	300	390		615							
25	F072	50	1	82	136	202	270	290	360	430	620	620						0,15	
26	F020	50	1	74	174	227	240	250	255	300		435							
27	F050	50	1	103	212	261	280	300	300	420		600							
28	F034	50	1	77	121	189	230	250	315	390		700							
29	F140	50	1	100	204	254	250	270	290	390		620							
30	F115	50	1	65	109	149	185	200	230	300		480							
31	F020	50	1	91	144	198	230	250	310	380		640							
32	F032 mg	50	1	149	234	276	310	320	385	500		670							
33	F115	14	0	54	66	132	150	150	160										
34	F083	50	1	121	188	235	290	330	365	450		715							
35	F032 mg	50	1	131	196	239	280	310	360	480		635							





84	F140	50	1	101	141	208	260	310	360	420		620							
85	F056	18	0	76	136	167	200	260	275	20									
86	F056	14	0	67	70														
87	F115	50	1	51	58	85	115	140	195	250		490							
88	F072	50	1	89	132	162	215	250	305	380		510							
89	F140	50	1	86	132	197	250	300	360	410		600							
90	F034	50	1	109	140	218	305	320	410	425		670							
91	F140	50	1	121	179	219	250	300	320	400		530							
92	F032 mg	50	1	143	205	233	270	310	410	500		600							
93	F028	50	1	130	232	272	330	370	400	510		590							
94	F083	50	1	103	191	222	280	340	345	530		630							
95	F050	50	1	110	179	218	240	250	275	360		485							
96	F140	50	1	67	177	219	250	280	345	460		635							
97	F028	50	1	110	140	209	260	300	325	370		610							
98	F024	50	1	51	91	131	170	180	245	300		470							
99	F032 mg	14	0	152	193	47													
100	F050	50	1	121	157	192	230	250	290	340		525							
101	F028	50	1	131	179	218	250	290	325	480		590							
102	F083	50	1	118	162	225	250	270	285	330		560							
103	F034	50	1	118	162	180	240	265	310	370		655							
104	F020	14	0	68	72														
105	F028	50	1	121	185	231	280	310	365	460		630							
106	F034	50	1	107	153	195	260	310	350	460		740							
107	F032 mg	50	1	146	182	225	250	300	365	460	625	625						0,02	
108	F020	18	0	73	112	161			50	30									
109	F050	50	1	85	167	193	220	240	220	340		540							
110	F083	50	1	102	171	216	250	320	300	360		535							
111	F056	50	1	118	178	200	220	240	285	320		455							
112	F034	50	1	104	146	184	250	270	340	440		685							
113	F072	50	1	75	137	161	190	230	275	340		520							
114	F024	50	1	55	101	122	190	225	245	340		550							
115	F020	50	1	74	137	190	230	240	240	310		335							
116	F115	50	1	78	132	165	190	215	245	320		355					0,05		0,05
117	F056	50	1	89	138	163	180	190	200	300		430							
118	F044	14	0	59	58														
119	F050	50	1	96	166	188	200	210	215	280		380							
120	F072	50	1	70	180	224	280	300	375	480	550	500							0,4



40	F024								
41	F115								
42	F140								
43	F083								
44	F028								
45	F115								
46	F032mg								
47	F044								
48	F072								
49	F024								
50	F032mg								
51	F020		1	EY ?		EY ?			
52	F024								
53	F140								
54	F034								
55	F028								
56	F034		1		EY ?				
57	F140								
58	F140								
59	F044								
60	F072								
61	F056								
62	F024		1		EY ?				
63	F050								
64	F024								
65	F044								
66	F083	light infection 2017 ?							
67	F028								
68	F034	light infection 2017 ?							
69	F044								
70	F050								
71	F050								
72	F044								
73	F056								
74	F020		1		EY	some EY			
75	F083								
76	F115								
77	F020								
78	F115								
79	F072								
80	F050								
81	F044								
82	F032mg								
83	F115								
84	F140								
85	F056								
86	F056								
87	F115								
88	F072								

89	F140								
90	F034						4		
91	F140								
92	F032mg								
93	F028								
94	F083								
95	F050								
96	F140								
97	F028								
98	F024								
99	F032mg							49.070028 N	0.559126 W
100	F050								
101	F028								
102	F083								
103	F034								
104	F020								
105	F028								
106	F034								
107	F032mg	light infection 2018							
108	F020								
109	F050						1		
110	F083						2		
111	F056						3	49.069668 N	0.559775 W
112	F034							49.069385 N	0.559587 W
113	F072								
114	F024								
115	F020			1		EY			
116	F115	light infection 2017 ?							
117	F056								
118	F044								
119	F050								
120	F072							49.069133 N	0.559976 W

**Tab-S3-3: data file of plot-test #31 (Irstea / P p. ONF Gu men -P.) at Lyc e J. Rieffel p72, F44800 Saint-Herblain**

tree number : see map in Fig-S3-3 and satellite photo Fig-S4-3  
 death\_year: e.g. 16 for death in 2016 ; 50 is the default value  
 analysable : 1 for undamaged trees ; 0 for accidently damaged trees excluded from data analysis  
 h.06 : height after growth year 2006  
 current h18: height in growth year 2018  
 ante-infection-h.18 : tree height before dieback in infection year 2018  
 lines of DED infected trees are highlighted in dark yellow  
 lines of dead or missing trees are highlighted in grey

tree number	clone	death year	analysable	h.06	h.09	ante-infection-h.10	current-h.10	ante-infection-h.11	ante-infection-h.12	ante-infection-h.13	current-h.13	ante-infection-h.14	current-h.14	ante-infection-h.15	current-h.15	ante-infection-h.16	current-h.16	ante-infection-h.17	current-h.17	ante-infection-h.18	current-h.18
101	F056	50	1	100	240		330				495		565	560	560		500		495		520
102	F083	50	1	145	215		270				495		615				730		720		770
103	F501																				340
104	F024	50	1	130	255		305				420		645				780		870	860	860
105	F032 mg	50	1	200	320		335				490		575				575		585		585
106	F028	50	1	160	220		260				430		425				450		450		460
107	F077	50	1	40	75		150				210		225				245		260		260
108	F044	16	0	80	145		150				155		140								
109	F072	13	0	100	145		125														
110	F144	16	0	130	135		150				150		130								25
111	F203	50	1	70	85		90				125		130				140		40		52
112	F352 *	50	1	165	180		180				185		180				150		160		160
113	F041 gm	18	0	85	170		195				225		210				120		135		
114	F050	50	1	130	160		180				190		180				180		190		190
201	F203	8	0	70																	
202	F035	8	0	70																	
203	F044	7	0	85																	
204	F355	50	1	75	160		210				280		330				430		430		470
205	F034	50	1	140	360		440	488			360		460				585		645	630	630
206	F350	50	1	115	220		250				365		410				505		525		545
207	F140	50	1	115	235		285				375		790				600		600		630
208	F083	50	1	110	240		270				380		400				440		440		460
209	F028	50	1	200	315		340				360		315				320		330		330
210	F124 mg	50	1	140	210		235				265		260				265		260		260
211	F501																				255
212	F020	50	1	75	100		115				135		130				135		130		135
213	F115	13	0	80	100		100														
214	F024	7	0	95																	
301	F072	50	1	115	170		240				485		480				500		550		610
302	F020	50	1	105	265		300				465	455	455		280		420		460		510
303	F050	50	1	155	360		415				565		690				840		910		950
304	F041 gm	50	1	60	160		200				300		365				385		420	430	385
305	F124 mg	50	1	125	235		290				415		575				640		660		580
306	F144	50	1	125	190		225				310		330				415		475		470
307	F352 *	50	1	125	325		240				335		445				600		620		650

308	F034	50	1	140	330		420			605	605	515	515				660		720		680
309	F032 mg	50	1	250	430	510	490				495		240				240		300		300
310	F140	50	1	145	290	320	290		285		285		275				290		350		350
311	F355	50	1	100	125		135				140		140				140		150		160
312	F350	16	0	120	160		10				10										
313	F077	16	0	45	65		100				120		120								
314	F056	50	1	125	135		165				180		165				175		160		170
401	F144	13	0	140	140		170														
402	F041 gm	50	1	100	255		295				435		530				590		650		730
403	F083	50	1	115	135		145				130		125				150		180		260
404	F352 *	50	1	140	165		185				275		405				550		560		585
405	F032 mg	50	1	190	215		225				380		495	490	490		260		300		270
406	F050	50	1	155	200		215				270		325				500		520		550
407	F203	50	1	55	90		135				200		270				410		360		370
408	F072	50	1	110	165		205				275		350				410		415		430
409	F024	50	1	85	185		210				320		505				700		700		730
410	F077	50	1	60	125		165				265		370				505		480		505
411	F028	50	1	140	160		175				270		310				340		335		340
412	F034	50	1	160	255		290				410		460				540		540		535
413	F124 mg	50	1	120	170		195				245		260				280		280		290
414	F350	16	0	125	160		170				185		200						65		
501	F501																				360
502	F034	50	1	140	265		320	488			465		680				815		925		950
503	F140	50	1	160	190		180				190		170				280		310		390
504	F028	50	1	155			130				195		230				365		390		410
505	F044	50	1	105	130		140				205		265				380		390		420
506	F020	50	1	90	145		155				160		165				275		305		310
507	F035	50	1	130	135		135				210		300				400		430		430
508	F050	50	1	125	230		305				395		420				535		560		560
509	F056	50	1	115	210		280				375		510				600		600	600	600
510	F355	50	1	90	165		200				260		325				440		465		480
511	F144	50	1	150	130		175				245		325				410		415		415
512	F083	50	1	120	215		275				405		495				580		590		600
513	F203	50	1	120	165		185				230		325				420		430	455	455
514	F032 mg	50	1	170	385		430				560		625	625	625		660		615		630
601	F024	50	1	110	100		130				250		360				470		520		580
602	F077	50	1	45	170		200				215		355				510		570		640
603	F355	50	1	115	135		140				145		190				210		225		240
604	F350	50	1	125	170		185				255		335				500		520		535
605	F124 mg	50	1	90	140		160				175		225				240		245		275
606	F056	50	1	120	180		215				295		415				570		570	585	585
607	F072	7	0	85																	
608	F020	50	1	120	185		220				325		435				580		590		590
609	F041 gm	50	1	80	175		235				180		245				265		290		295
610	F035	50	1	85	235		290				335		540				620		570		570
611	F352 *	50	1	150	235		300				395		570				730		760		775

612	F115	50	1	65	125		150				190		235				305		320		320
613	F140	50	1	180	360		450				530		645				760		840		850
614	F044	50	1	110	160		175				180		180				190		190		190
701	F124 mg	50	1	90	120		165				320		560				710		720	730	730
702	F350	50	1	145	170		200				285		415				545		590		590
703	F056	50	1	85	145		180				225		420				470		520		540
704	F034	7	0	180																	
705	F072	50	1	75	110		160				220		310				365		395		430
706	F501																				290
707	F140	50	1	125	190		240				305		445	475	475		450		435		460
708	F203	50	1	70	135		155				255		335				430		430		440
709	F032 mg	50	1	185	355		420				570		670				840		860		880
710	F024	50	1	90	200		270				445		570				740		800		805
711	F044	50	1	90	185		220				325		420				570		600		640
712	F077	50	1	45	150		195				325		415				600		615		680
713	F050	50	1	130	255		285				345	340	340		325		470		500		540
714	F355	50	1	75	165		180				195		200				200		210		210
801	F083	50	1	125	145		140				240		315				530		590		700
802	F020	50	1	85	140		145				200		245				290		310		350
803	F041 gm	50	1	130	200		195				250		335				410		445	460	430
804	F024	50	1	85	165		295				320		365				570		610		620
805	F352 *	50	1	120	135		280				240		370				520		545		580
806	F028	50	1	150	165						240		320				460		485		535
807	F144	50	1	155	180		260				225		125				280		295		295
808	F034	50	1	135	180		205				440	455	535		535		780		765		780
809	F501						200														300
810	F350	50	1	105	230		155				440		480			590	540		530		550
811	F035	50	1	120	265		195				355		450				550		580		610
812	F056	50	1	105	170		225				270		420				520		540		560
813	F072	50	1	75	110		165				180		225				230		255		270
814	F020	50	1	95	125		155				145		175				235		265		280
901	F035	50	1	95	170		215				215		325				505		540		590
902	F044	50	1	80	150		180				200		250				345		355		405
903	F203	50	1	60	215		245	460			310		400			490	320		375		380
904	F050	50	1	145	245		310				40		500				690		730		760
905	F077	50	1	115	235		250				325		390				530		595		645
906	F032 mg	50	1	190	310		380				580		720				840		980		1020
907	F501						120														265
908	F041 gm	50	1	155	320		400				515		620	755	650		555		555		580
909	F028	50	1	150	295		330				525		665				760		800		805
910	F124 mg	50	1	125	240		285				415		550				705		750		750
911	F140	50	1	150	360	380	320				290		295				320		340		360
912	F083	50	1	150	240		290		346		390		455				620		645		660
913	F144	50	1	140	160		185				195		315				380		400		400
914	F352 *	8	0	145																	
1001	F203	50	1	75	120		140				145		225				365		415	430	350
1002	F144	50	1	110	150		200	284			285		335				470		490		520

1003	F355	50	1	100	185		200			240		255				355		420		455
1004	F041 gm	50	1	140	230		290			330		420				485		540		555
1005	F044	50	1	90	165		180			180		265				385		415		455
1006	F083	50	1	150	185		195			260		370				500		560		620
1007	F035	50	1	100	190		250			235		330				475		520		580
1008	F020	50	1	90	200		95			205		310				465		500		575
1009	F352 *	50	1	130	330		350			410		615				820		845		970
1010	F056	50	1	115	210		220			225		370	400	400		410		425		440
1011	F032 mg	50	1	225	330		390			560		690				840		860		960
1012	F034	50	1	180	195		205			310	310	310		260		435		490		520
1013	F077	50	1	90	240		260			350		470				640		625		670
1014	F072	50	1	85	150		150			150		155				160		165		175
1101	F140	50	1	145	270		220			320		335				480		560		585
1102	F352 *	50	1	155	215		245			265		325				410		430		430
1103	F501																			220
1104	F028	50	1	175	195		205			290		380				540		590		655
1105	F024	50	1	75	285		320			320		475				670		750		770
1106	F350	50	1	130	225		255			320		400				560		600		620
1107	F115	50	1	60	165		30			80		150				260		290		310
1108	F144	50	1	145	210		235			10		70				185		210		270
1109	F035	50	1	95	160		185	288	290		245		455			600		650		680
1110	F044	50	1	100	165		185			290		360				520		570		600
1111	F050	50	1	125	250		270			360		450				610		620		630
1112	F355	50	1	105	145		135			150		225				370		380		390
1113	F124 mg	50	1	105	170		195		321		10		335			510		575		630
1114	F041 gm	50	1	55	110		90			110		125				175		185		200
1201	F077	50	1	110	140		185			225		265				430		465		515
1202	F124 mg	50	1	95	230		280			350		420				500		555		600
1203	F056	50	1	100	205		250			330		435			490	450		450		485
1204	F050	50	1	165	255		275			330		450			600	530		510		515
1205	F020	50	1	105	230		265			360		440			520	480		300		180
1206	F032 mg	50	1	180	350		380			515		650	680	680		680		695		710
1207	F072	50	1	95	175		215			70		240				355		390		425
1208	F203	50	1	80	125		155			245		425			510	430		425		455
1209	F140	50	1	145	270		330		345		315		265			270		270		275
1210	F350	8	0	135																
1211	F501																			285
1212	F028	50	1	140	220		260			345		480				610		655		695
1213	F024	50	1	85	215		290			425		575				755		785		770
1214	F083	50	1	165	210		230			360		480				640		665		695
1301	F024	50	1	75	125		140			215		350				510		540		570
1302	F072	8	0	130																
1303	F501																			285
1304	F140	50	1	150	330		265			5		255				440		510		555
1305	F355	8	0	120																
1306	F144	12	0	170	190		185													
1307	F034	50	1	160	250		300			440		575				860		880		910





**Tab-S3-3: data file of plot-test #31 (Irstea / Pép. ONF Guémené-P.) at Lycée J. Rieffel p72, F44800 Saint-Herblain *Continued***

tree number : see map in Fig-S3-3 and satellite photo Fig-S4-3  
 current h19: height in growth year 2019  
 ante-infection-h.19 : tree height before dieback in infection year 2019  
 wilt15 : wilt % in growth year 2015  
 crown-loss-18 : total loss of crown % observed in 2018 (= dieback of branch architecture)  
 Elm Yellows : 1 = tree with leaf yellowing evocating Elm Yellows  
 lines of DED infected trees are highlighted in dark yellow  
 lines of dead or missing trees are highlighted in grey

tree number	clone	ante-infection-h.19	current-h.19	wilt-10	wilt-11	wilt-12	wilt-13	wilt-14	wilt-15	wilt-16	wilt-17	wilt-18	wilt-19	crown-loss-18	crown-loss-19	Elm Yellows	Google Maps Lat	Google Maps Long
101	F056		560						0,7	0,95				0,5			47.256118 N	1.637690 W
102	F083		860															
103	<b>F501</b>		460															
104	F024		860									0,05			0,2			
105	F032 mg		585											0,5	0,45			
106	F028		470															
107	F077		270															
108	F044																	
109	F072																	
110	F144																	
111	F203		55															
112	F352*		150															
113	F041gm																	
114	F050		190														47.255598 N	1.637890 W
201	F203																	
202	F035																	
203	F044																	
204	F355		580															
205	F034		550			0,95						0,2	0,05		0,2			
206	F350		530											0,1				
207	F140		655											0,1				
208	F083		460															
209	F028		330															
210	F124 mg		265															
211	<b>F501</b>		260															
212	F020		135															
213	F115																	
214	F024																	
301	F072		700															
302	F020		570					0,99										
303	F050		1030															
304	F041gm		340									0,55	0,5		0,9			
305	F124		600							0,1		0,6		0,1	0,5			







1306	F144																		
1307	F034		940																
1308	F020		580																
1309	F077		700																
1310	F083		780																
1311	F050		700			0,1													
1312	F032 mg		870						0,1	0,05	0,5	0,1	0,15	0,75					
1313	F035	630	630									0,05							
1314	F203		450				0,55						0,3						
1401	F044		440																
1402	F350		380								0,25	0,05		0,15					
1403	F203		400						0,8	0,2			0,2	0,7					
1404	F032 mg		1010																
1405	F028																		
1406	F056		310				0,6		0,65	0,25			0,55						
1407	F352*		720																
1408	F024		770																
1409	F072		600																
1410	F124 mg		665																
1411	F041g m		520					0,1	0,05										
1412	F140		590			0,25	0,6						0,15						
1413	F350		415					0,75					0,1						
1414	F144		490																
1501	F035		540															47.25 6069 N	1.636 909 W
1502	F083		820																
1503	F020		565																
1504	F077																		
1505	F124 mg		750																
1506	F050		750																
1507	F041g m		610																
1508	F028		620																
1509	F352*		730							0,05	0,05		0,05	0,2					
1510	F355		520																
1511	F115		570						0,1	0,2			0,1	0,2					
1512	F056					0,9													
1513	F501		260																
1514	F044																	47.25 5545 N	1.637 153 W

Supplementary material to: Collin E, Pozzi T, Joyeau C et al. (ms. 2022).  
Monitoring of the incidence of Dutch Elm Disease and mortality  
in experimental plantations of French *Ulmus minor* conservation clones

**Tab-S3-4 - SSRs fingerprints for 9 French *Ulmus minor* Mill. clones**

kindly supplied to Eric Collin (Irrstea, Nogent/Vernisson, F.) by Joukje Buiteveld (CGN, Wageningen, NL.) in 2016

Allele sizes (in bp) are given for 10 loci :

- Ulm 2 and Ulm3 as described in Whiteley et al. (2003);
- Ulm8, Ulmi1-21 and Ulmi1-98 according to the PCR profile b as described in Collada et al. (2004);
- UR123, UR138, UR175, UR158 and UR188a following the protocol of Zalapa et al. (2008).

Methods as described in: Buiteveld J., Vanden Broeck A., Cox K., Collin E. (2016). Human impact on the genetic diversity of Dutch field elm (*Ulmus minor*) populations in the Netherlands: implications for conservation. *Plant Ecol Evol* 149:165–176

Clone	Ulm2a	Ulm2b	Ulm3a	Ulm3b	Ulm8a	Ulm8b	Ulm1-21a	Ulm1-21b	Ulm1-98a	Ulm1-98b	UR158 a	UR158 b	UR188 a	UR188 b	UR175 a	UR175 b	UR123 a	UR123 b	UR138 a	UR138 b
F043	96	105	162	162	104	104	208	210	152	165	0	0	108	112	220	222	243	245	200	228
F072	102	108	177	180	104	104	208	214	152	157	176	196	108	110	224	226	243	245	228	232
F077	102	108	162	162	104	104	210	220	152	180	180	196	108	112	222	222	245	245	232	232
F083	108	108	162	177	104	104	208	218	147	152	0	184	108	112	218	222	245	247	230	248
F115	102	114	177	180	104	122	210	212	152	160	176	196	110	112	218	222	247	249	228	232
F140	102	102	177	177	104	122	208	210	153	153	176	180	108	112	218	226	247	247	214	230
F205	102	102	162	177	104	104	210	214	152	152	0	196	108	112	222	224	245	245	228	232
F250	102	102	159	177	104	104	208	210	152	152	176	196	108	112	222	224	243	249	228	228
F351	102	108	171	174	104	122	204	208	152	152	180	196	108	112	224	226	245	245	228	228