
Appendix 1

Figures 2.1- 2.25 The average radial growth of 25 different isolates of *D. flagrans* over 14 days at five different temperatures

Figures 2.1- 2.4 show the average radial growth of four of the 25 isolates over 12 days at five different temperatures. The results for these four isolates are limited to 12 days because of a power failure in the incubators at day 13 during this part of the study. Figures 2.5- 2.25 show the average radial growth of the remainder of the 25 isolates over 14 days at the five different temperatures.

Figures 2.2- 2.25 The average radial growth of 25 different isolates of *D. flagrans* over 14 days at five different temperatures . (\blacksquare 12 °C, \blacktriangle 17 °C, \blacklozenge 22 °C, \times 27 °C, \blacklozenge 32 °C)

Figure 2.1: CP 845

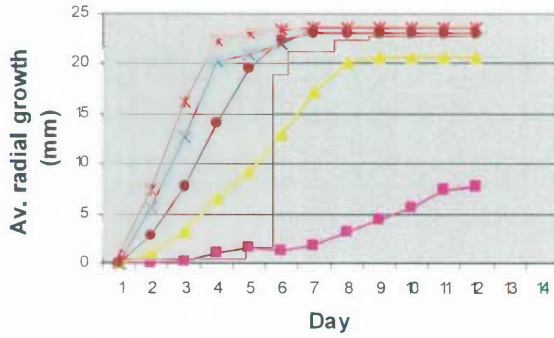


Figure 2.2: CP 1134

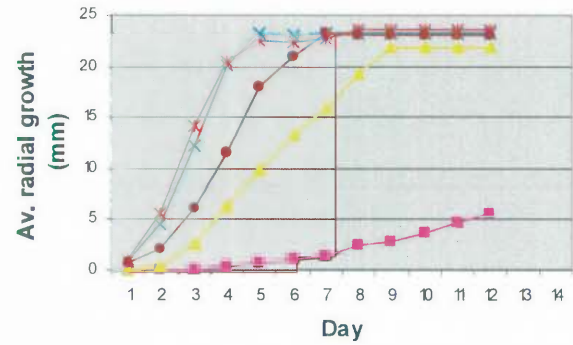


Figure 2.3: DF 8

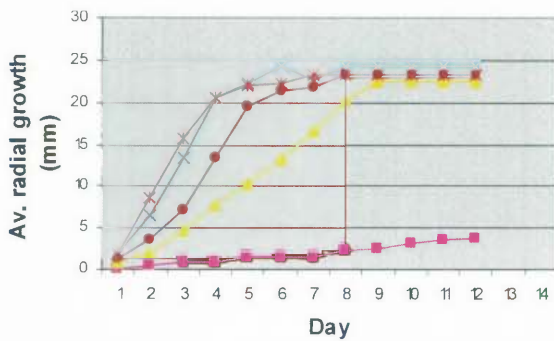


Figure 2.4: CP 1801

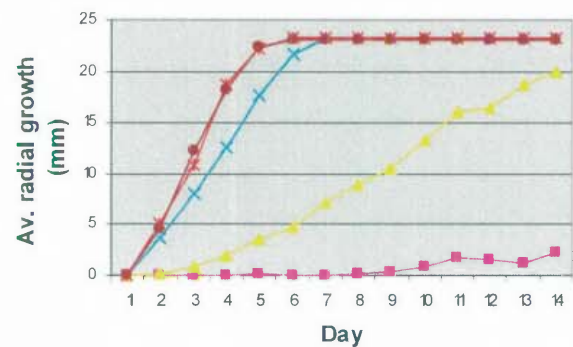


Figure 2.5: CP 1168

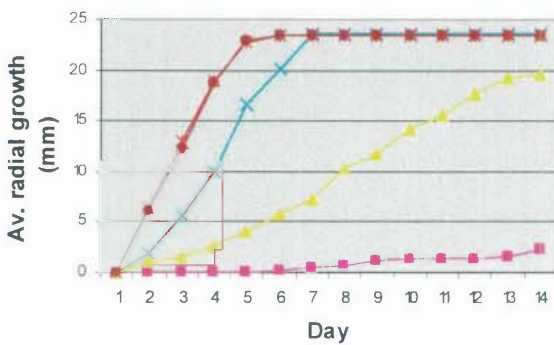


Figure 2.6: CP 1188

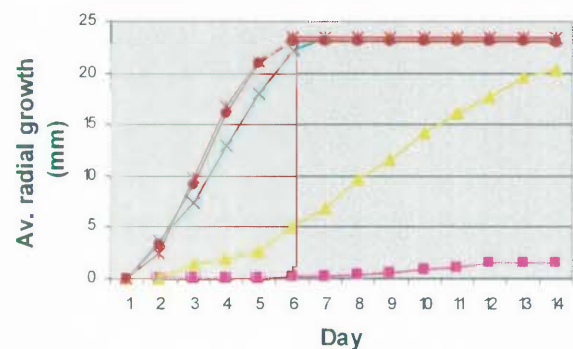


Figure 2.7: CP 1382

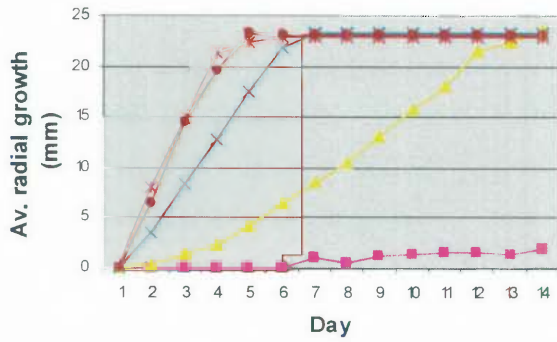


Figure 2.8: CP 1382

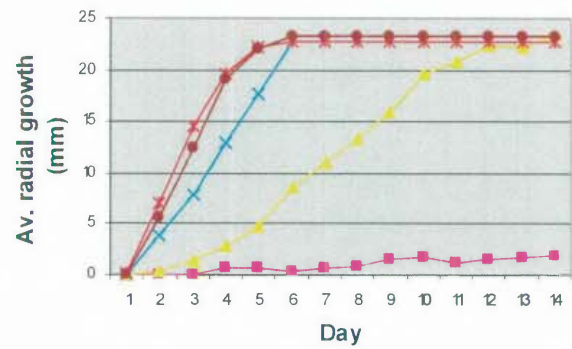


Figure 2.9: CP 911

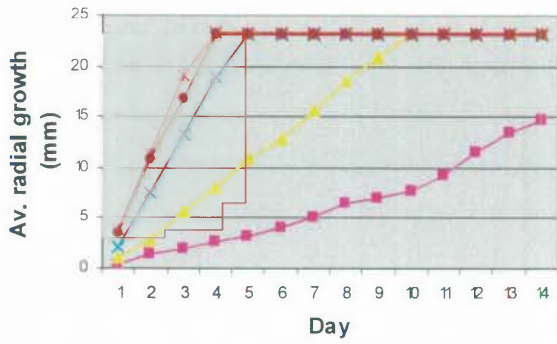


Figure 2.10: CP 1810

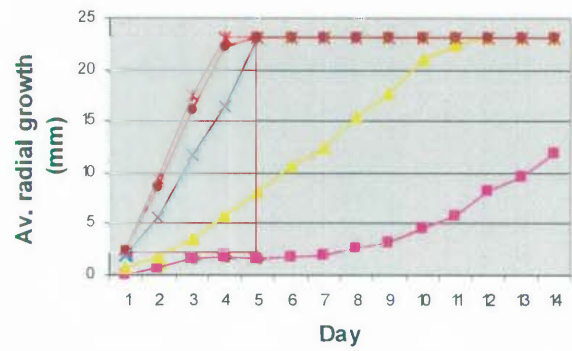


Figure 2.11: CP 1187

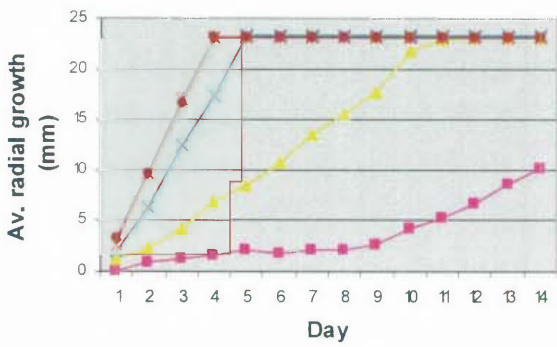


Figure 2.12: CP 1171

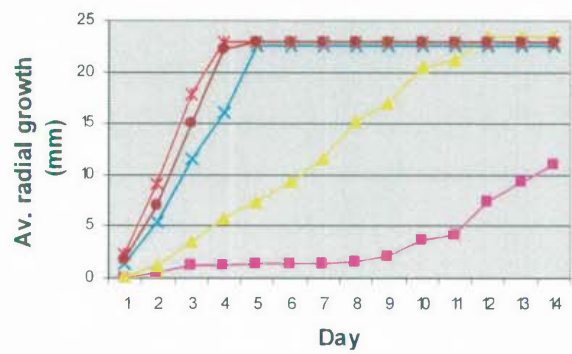


Figure 2.13: 94 DFa

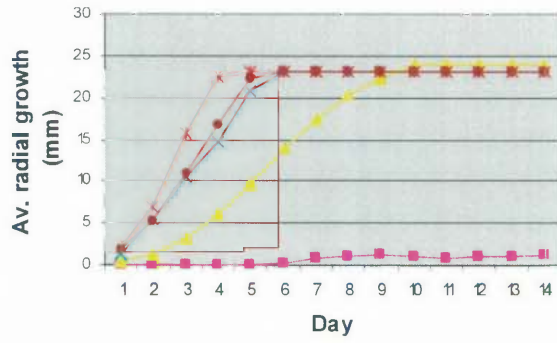


Figure 2.14: CP 1474

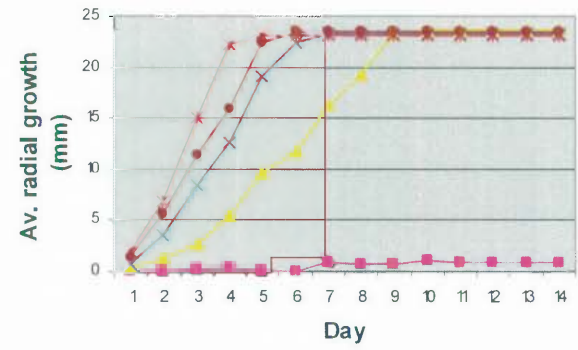


Figure 2.15: DF 3

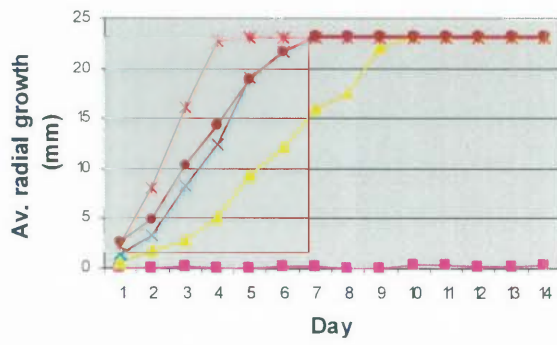


Figure 2.16: 92 4054

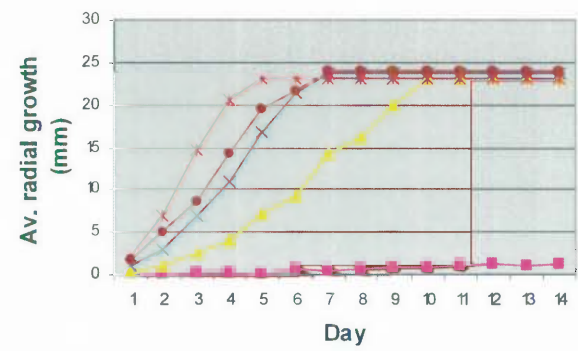


Figure 2.17: CP 1861

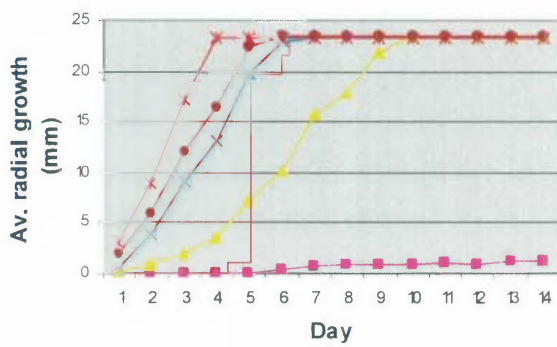


Figure 2.18: DH DIXON

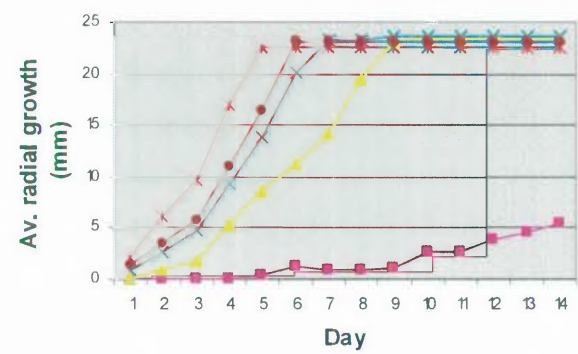


Figure 2.19: DH MCOMP

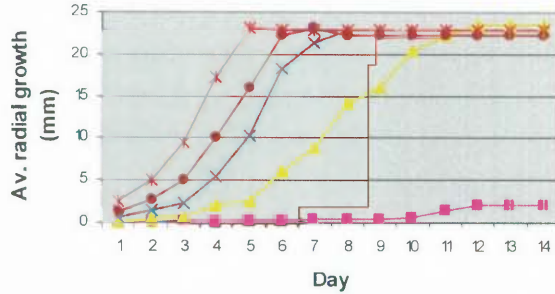


Figure 2.20: DH OSP

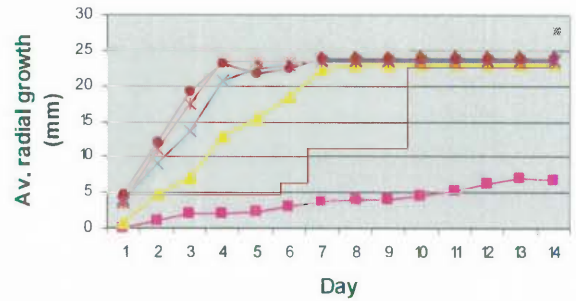


Figure 2.21: DH SPA

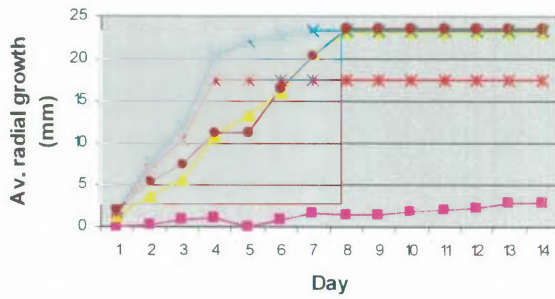


Figure 2.22: DH SPB

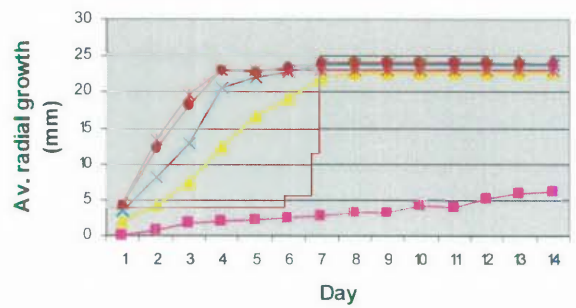


Figure 2.23: 92 870

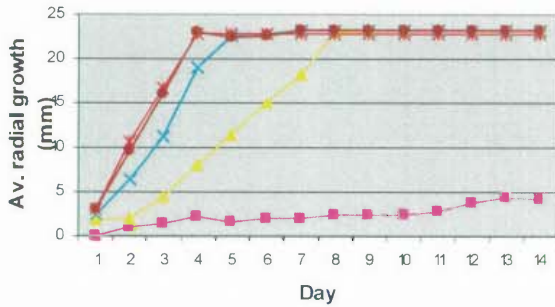


Figure 2.24: DH CHICK

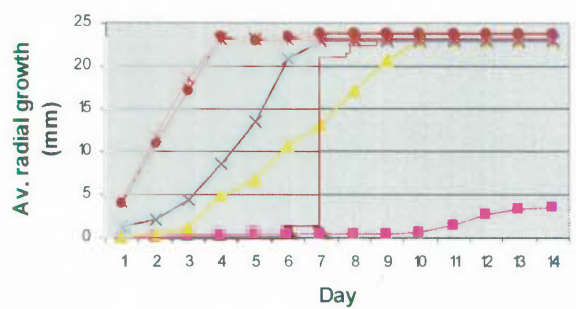
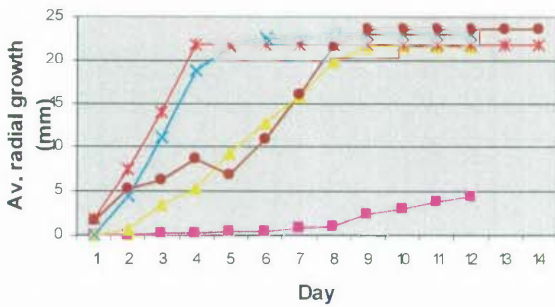


Figure 2.25: CP 912



Appendix 2

Figures 2.26- 2.50 The average chlamyospore production of 25 different isolates of *D. flagrans* over 14 days at five different temperatures

Figures 2.26-2.29 show the average chlamyospore production of four of the 25 isolates over 12 days at five different temperatures. The results for these four isolates are limited to 12 days because of a power failure in the incubators at day 13 during this part of the study. Figures 2.30-2.50 show the average chlamyospore production of the remaining 25 isolates over 14 days at five different temperatures.

Figures 2.36 – 2.50 The average chlamyospore production /cm² of 25 different isolates of *D. flagrans* over 14 days at five different temperatures. (12 °C, 17 °C, 22 °C, 27 °C, 32 °C)

Figure 2.26: CP 845

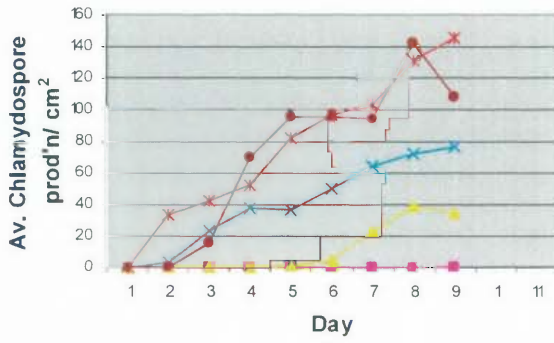


Figure 2.27: CP 1134

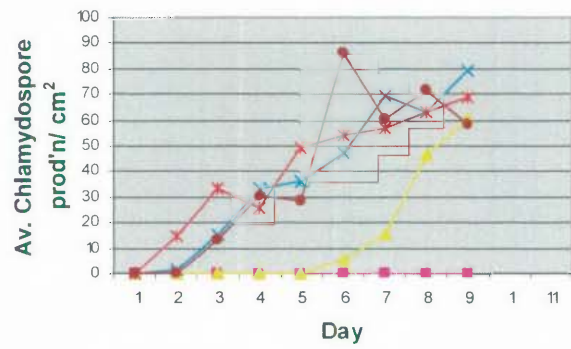


Figure 2.28: DF 8

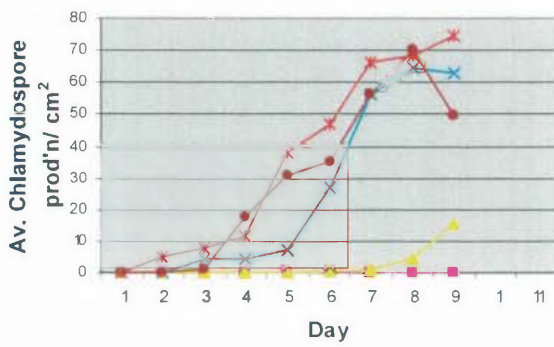


Figure 2.29: CP 1801

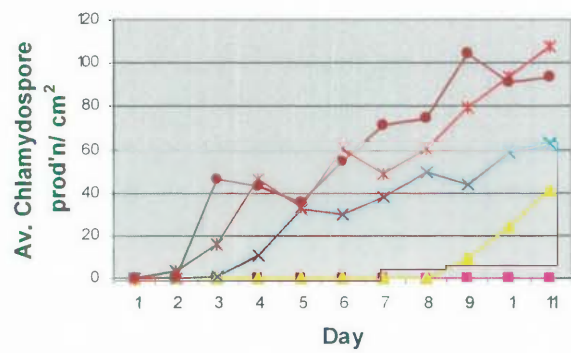


Figure 2.30: 1168

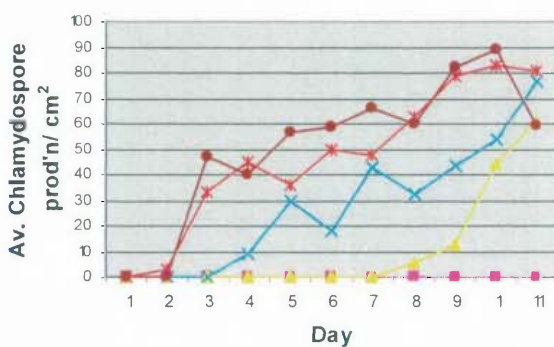


Figure 2.31: CP 1188

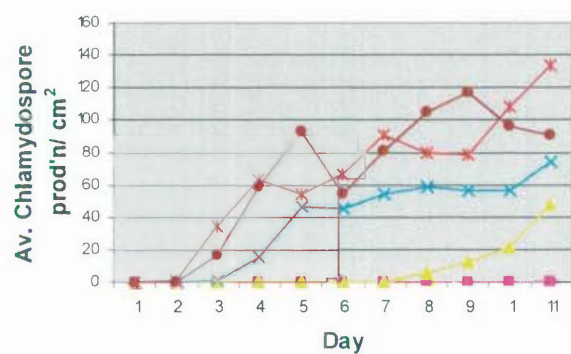


Figure 2.32: CP 1382

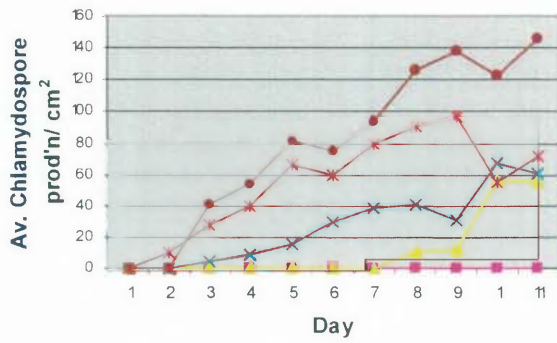


Figure 2.33: 92 3197

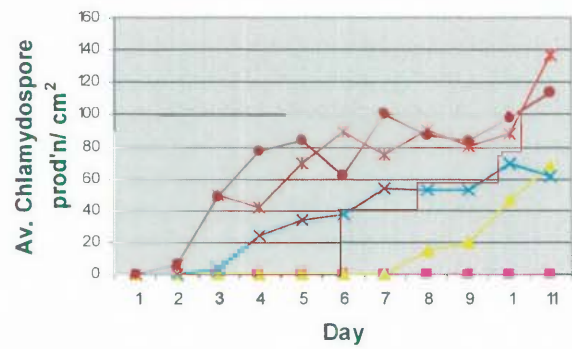


Figure 2.34: CP 911

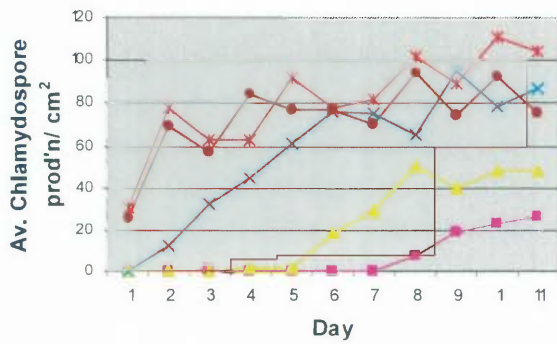


Figure 2.35: CP 1810

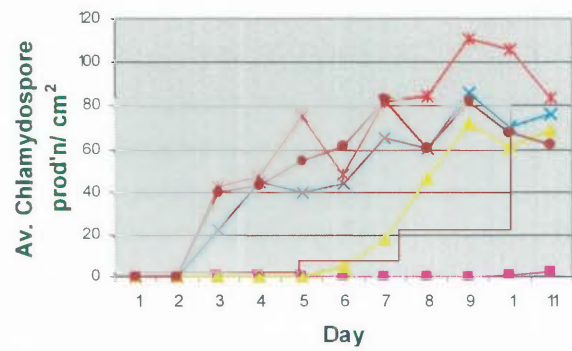


Figure 2.36: CP 1187

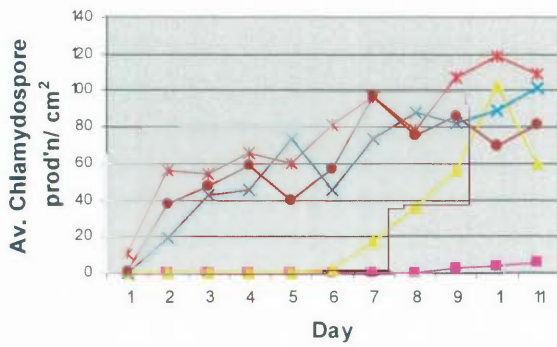


Figure 2.37: CP 1171

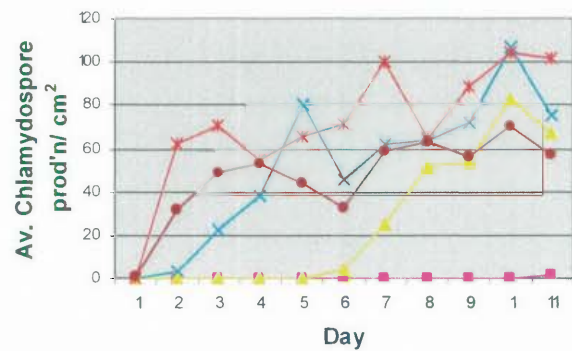


Figure 2.38: 94 DFa

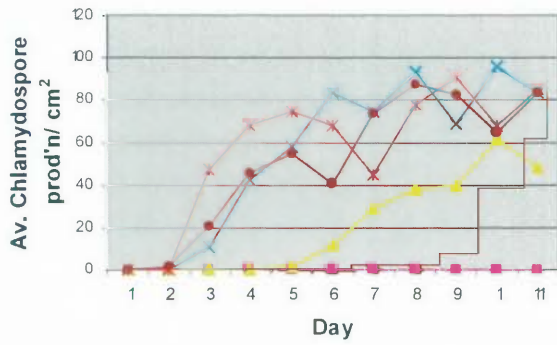


Figure 2.39: CP 1474

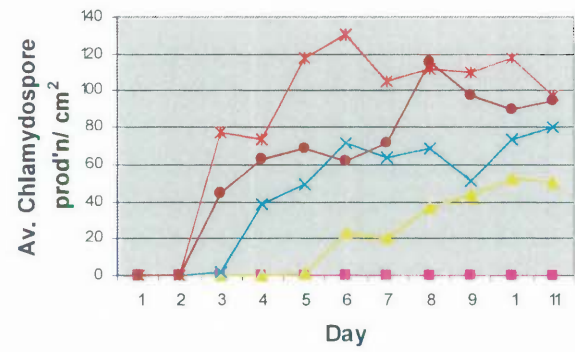


Figure 2.40: DF 3

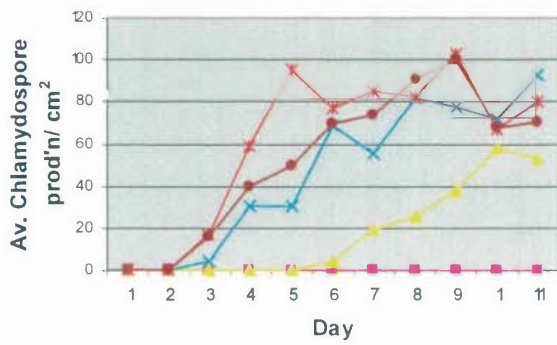


Figure 2.41: 92 4054

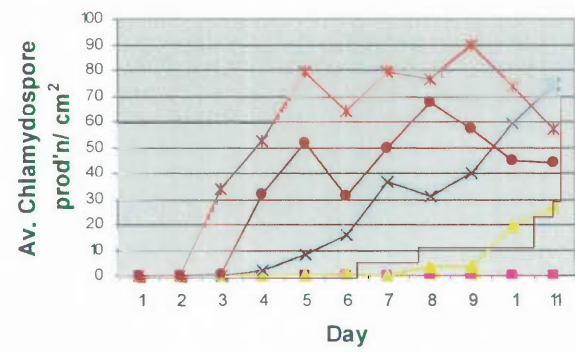


Figure 2.42: CP 1861

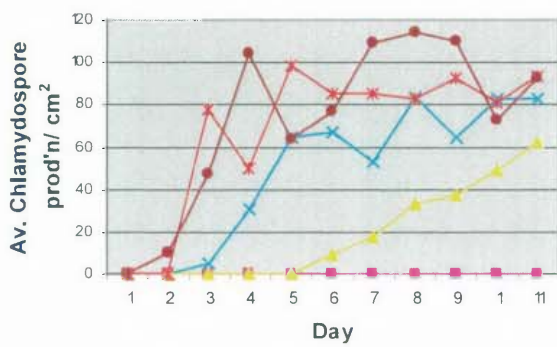


Figure 2.43: DH DIXON

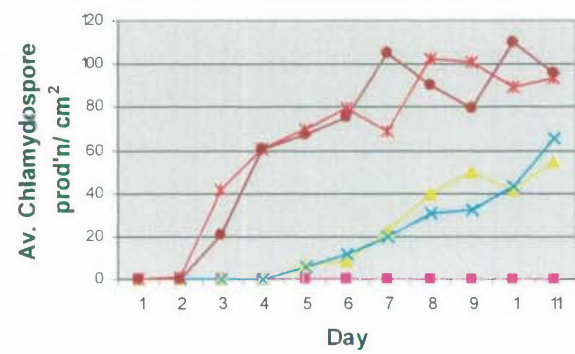


Figure 2.44: DH MCOMP

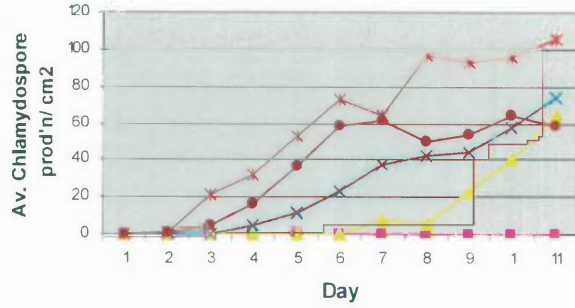


Figure 2.45: DH OSP

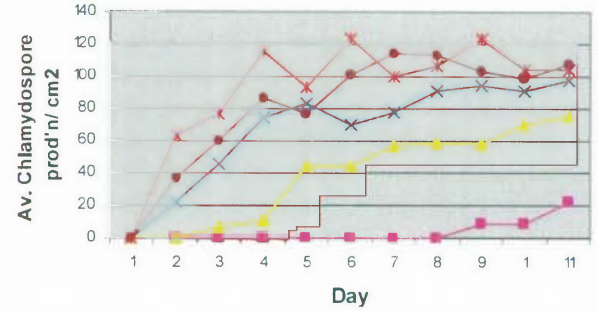


Figure 2.46: DH SPA

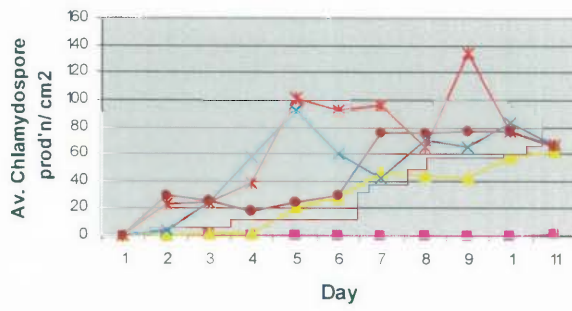


Figure 2.47: DH SPB

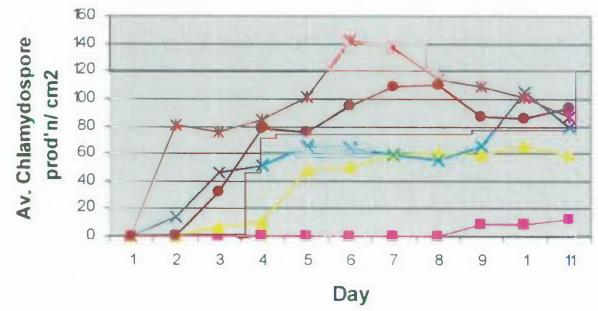


Figure 2.48: 92 870

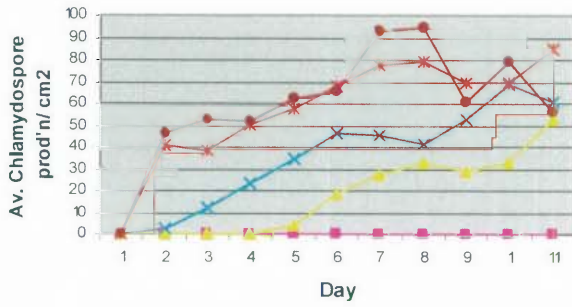


Figure 2.49: DH CHICK

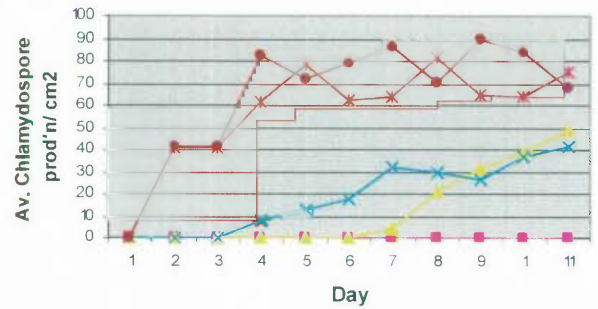
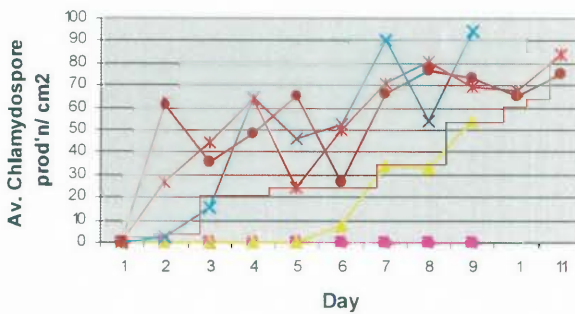


Figure 2.50: CP 912



Appendix 3

Composite RAPD data for nine primer/primer pair combinations

Table 1. Composite RAPD data for four primer/primer pair combinations

Primer name	38a									OPB 12-18						CNISSOR											MYCI/CNI								
	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	1	2	3	4	5	6	7	8	9	10	11	1	2	3	4	5	6	7	8	9
Isolate	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	1	2	3	4	5	6	7	8	9	10	11	1	2	3	4	5	6	7	8	9
DH SPA	1	1	1	0	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1
DH SPB	1	1	0	0	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	
DH DIXON	1	1	0	1	0	0	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	
DHOSP	1	1	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	
DH CHICK	1	1	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	
DH MCOMP	1	1	0	1	0	0	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	1	1	1	1	
DF 3	1	1	0	1	0	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	1	1	1	1	
DF 8	1	1	0	1	0	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	1	1	1	1	
Dfa	1	1	1	0	0	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1		
92 4054	1	1	1	0	0	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	1	1	1		
92 870	1	1	1	0	0	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	1	1	1		
92 3197	1	1	1	0	0	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	1	1	1		
CP 912	1	1	0	0	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	1	1	1		
CP 911	1	1	0	0	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	1	1	1		
CP 1474	1	1	1	0	0	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	1	1	1		
CP 1171	1	1	1	0	0	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	1	1	1		
CP 1134	1	1	1	0	0	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	1	1	1		
CP 1810	1	1	1	0	0	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	1	1	1		
CP 1861	1	1	1	0	0	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	1	1	1		
CP 1168	1	1	1	0	0	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	1	1	1		
CP 1801	1	1	1	0	0	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	1	1	1		
CP 1382	1	1	0	1	0	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	1	1	1		
CP 845	1	1	0	1	0	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	1	1	1		
CP 1187	1	1	0	1	0	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	1	1	1		

Table 2. Composite RAPD data for five primer/primer pair combinations

Primer name	OPB 05-10						MYCJ/SOR													OPB 01-04										OPB 01-07						OPB 04													
	1	2	3	4	5	6	1	2	3	4	5	6	7	8	9	10	11	12	13	1	2	3	4	5	6	7	8	9	10	11	1	2	3	4	5	6	7	1	2	3	4	5	6	7					
Isolate	1	2	3	4	5	6	1	2	3	4	5	6	7	8	9	10	11	12	13	1	2	3	4	5	6	7	8	9	10	11	1	2	3	4	5	6	7	1	2	3	4	5	6	7					
DH SPA	1	0	1	0	1	1	1	0	0	1	1	1	0	1	1	1	1	1	1	1	0	0	0	0	1	1	1	0	1	1	0	1	1	1	1	1	0	1	0	1	1	0	1	0	1	0	1	1	0
DH SPB	1	0	1	0	1	1	0	1	0	1	1	0	1	1	1	1	1	1	1	1	0	0	0	0	1	1	1	0	1	1	0	1	1	1	1	1	1	0	1	0	1	0	1	0	1	0	1	1	0
DH DIXON	0	1	1	1	1	1	0	1	1	0	0	1	1	1	1	1	1	1	1	1	0	1	0	1	1	1	1	0	1	0	1	0	1	1	1	1	1	0	1	0	1	0	1	0	1	0	1	1	0
DHOSP	1	0	1	0	1	1	0	1	0	1	1	0	1	1	1	1	1	1	1	1	0	0	0	0	1	1	1	0	1	0	0	1	1	1	1	1	1	0	1	0	1	0	1	0	1	0	1	1	0
DH CHICK	1	0	1	0	1	1	0	1	0	1	1	0	1	1	1	1	1	1	1	1	0	0	0	0	1	1	1	0	1	0	0	1	1	1	1	1	1	0	1	0	1	0	1	0	1	0	1	1	0
DH MCOMP	0	1	1	1	1	1	0	1	1	0	0	1	1	1	1	1	1	1	1	1	0	1	0	1	1	1	1	0	1	0	0	1	1	1	1	1	1	0	1	0	1	0	1	0	1	0	1	1	0
DF 3	0	1	1	1	1	1	0	1	1	0	0	1	1	1	1	1	1	1	1	1	0	0	0	1	1	1	1	0	1	0	0	1	1	1	1	1	1	0	1	0	1	0	1	0	1	0	1	1	0
DF 8	0	1	1	1	1	1	0	1	1	0	0	1	1	1	1	1	1	1	1	1	0	0	0	1	1	1	1	0	1	0	0	1	1	1	1	1	1	0	1	0	1	0	1	0	1	0	1	1	0
DF a	0	1	1	1	1	1	0	1	1	0	0	1	1	1	1	1	1	1	1	1	0	0	0	1	1	1	1	0	1	0	0	1	1	1	1	1	1	0	1	0	1	0	1	0	1	0	1	1	0
92 4054	0	1	1	1	1	1	0	1	1	0	0	1	1	1	1	1	1	1	1	1	0	0	0	1	1	1	1	0	1	0	0	1	1	1	1	1	1	0	1	0	1	0	1	0	1	0	1	1	0
92 870	0	1	1	1	1	1	0	1	1	0	0	1	1	1	1	1	1	1	1	1	0	0	0	1	1	1	1	0	1	0	0	1	1	1	1	1	1	0	1	0	1	0	1	0	1	0	1	1	0
92 3197	0	1	1	1	1	1	0	1	1	0	0	1	1	1	1	1	1	1	1	1	0	0	0	1	1	1	1	0	1	0	0	1	1	1	1	1	1	0	1	0	1	0	1	0	1	0	1	1	0
CP 912	1	0	1	0	1	1	1	0	0	1	1	1	0	1	1	1	1	1	1	1	0	0	0	0	1	1	1	0	0	0	1	1	1	1	1	1	0	1	0	1	0	1	0	1	0	1	1	0	
CP 911	1	0	1	0	1	1	1	0	0	1	1	1	0	1	1	1	1	1	1	1	0	0	0	0	1	1	1	0	0	0	1	1	1	1	1	1	0	1	0	1	0	1	0	1	0	1	1	0	
CP 1474	0	1	1	1	1	1	0	1	1	0	0	1	1	1	1	1	1	1	1	1	0	0	0	1	1	1	1	0	0	0	1	1	1	1	1	1	0	1	0	1	0	1	0	1	0	1	1	0	
CP 1171	0	1	1	1	1	1	0	1	1	0	0	1	1	1	1	1	1	1	1	1	0	0	0	1	1	1	1	0	0	0	1	1	1	1	1	1	0	1	0	1	0	1	0	1	0	1	1	0	
CP 1134	0	1	1	1	1	1	0	1	1	0	0	1	1	1	1	1	1	1	1	1	0	0	0	1	1	1	1	0	0	0	1	1	1	1	1	1	0	1	0	1	0	1	0	1	0	1	1	0	
CP 1810	0	1	1	1	1	1	0	1	1	0	0	1	1	1	1	1	1	1	1	1	0	0	0	1	1	1	1	0	0	0	1	1	1	1	1	1	0	1	0	1	0	1	0	1	0	1	1	0	
CP 1861	0	1	1	1	1	1	0	1	1	0	0	1	1	1	1	1	1	1	1	1	0	0	0	1	1	1	1	0	0	0	1	1	1	1	1	1	0	1	0	1	0	1	0	1	0	1	1	0	
CP 1168	0	1	1	1	1	1	0	1	1	0	0	1	1	1	1	1	1	1	1	1	0	0	0	1	1	1	1	0	0	0	1	1	1	1	1	1	0	1	0	1	0	1	0	1	0	1	1	0	
CP 1188	0	1	1	1	1	1	0	1	1	0	0	1	1	1	1	1	1	1	1	1	0	0	0	1	1	1	1	0	0	0	1	1	1	1	1	1	0	1	0	1	0	1	0	1	0	1	1	0	
CP 1801	0	1	1	1	1	1	0	1	1	0	0	1	1	1	1	1	1	1	1	1	0	0	0	1	1	1	1	0	0	0	1	1	1	1	1	1	0	1	0	1	0	1	0	1	0	1	1	0	
CP 1382	0	1	1	1	1	1	0	1	1	0	0	1	1	1	1	1	1	1	1	1	0	0	0	1	1	1	1	0	0	0	1	1	1	1	1	1	0	1	0	1	0	1	0	1	0	1	1	0	
CP 845	0	1	1	1	1	1	0	1	1	0	0	1	1	1	1	1	1	1	1	1	0	0	0	1	1	1	1	0	0	0	1	1	1	1	1	1	0	1	0	1	0	1	0	1	0	1	1	0	
CP 1187	0	1	1	1	1	1	0	1	1	0	0	1	1	1	1	1	1	1	1	1	0	0	0	1	1	1	1	0	0	0	1	1	1	1	1	1	0	1	0	1	0	1	0	1	0	1	1	0	