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CHAPTER 9

APPENDICES

Appendix A : Canopy radiation extinction coefficient - Figures 1.1 to 1.5

Appendix B : Radiation conversion efficiency – Figures 2.1 to 2.5

Appendix C : Model simulations and statistical analysis – Figures 3.1 to 3.25

Appendix D : Weather data for the duration of the two trials

Appendix E : Growth analyses data

Appendix A : Canopy radiation extinction coefficient

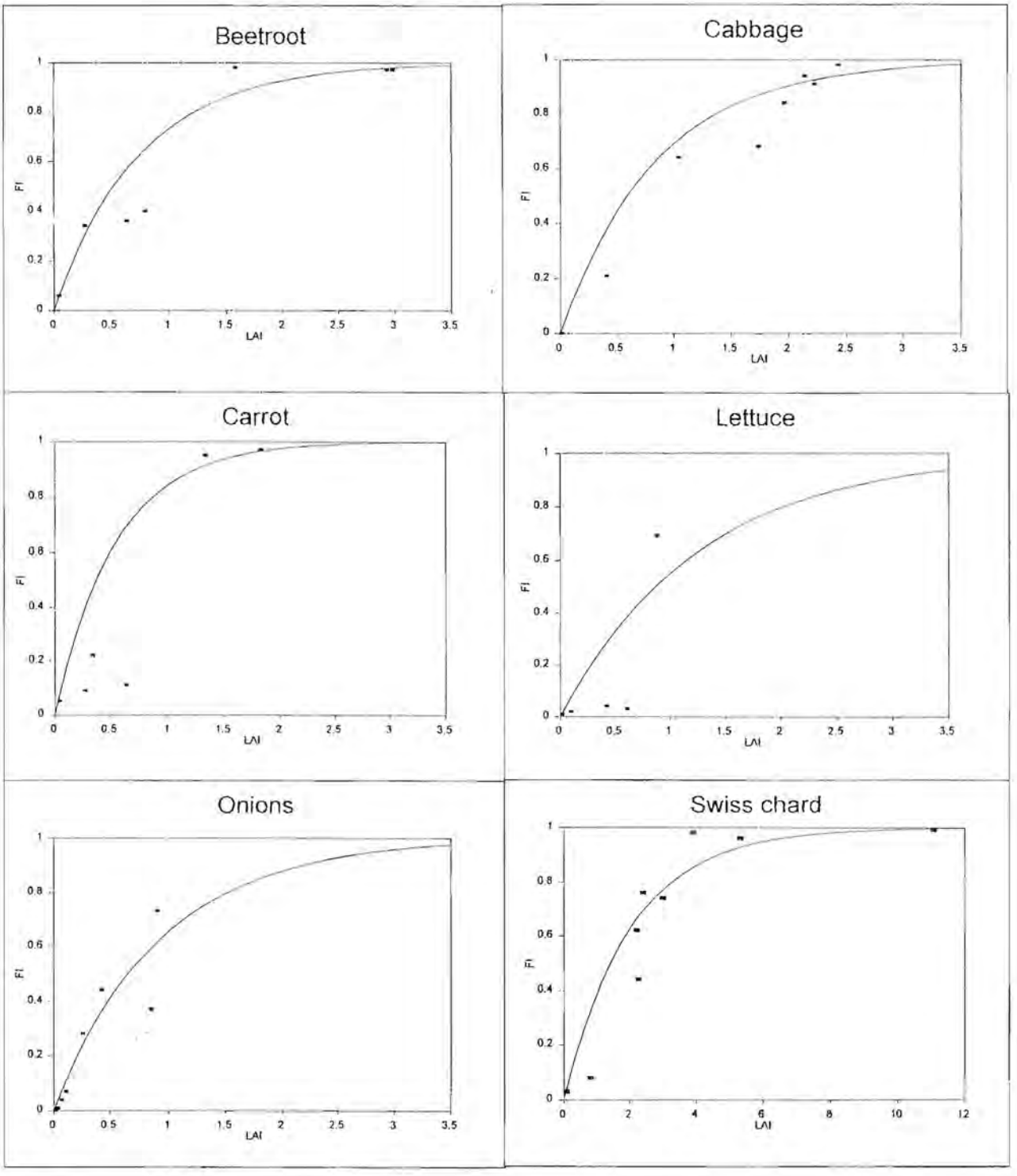


Figure 1.1 : Correlation between leaf area index (LAI) and radiation fractional interception (FI) for beetroot, cabbage, carrot, lettuce, onions and swiss chard.

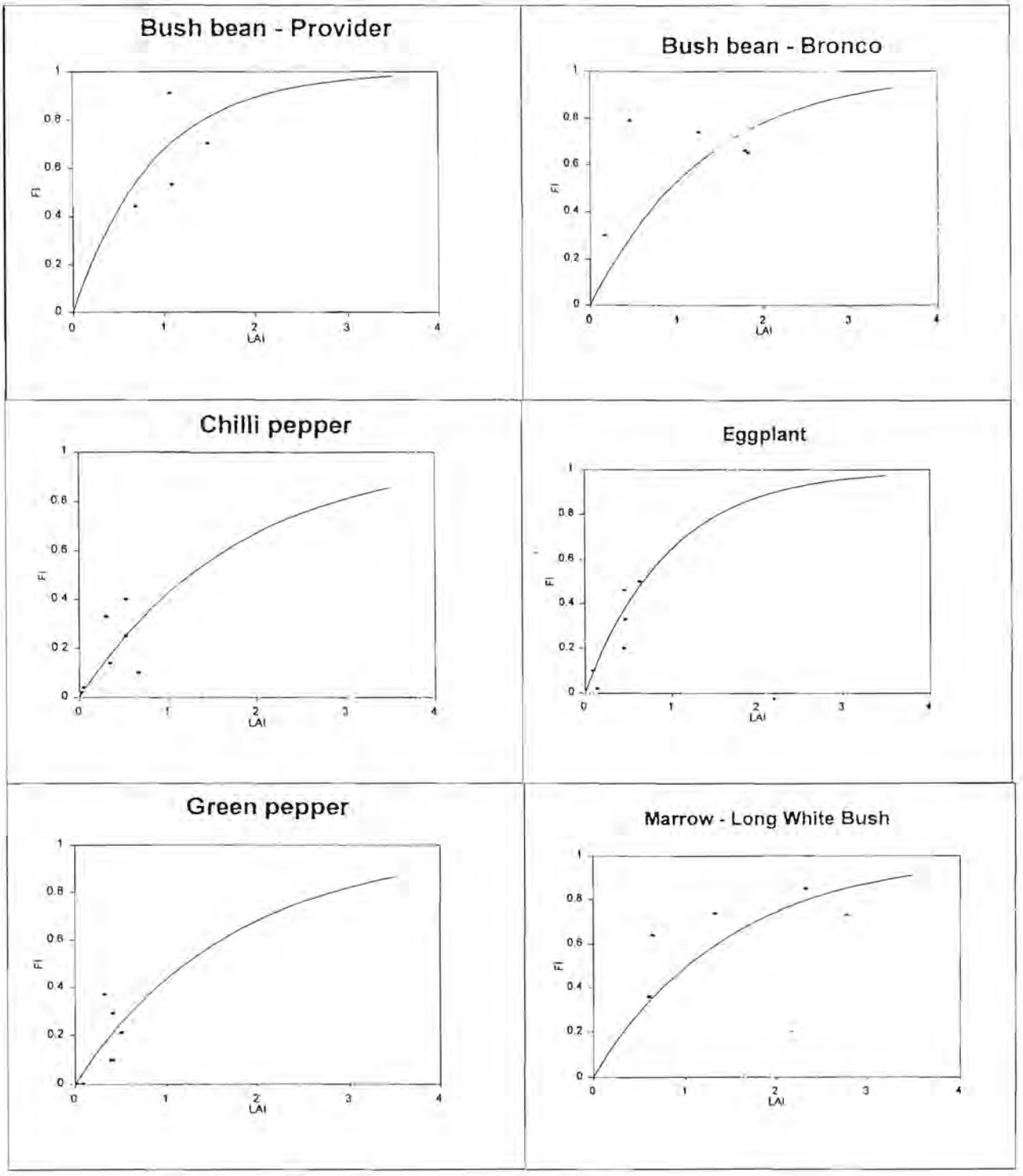


Figure 1.2 : Correlation between leaf area index,(LAI) and radiation fractional interception (FI) for bush beans (cv.'s Provider and Bronco), chilli pepper, eggplant, green pepper and marrow (cv. Long White Bush).

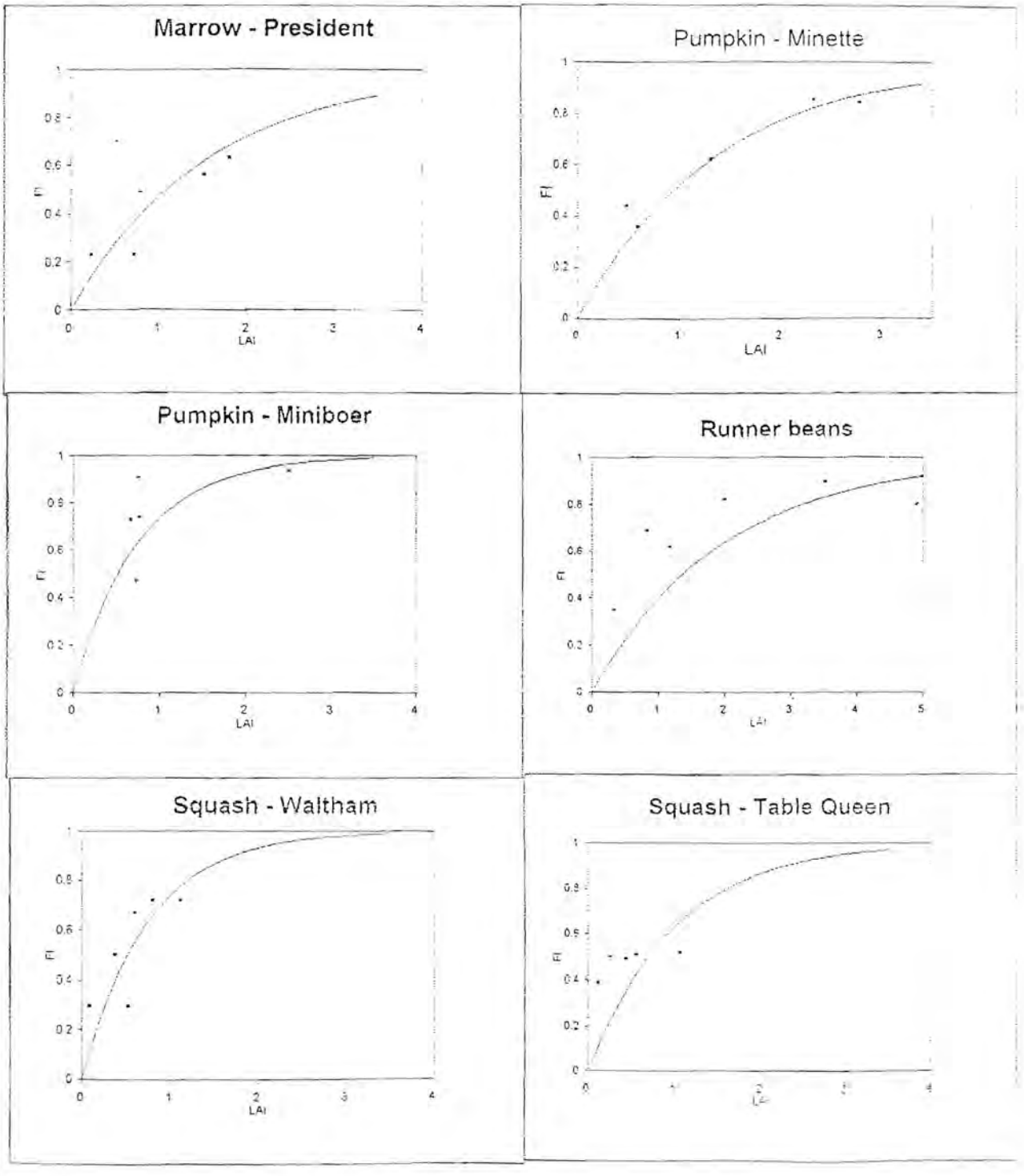


Figure 1.3 : Correlation between leaf area index (LAI) and radiation fractional interception (FI) for marrow (cv. President), pumpkin (cv.'s Minette and Miniboer), runner beans and squash (cv.'s Waltham and Table Queen).

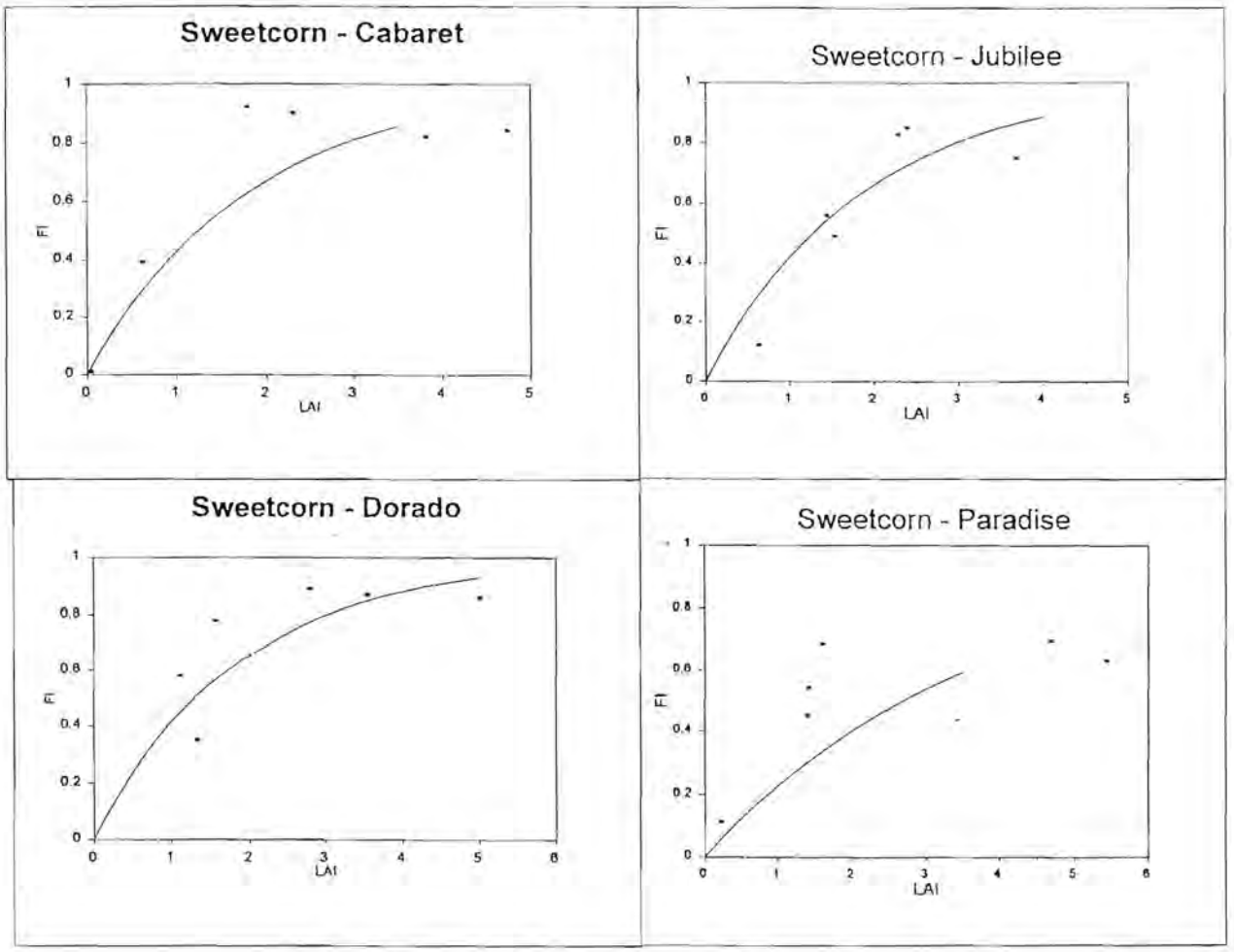


Figure 1.4 : Correlation between leaf area index (LAI) and radiation fractional interception (FI) for sweet-corn (cv.s Cabaret, Jubilee, Dorado and Paradise).

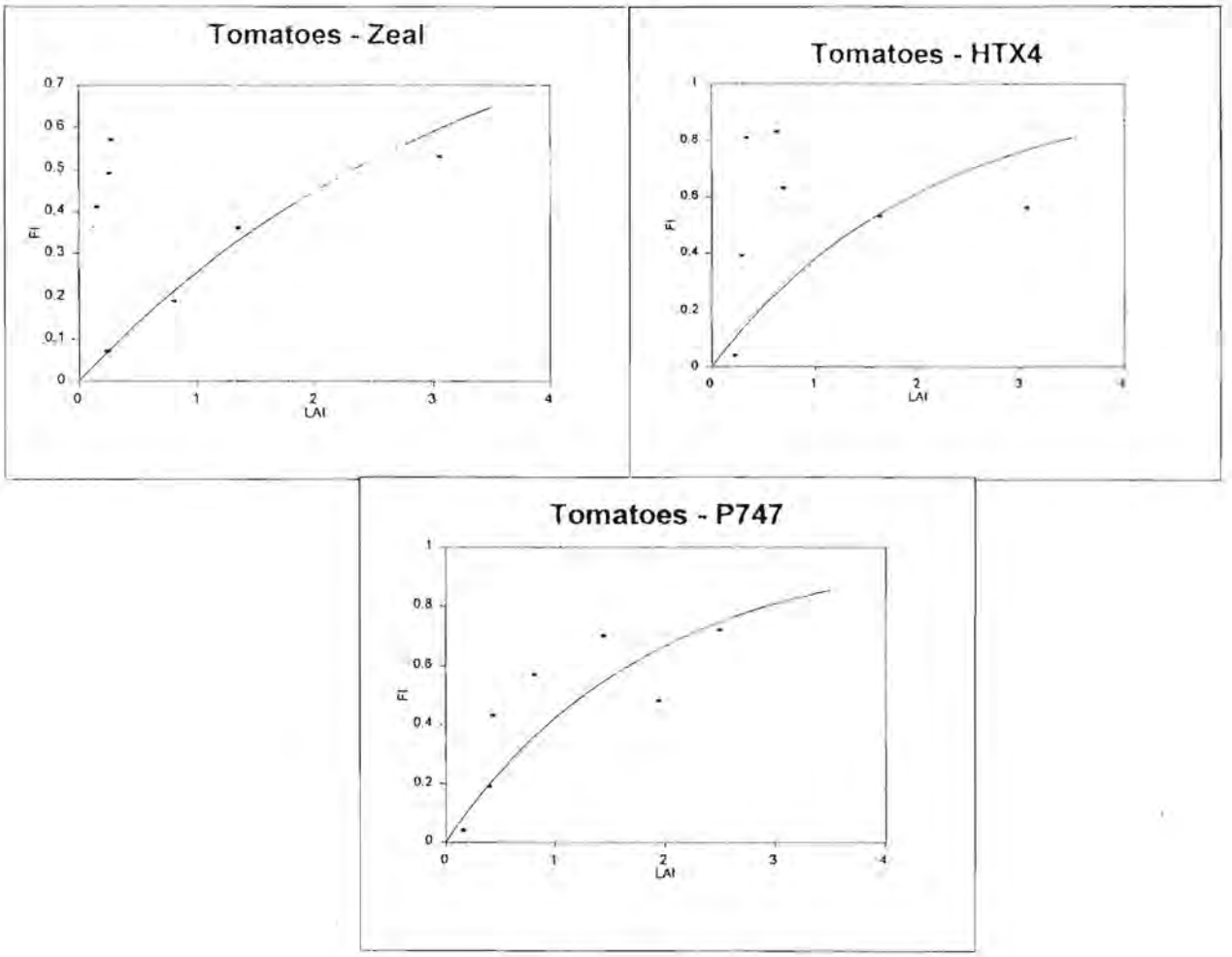


Figure 1.5 : Correlation between leaf area index (LAI) and radiation fractional interception (FI) for tomato (cv.s HTX14, P747 and Zeal).

Appendix B : Radiation conversion efficiency

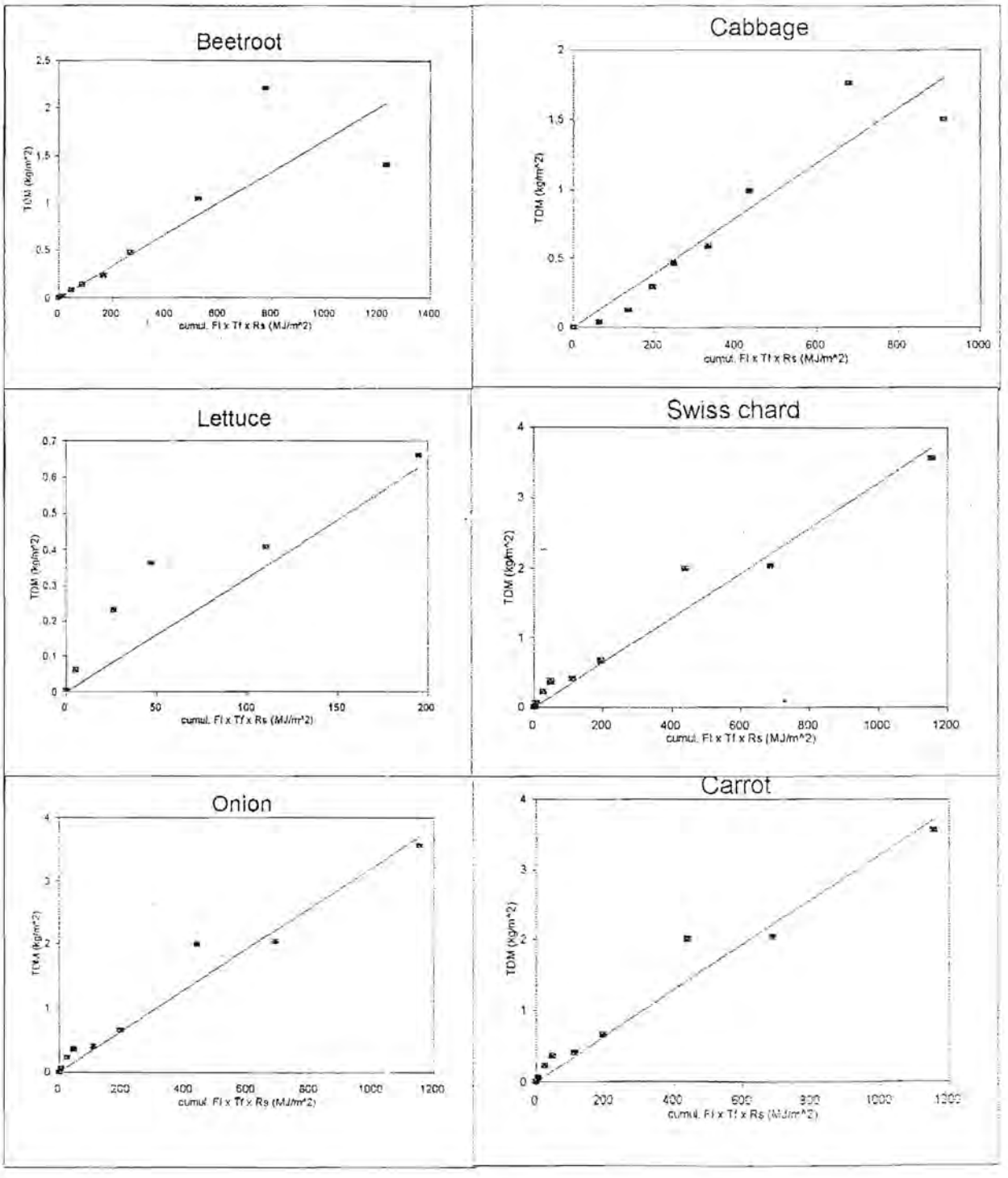


Figure 2.1 : Dry matter production as a function of the cumulative product of temperature factor (T_f) for light-limited crop growth, solar radiation fractional interception (FI) and total incoming solar radiation (R_s) for, clockwise from top left, beetroot, cabbage, spinach, carrot, onion, and lettuce.

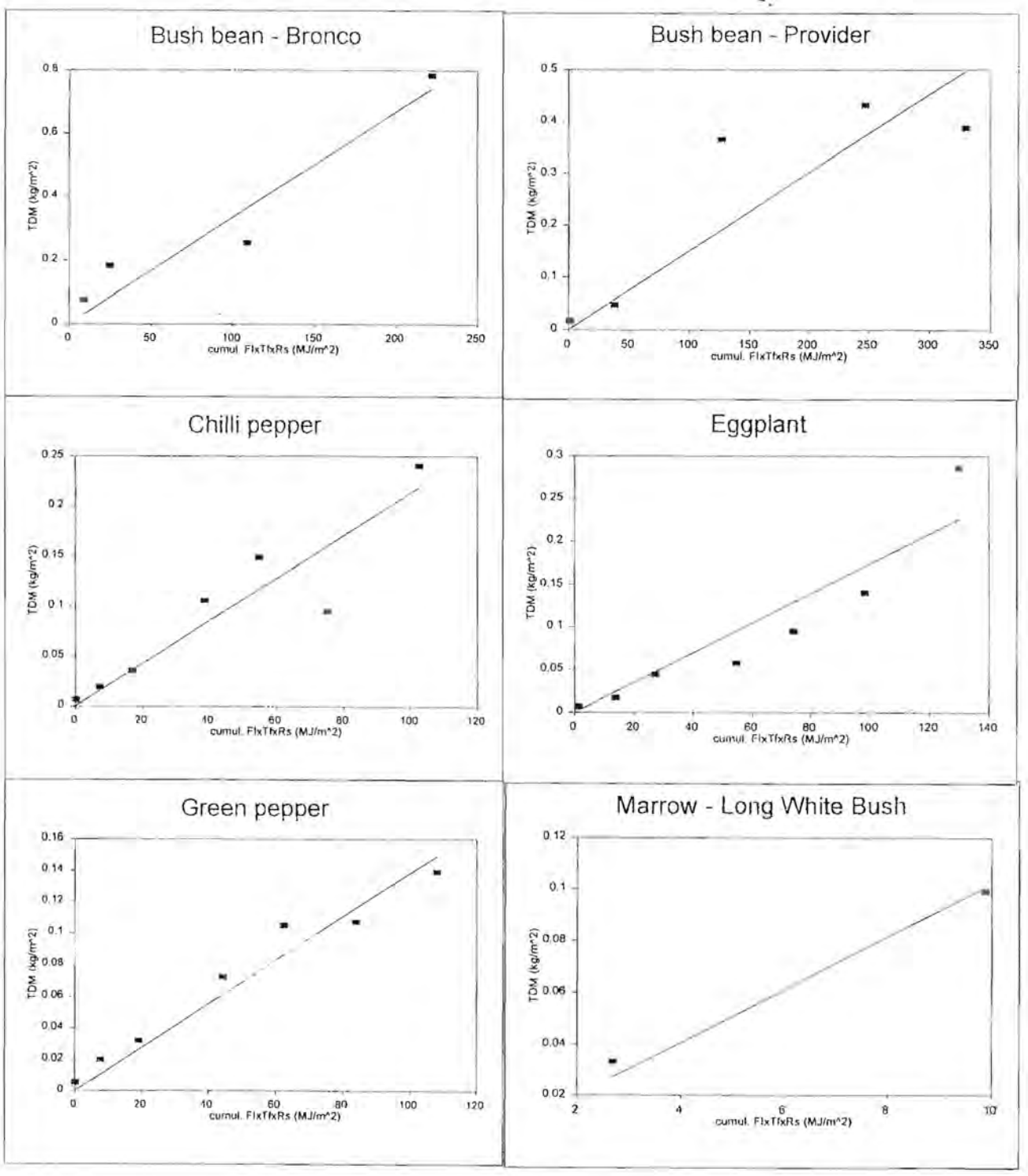


Figure 2.2 : Dry matter production as a function of the cumulative product of temperature factor (T_f) for light-limited crop growth, solar radiation fractional interception (FI) and total incoming solar radiation (R_s) for, clockwise from top left, bush bean (cv.'s Bronco and Provider), eggplant, marrow (cv. Long White Bush), green pepper, and chilli pepper.

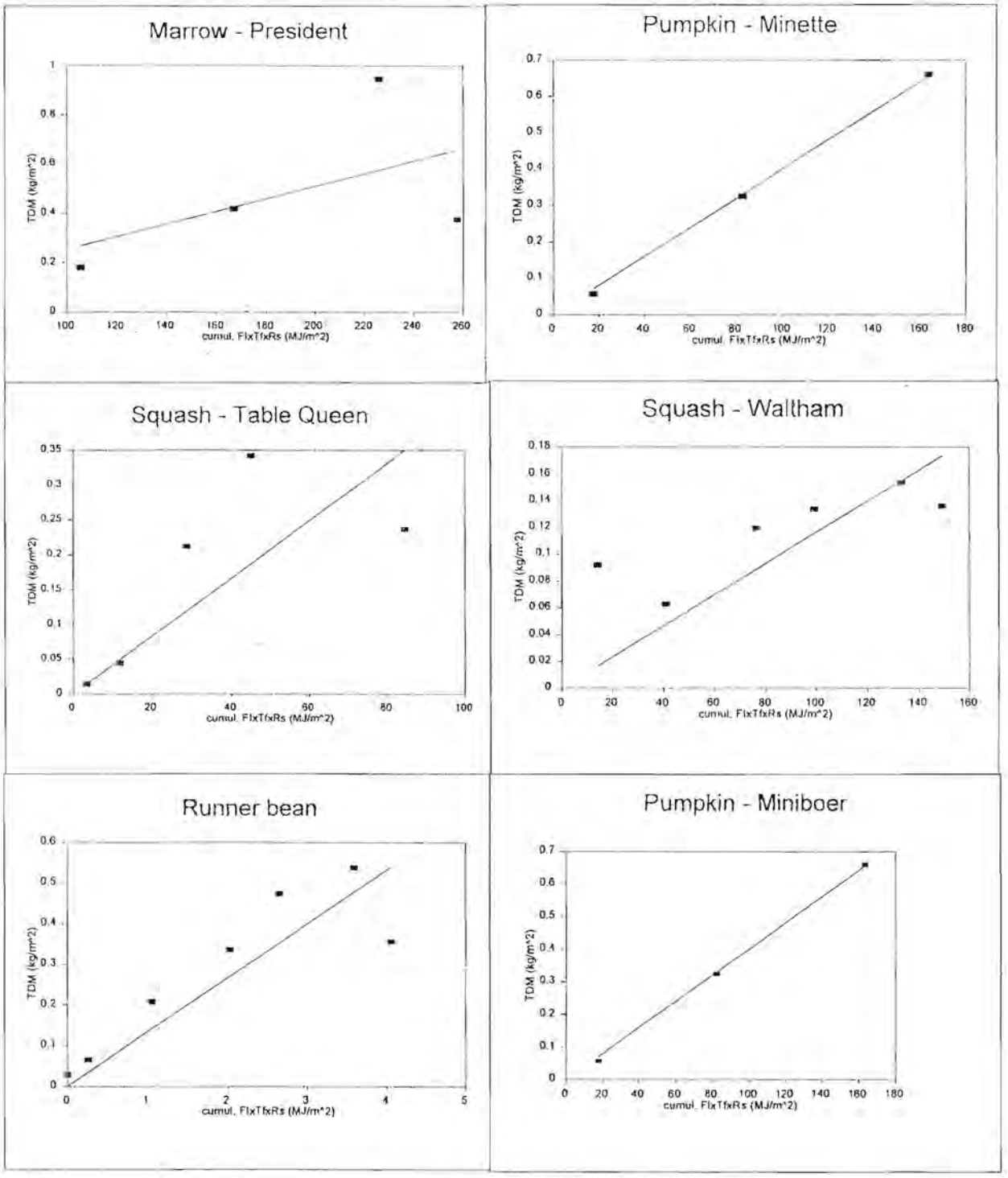


Figure 2.3 : Dry matter production as a function of the cumulative product of temperature factor (T_f) for light-limited crop growth, solar radiation fractional interception (FI) and total incoming solar radiation (R_s) for, clockwise from top left, marrow (cv. President), pumpkin (cv. Minette), squash (cv. Waltham) pumpkin (cv. Miniboer), runner bean, and squash (cv. Table Queen).

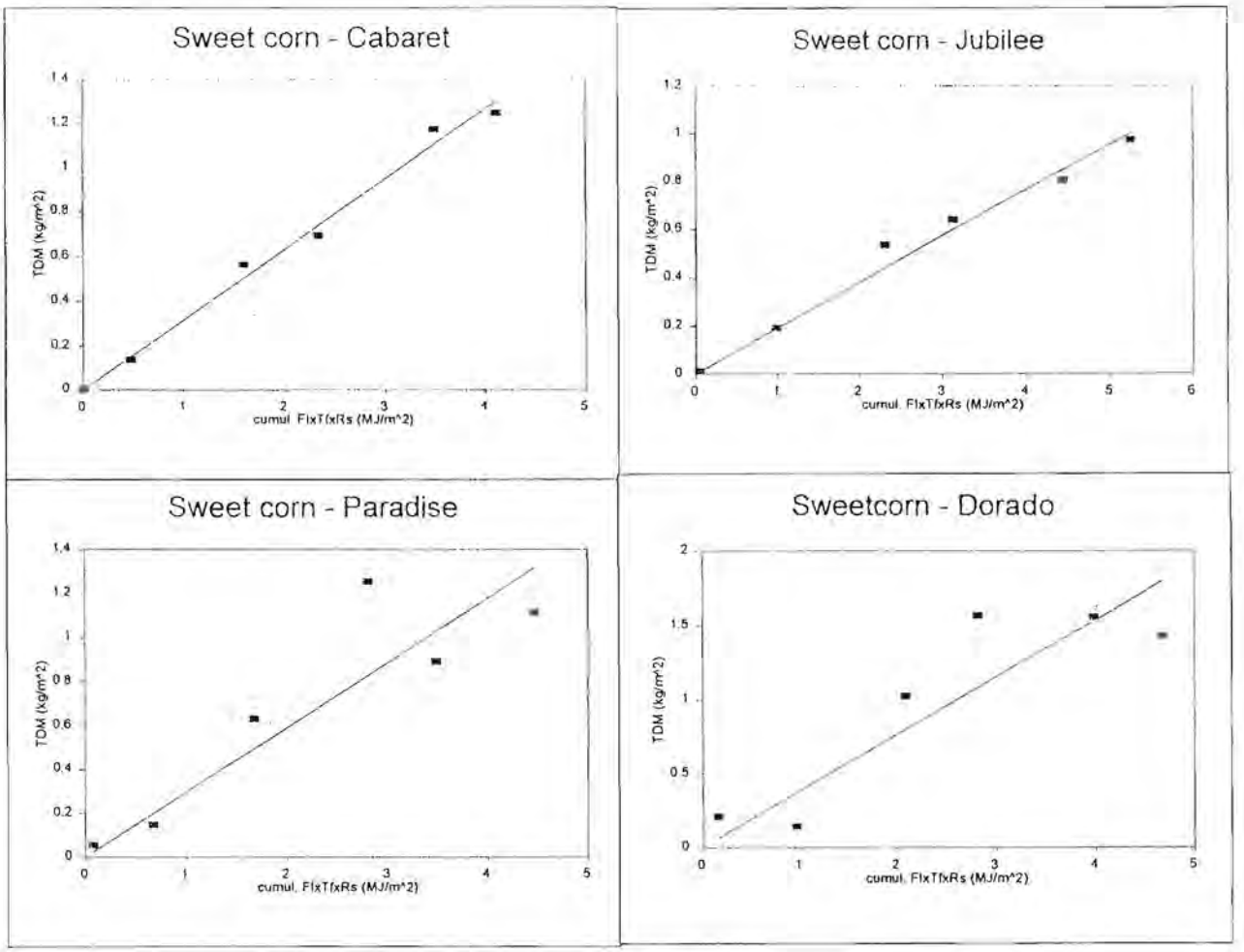


Figure 2.4 : Dry matter production as a function of the cumulative product of temperature factor (T_f) for light-limited crop growth, solar radiation fractional interception (FI) and total incoming solar radiation (R_s) for, clockwise from top left, sweet corn (cv's Dorado, Jubilee, Cabaret and Paradise).

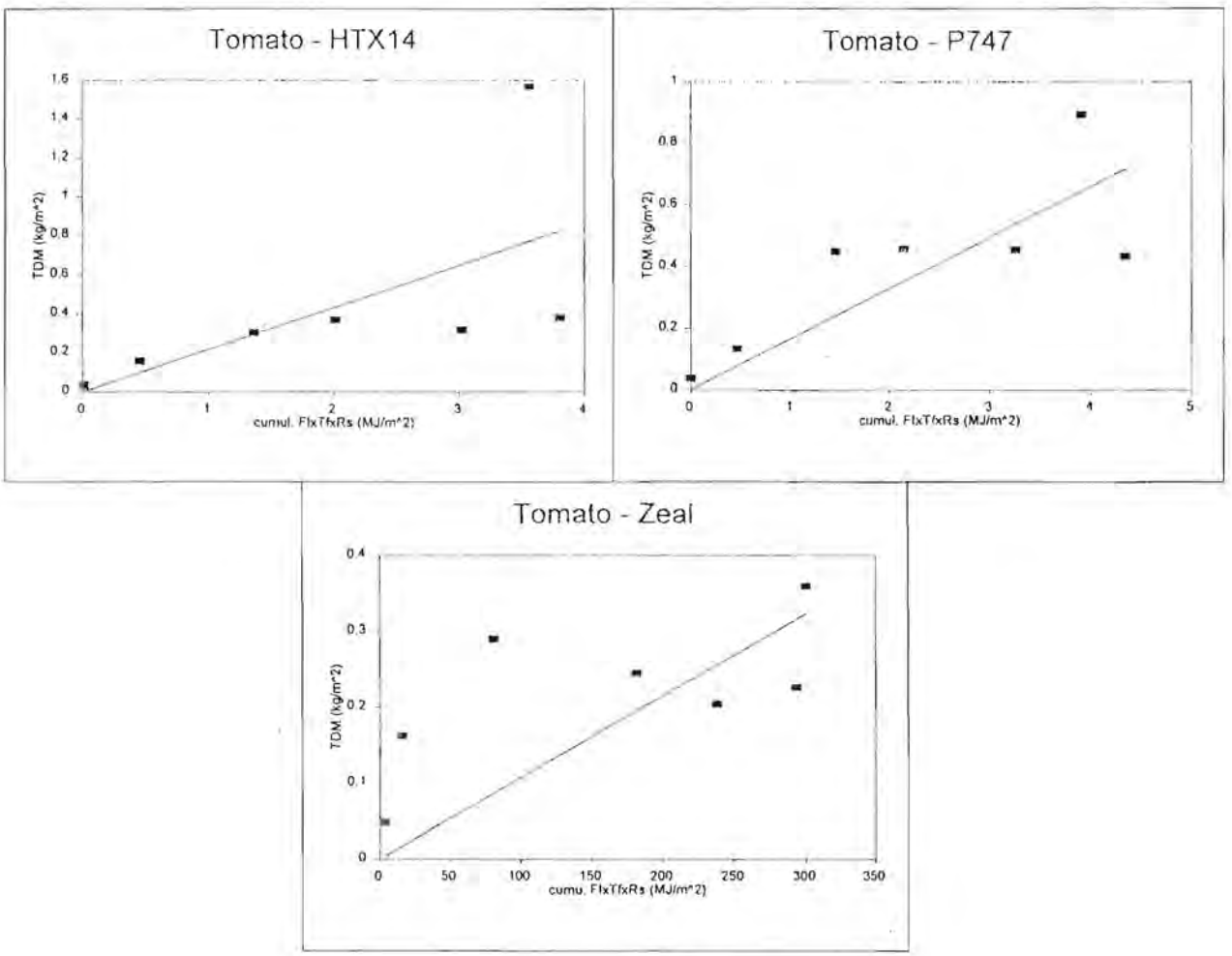
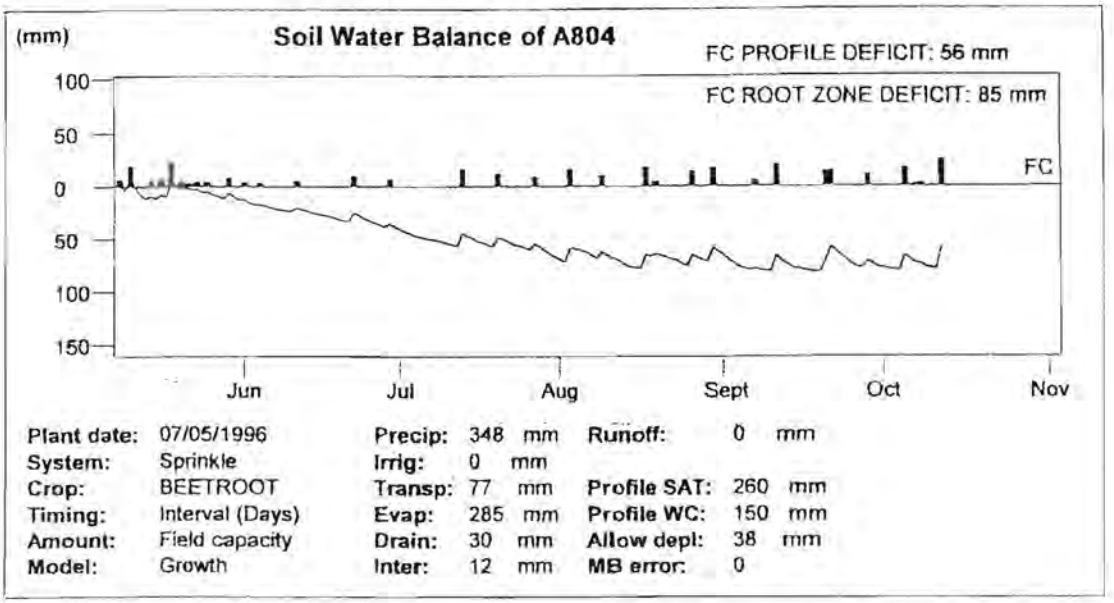


Figure 2.5 : Dry matter production as a function of the cumulative product of temperature factor (T_f) for light-limited crop growth, solar radiation fractional interception (FI) and total incoming solar radiation (R_s) for tomato (cv.'s Zeal, HTX4 and P747).

Appendix C : Model simulation and statistical analysis



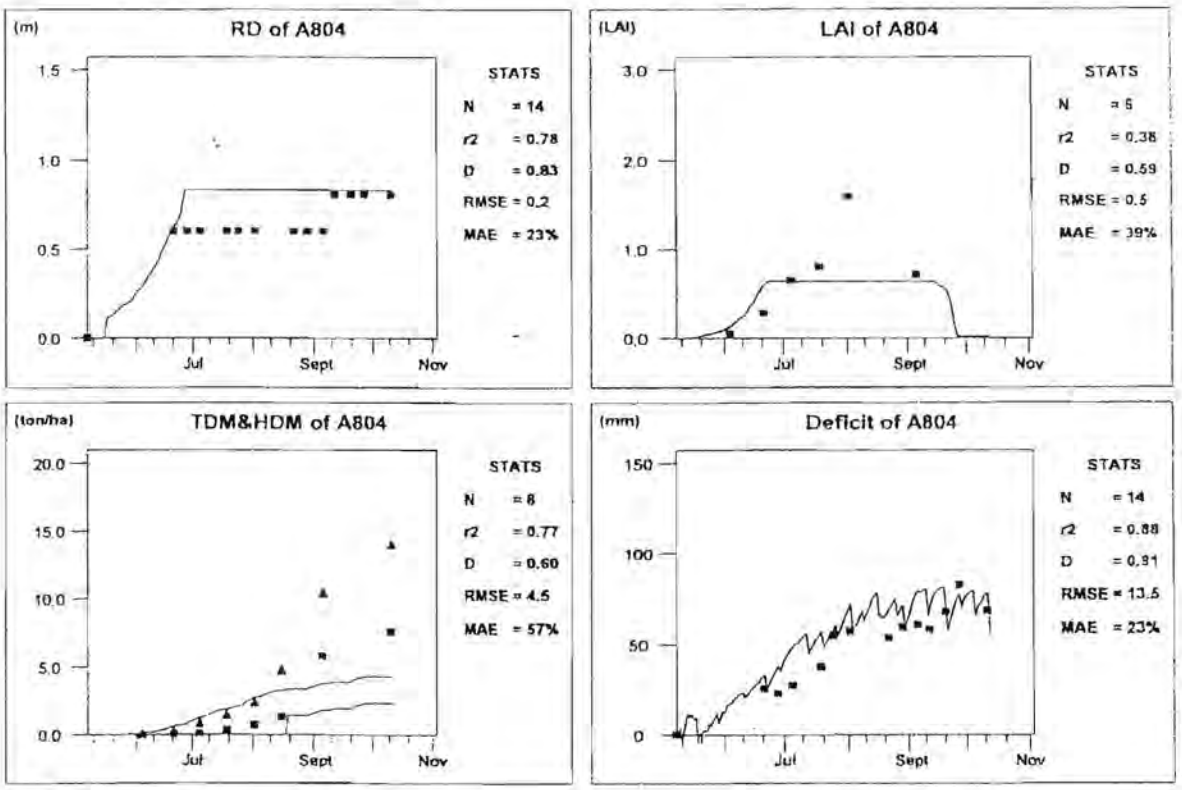
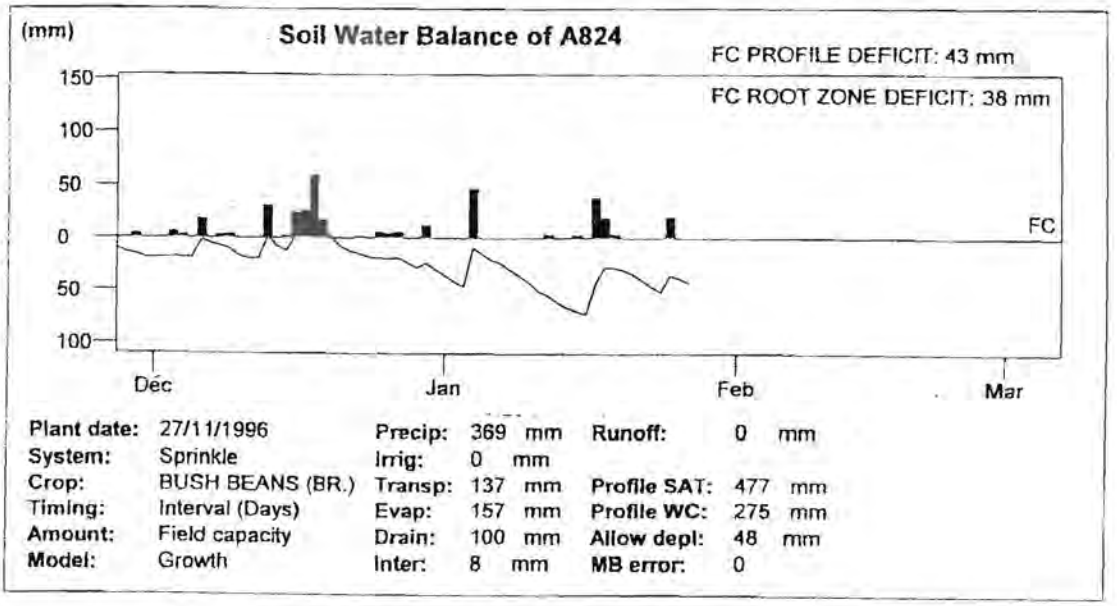


Figure 3.1 : Soil water balance output graph, simulated (solid line) and measured (symbols), root depth (RD), leaf area index (LAI), total above ground (TDM) and harvestable dry matter (HDM) as well as soil water deficit for beetroot



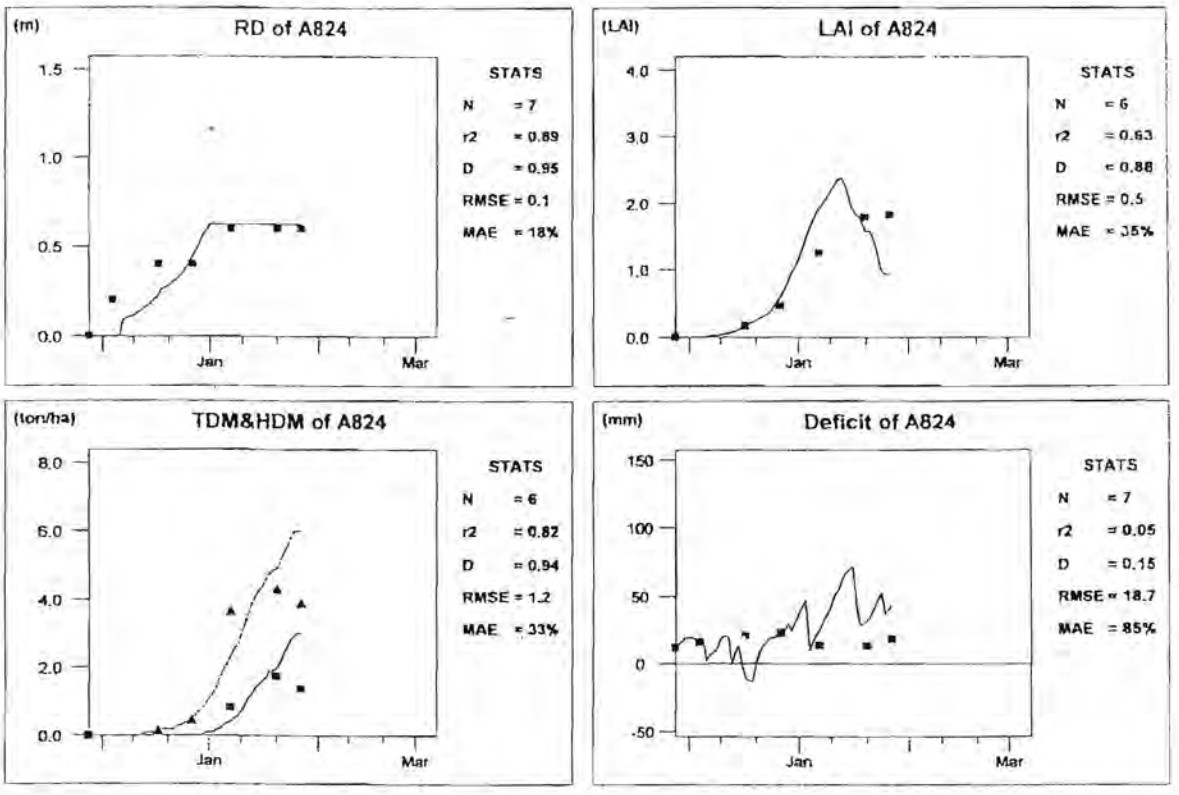
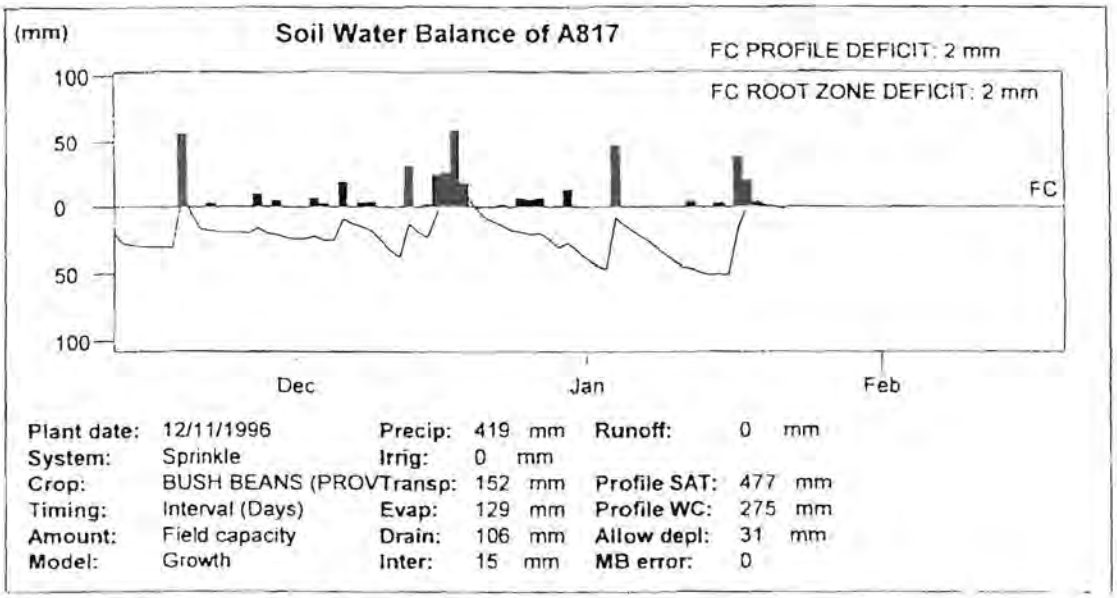


Figure 3.2 : Soil water balance output graph, simulated (solid lines) and measured (symbols) root depth (RD), leaf area index (LAI), total above ground (TDM) and harvestable dry matter (HDM), as well as soil water deficit for bean (cv. Bronco)



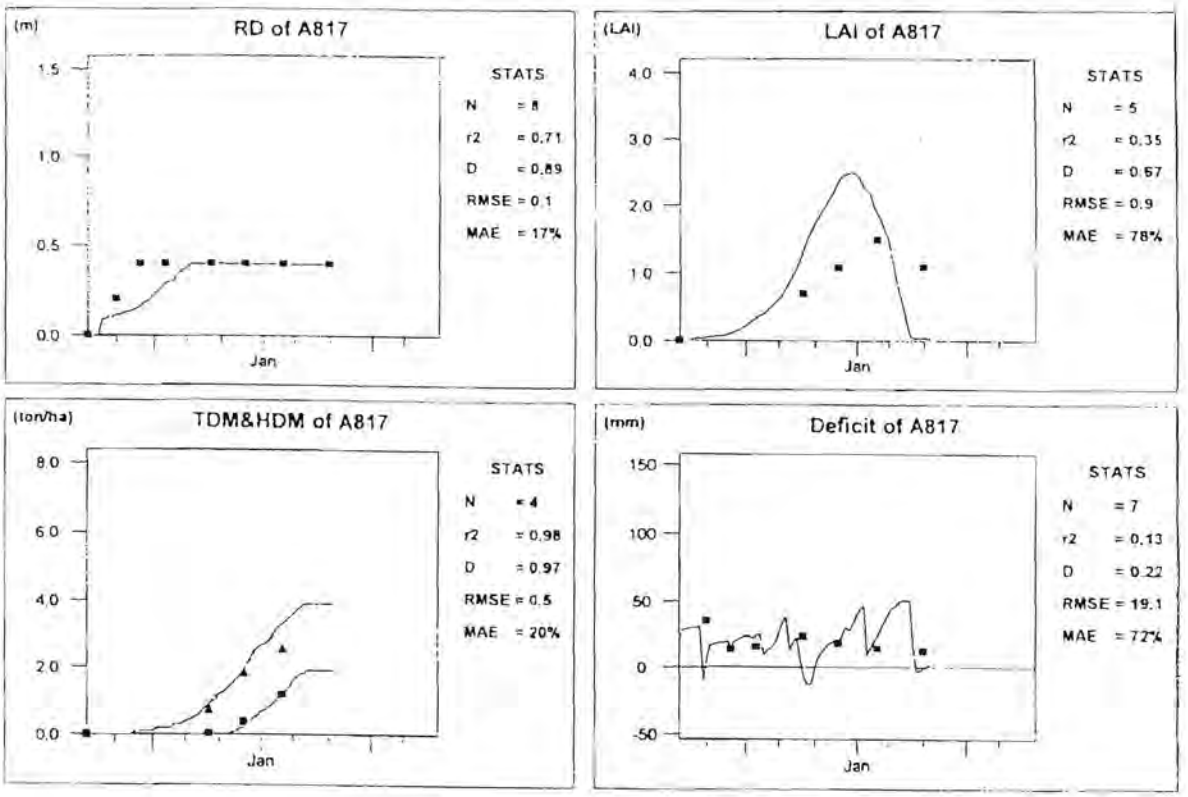
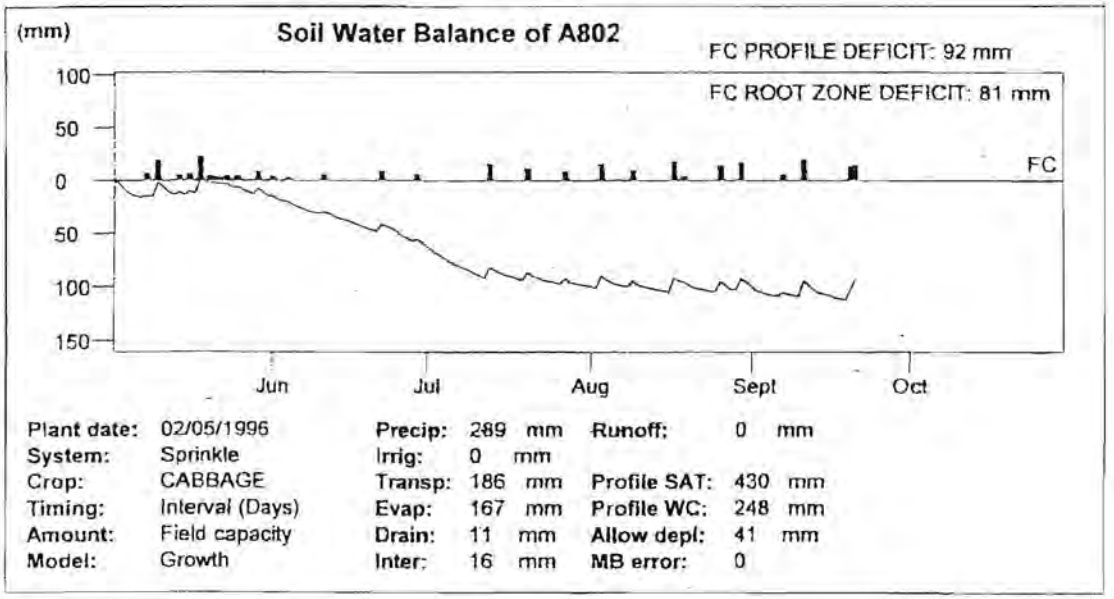


Figure 3.3 : Soil water balance output graph, simulated (solid lines) and measured (symbols0 root depth (RD), leaf area index (LAI), total above ground (TDM) and harvestable dry matter (HDM), as well as soil water deficit for bush bean (cv. Provider).



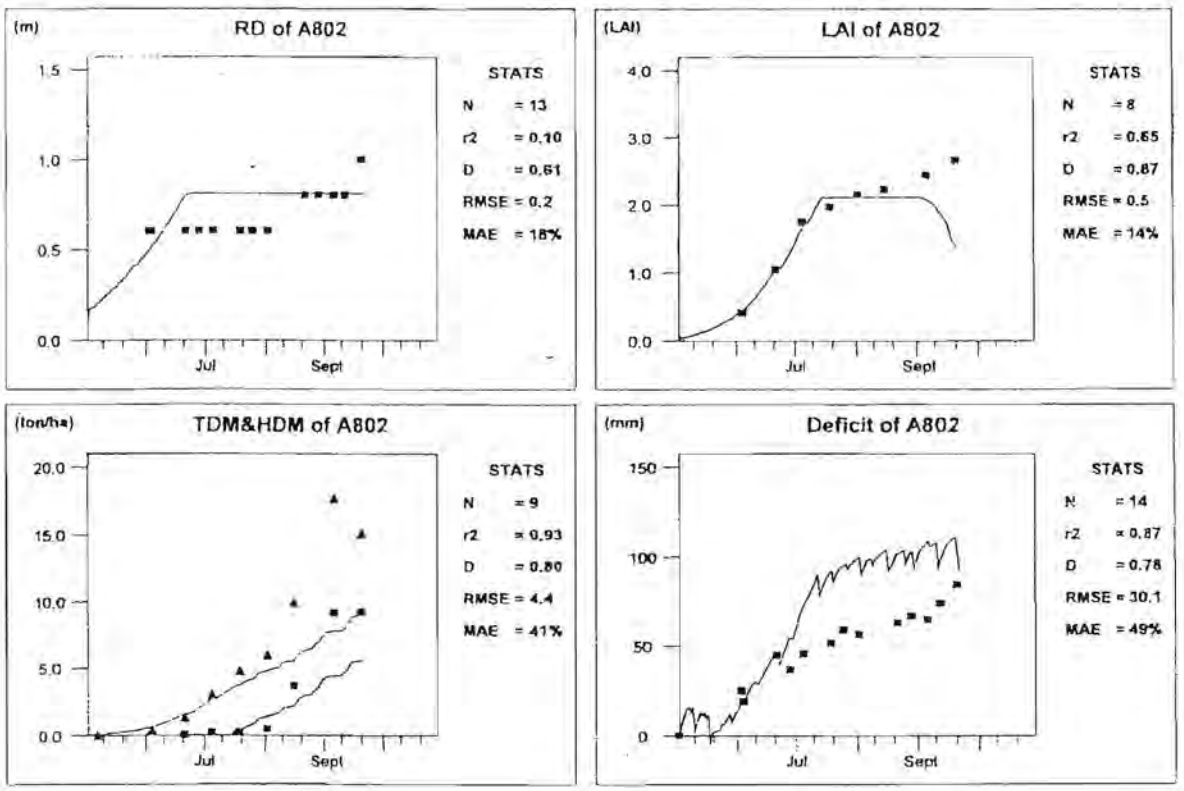


Figure 3.4 : Soil water balance output graph, simulated (solid lines) and measured (symbols) root depth (RD), leaf area index (LAI), total above ground (TDM) and harvestable dry matter (HDM), as well as soil water deficit for cabbage.

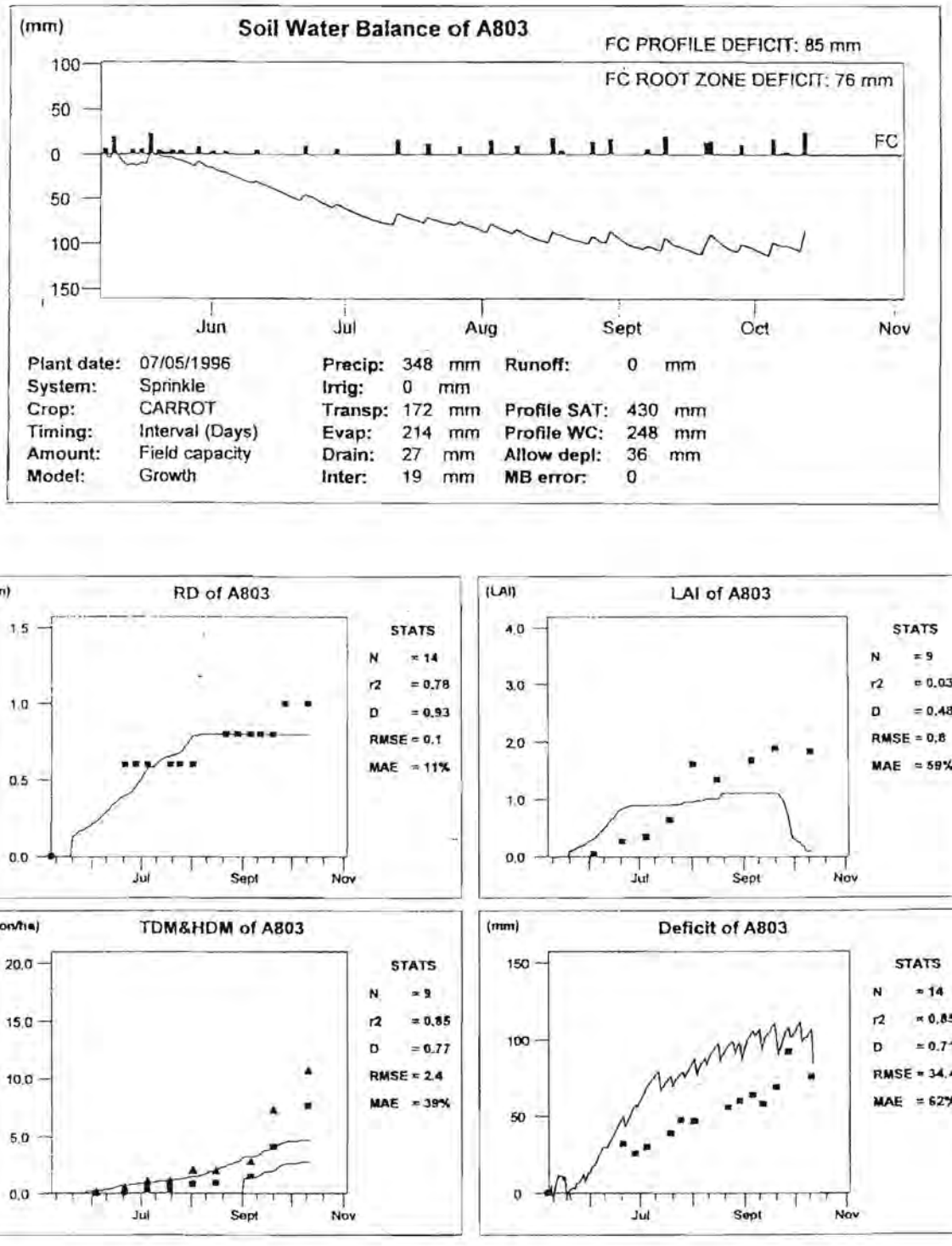
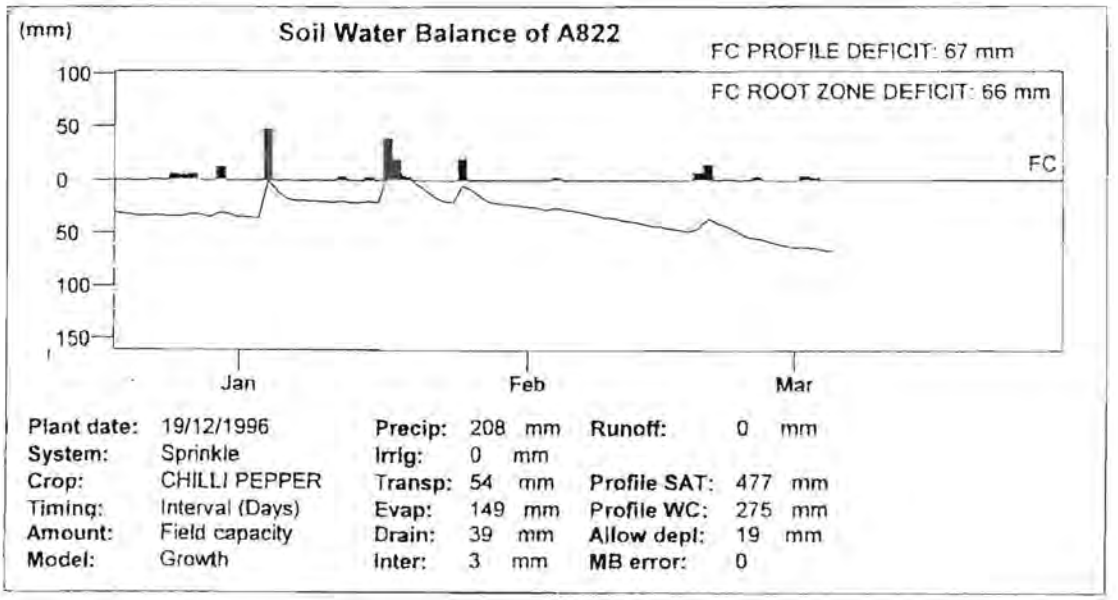


Figure 3.5 : Soil water balance output graph, simulated (solid lines) and measured (symbols) root depth (RD), leaf area index (LAI), total above ground (TDM) and harvestable dry matter (HDM), as well as soil water deficit for carrot



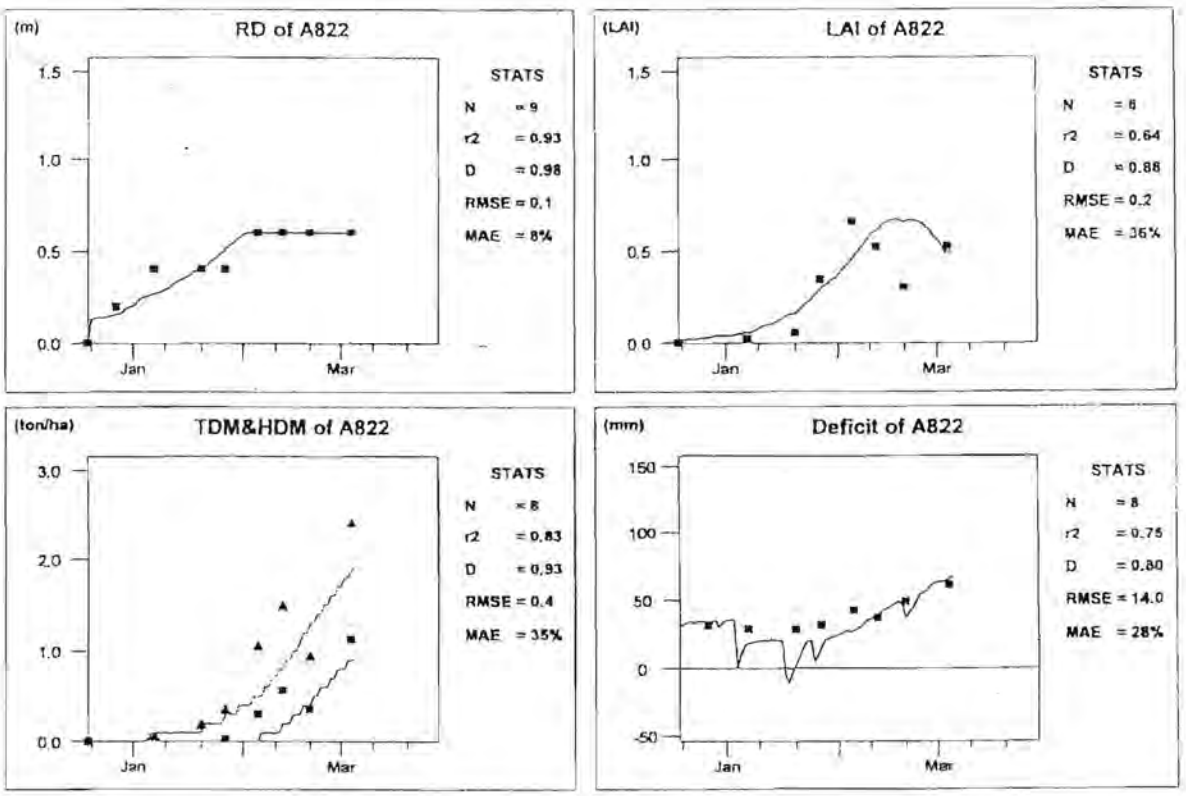
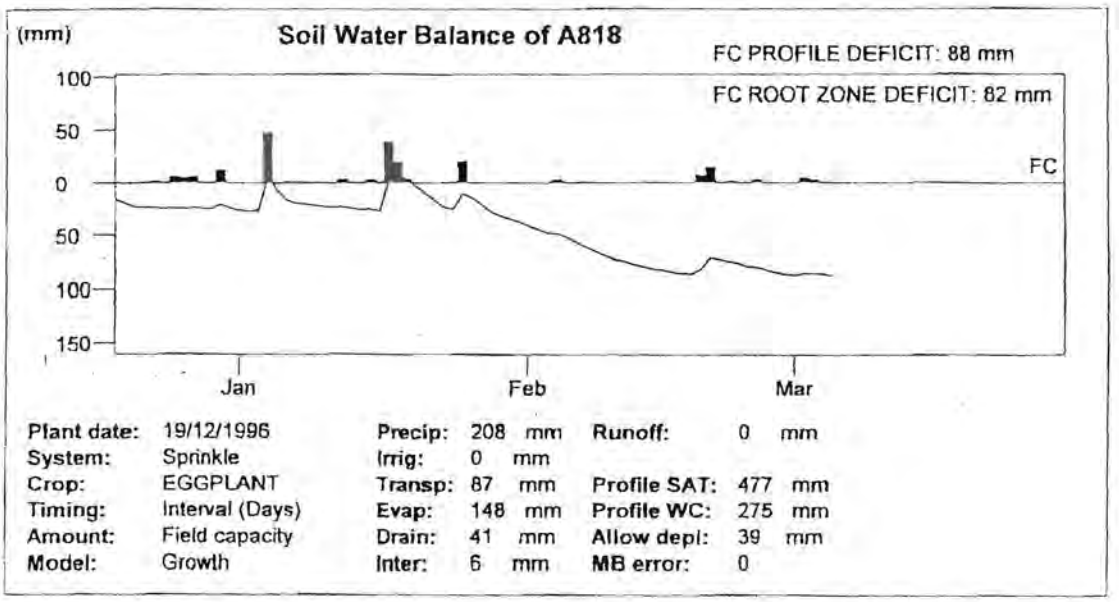


Figure 3.6 : Soil water balance output graph, simulated (solid lines) and measured (symbols) root depth (RD), leaf area index (LAI), total above ground (TDM) and harvestable dry matter (HDM), as well as soil water deficit for chilli pepper.



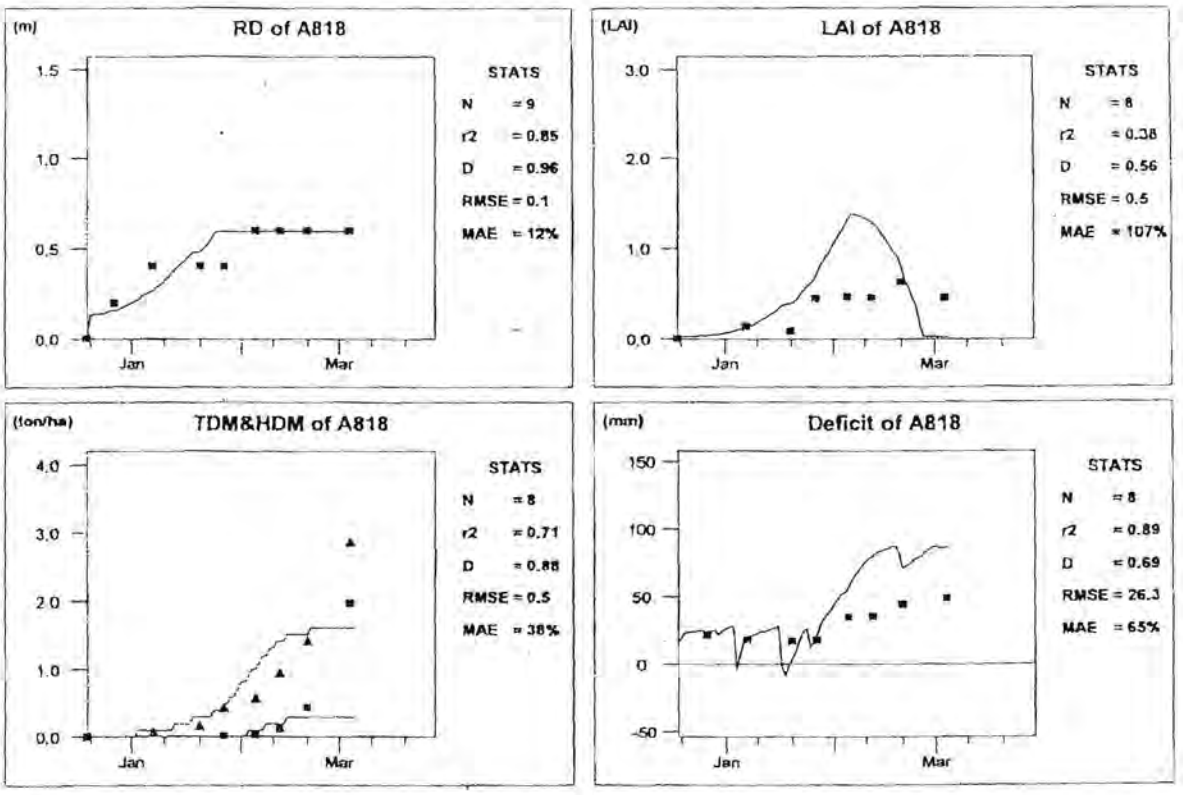
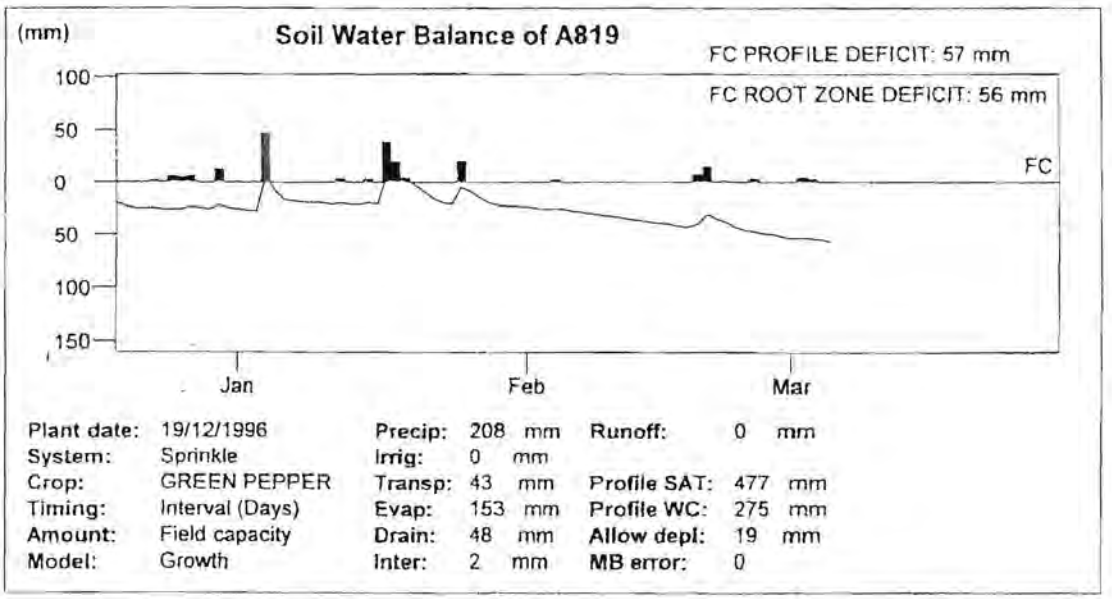


Figure 3.7 : Soil water balance output graph, simulated (solid lines) and measured (symbols) root depth (RD), leaf area index (LAI), total above ground (TDM) and harvestable dry matter (HDM), as well as soil water deficit for eggplant



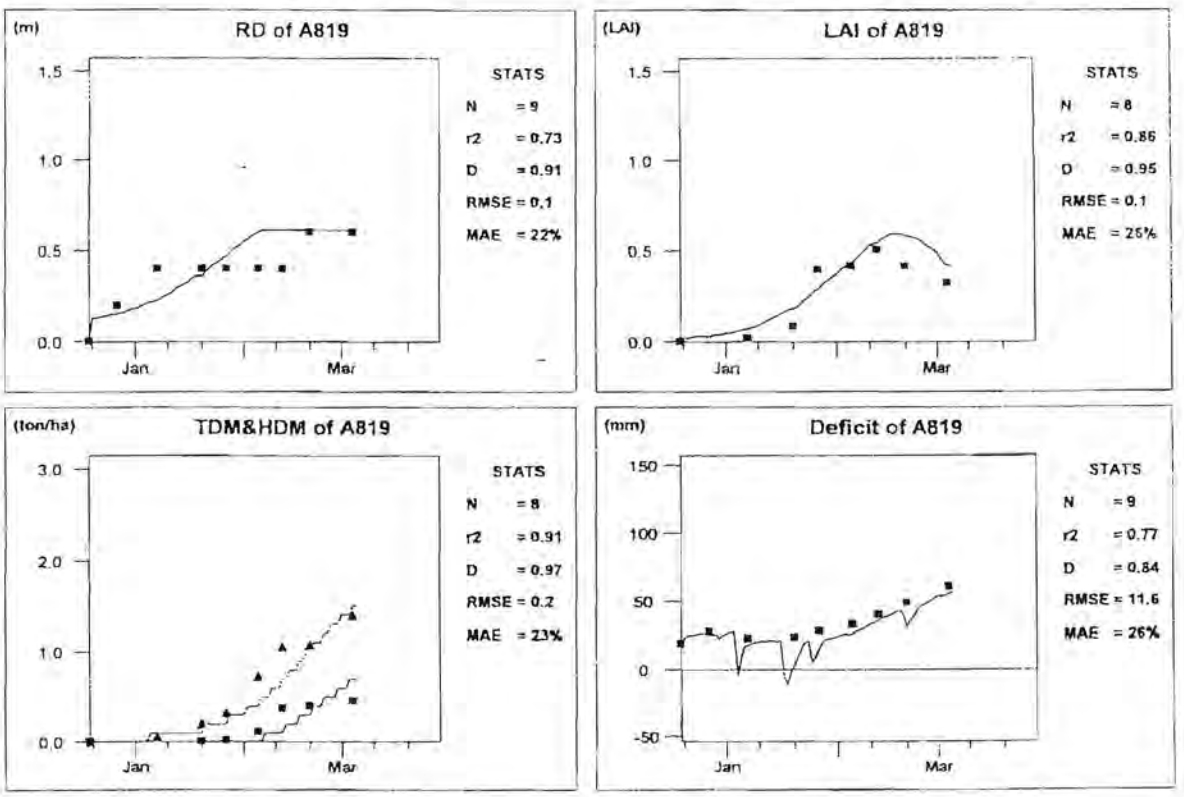


Figure 3.8 : Soil water balance output graph, simulated (solid lines) and measured (symbols) root depth (RD), leaf area index (LAI), total above ground (TDM) and harvestable dry matter (HDM), as well as soil water deficit for green pepper

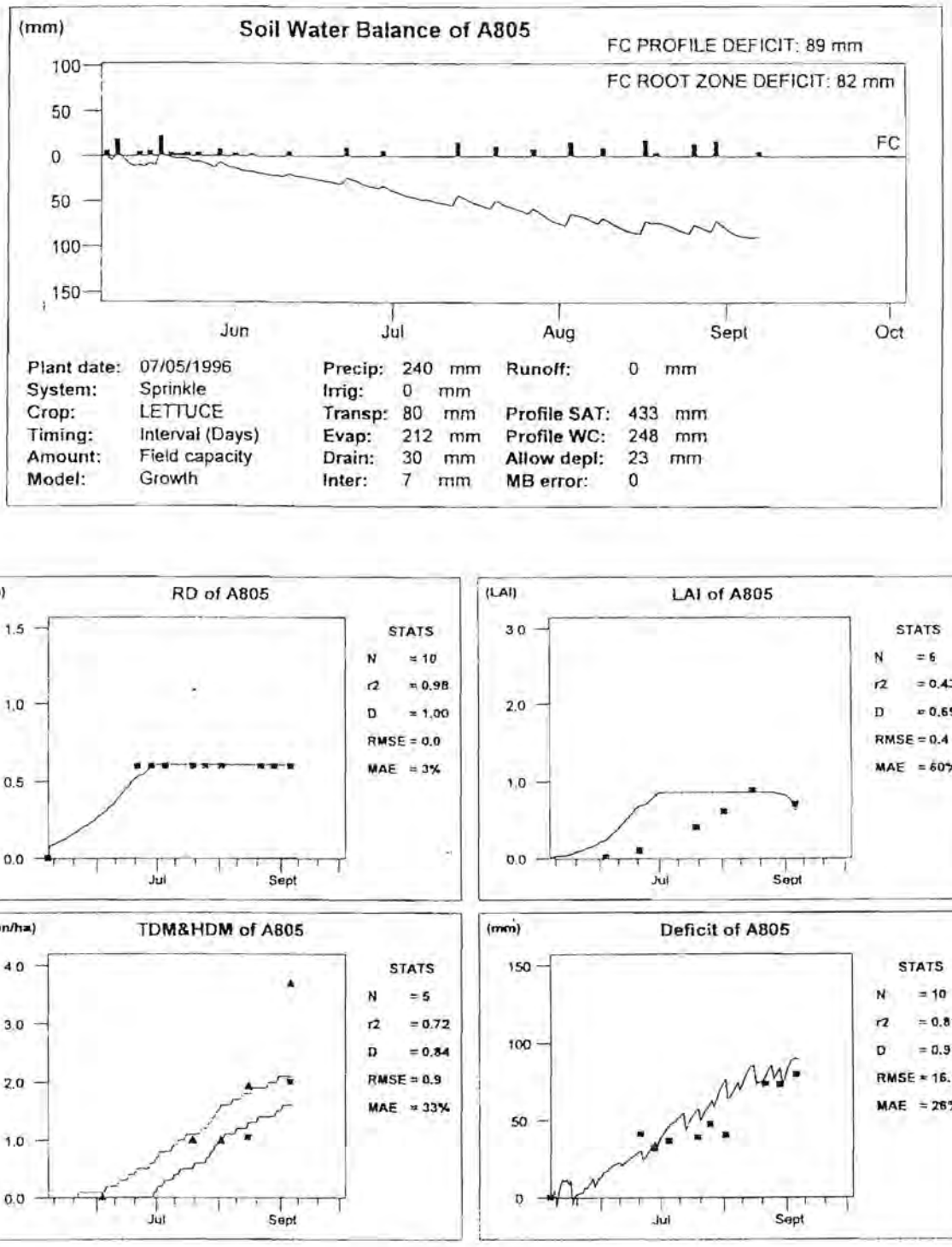


Figure 3.9 Soil water balance output graph, simulated (solid lines) and measured (symbols) root depth (RD), leaf area index (LAI), total above ground (TDM) and harvestable dry matter (HDM), as well as soil water deficit for lettuce.

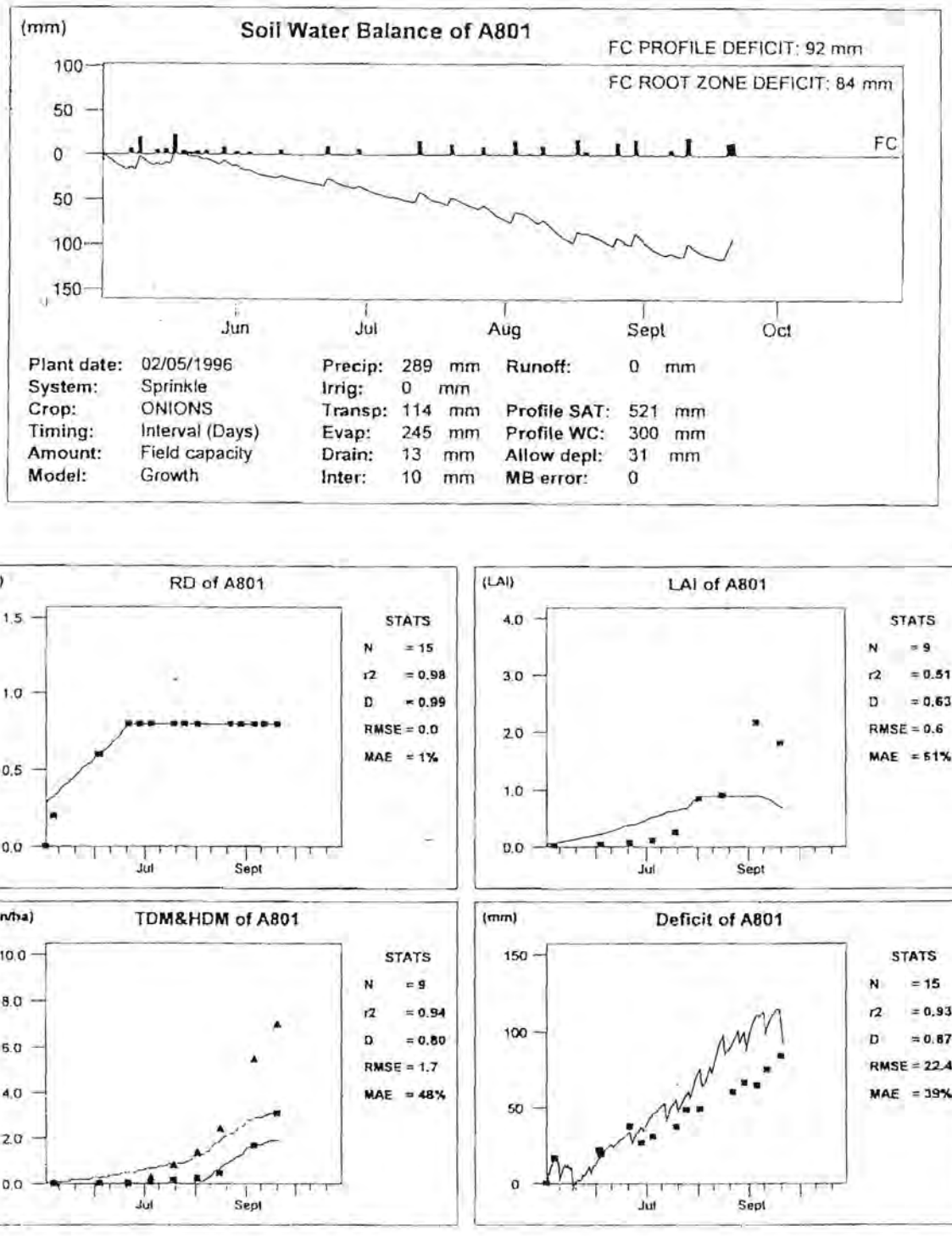


Figure 3.10 : Soil water balance output graph, simulated (solid lines) and measured (symbols) root depth (RD), leaf area index (LAI), total above ground (TDM) and harvestable dry matter (HDM), as well as soil water deficit for onion.

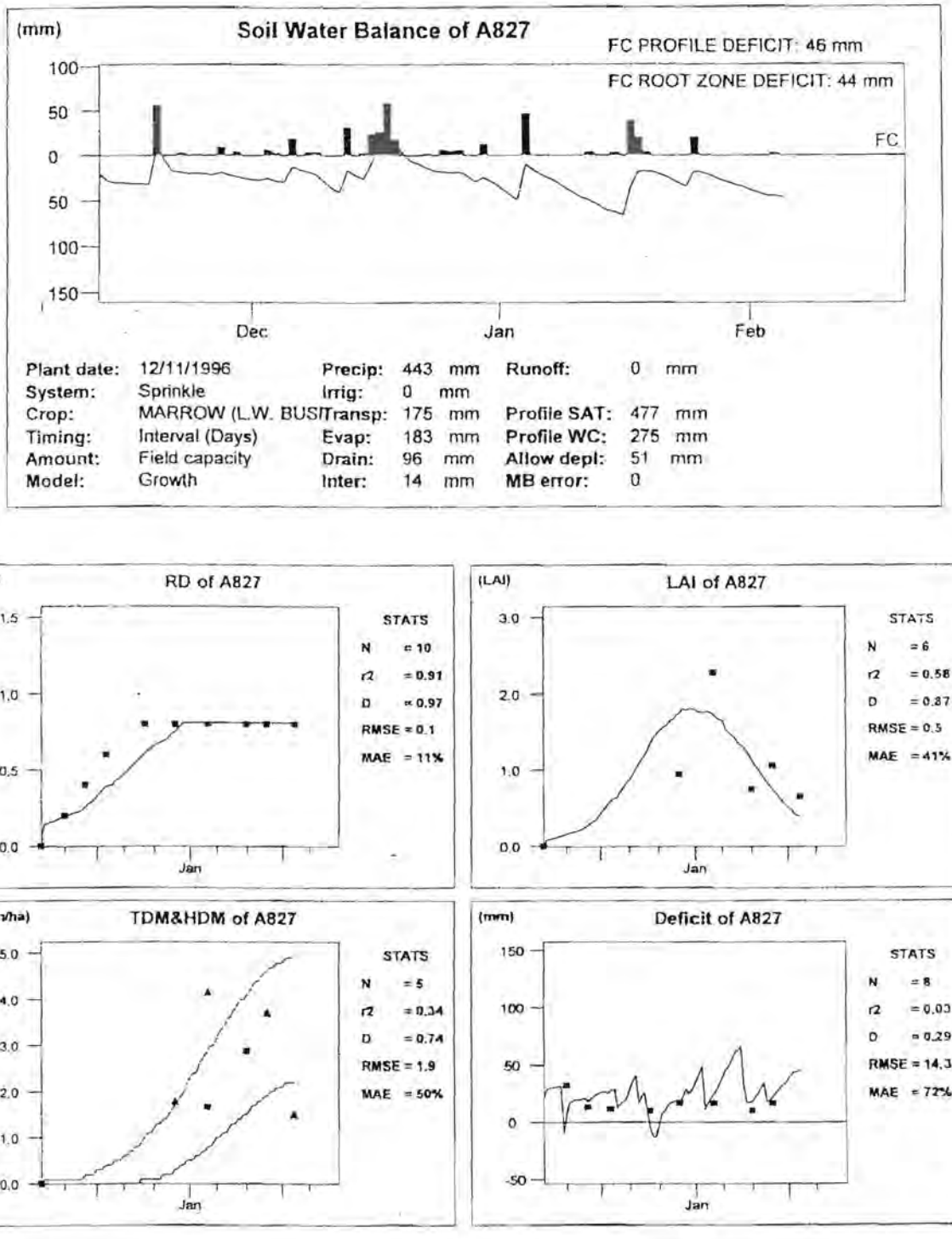
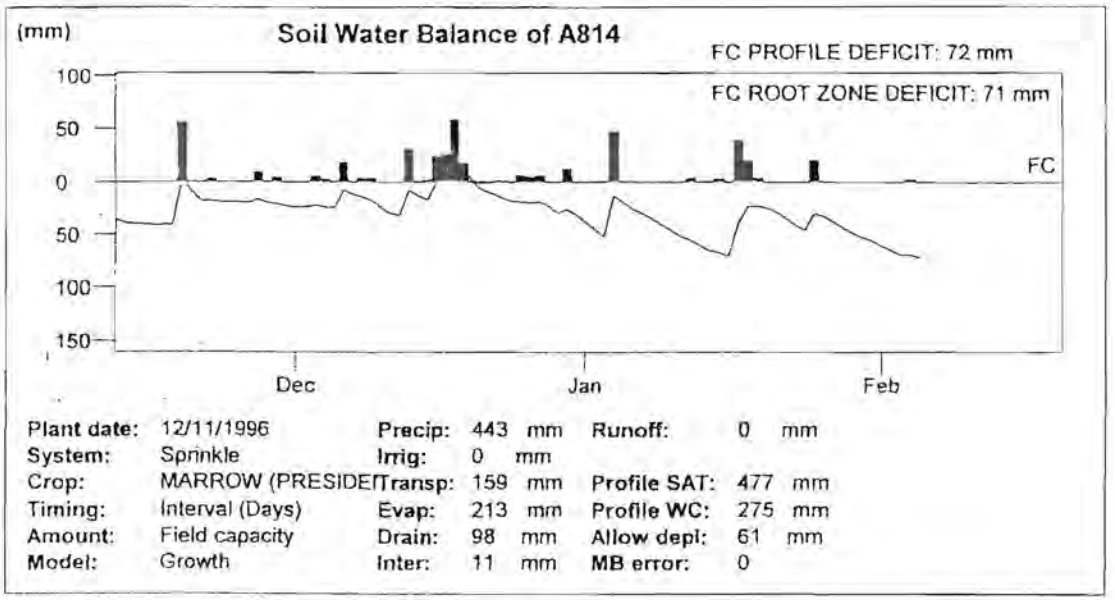


Figure 3.11 : Soil water balance output graph, simulated (solid lines) and measured (symbols) root depth (RD), leaf area index (LAI), total above ground (TDM) and harvestable dry matter (HDM), as well as soil water deficit for marrow (cv. Long White Bush)



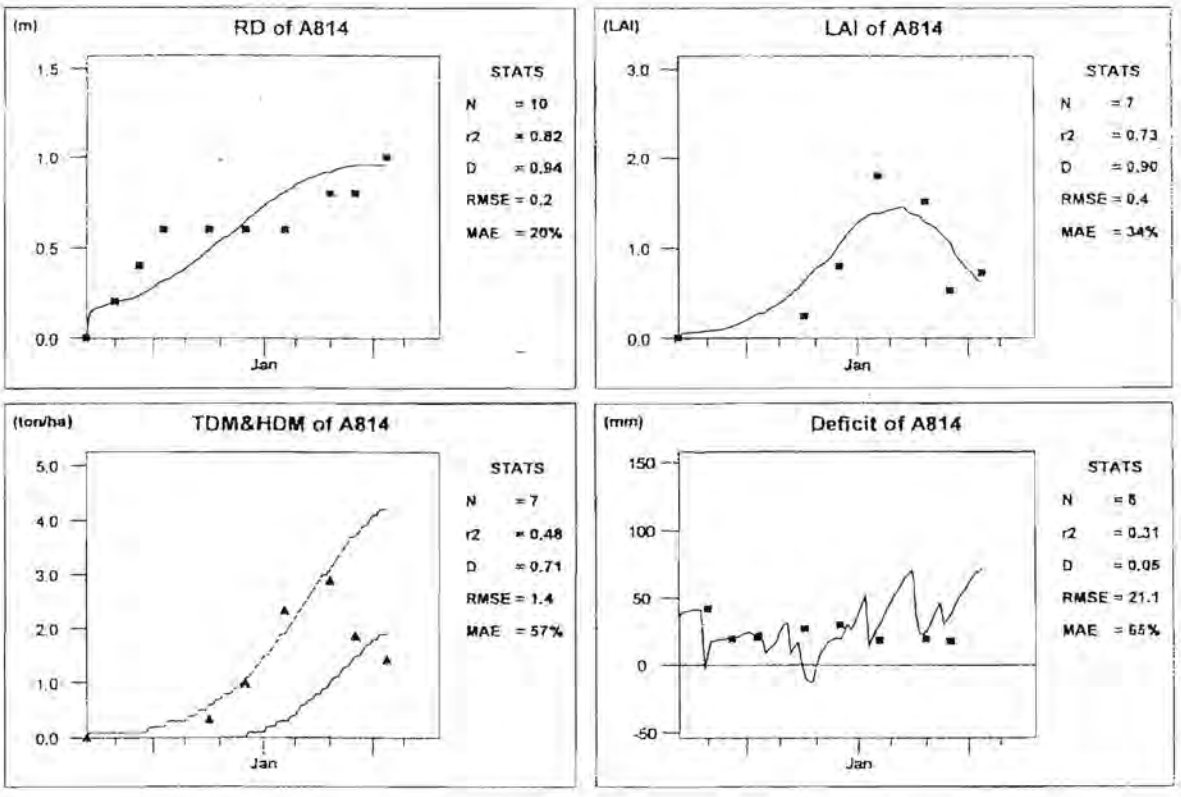


Figure 3.12 : Soil water balance output graph, simulated (solid lines) and measured (symbols) root depth (RD), leaf area index (LAI), total above ground (TDM) and harvestable dry matter (HDM), as well as soil water deficit for marrow (cv. President).

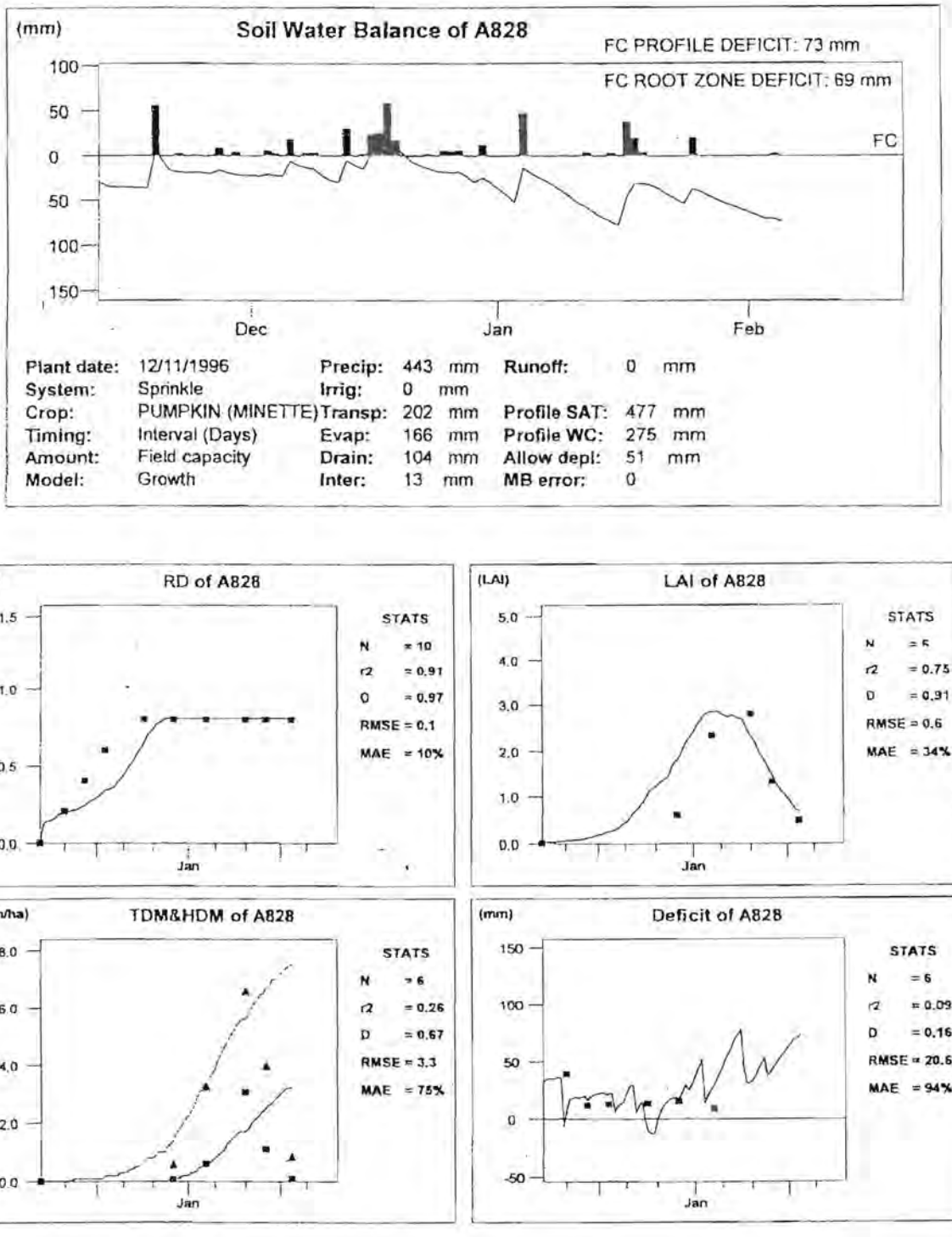


Figure 3.13 : Soil water balance output graph, simulated (solid lines) and measured (symbols) root depth (RD), leaf area index (LAI), total above ground (TDM) and harvestable dry matter (HDM), as well as soil water deficit for pumpkin (cv. minette).

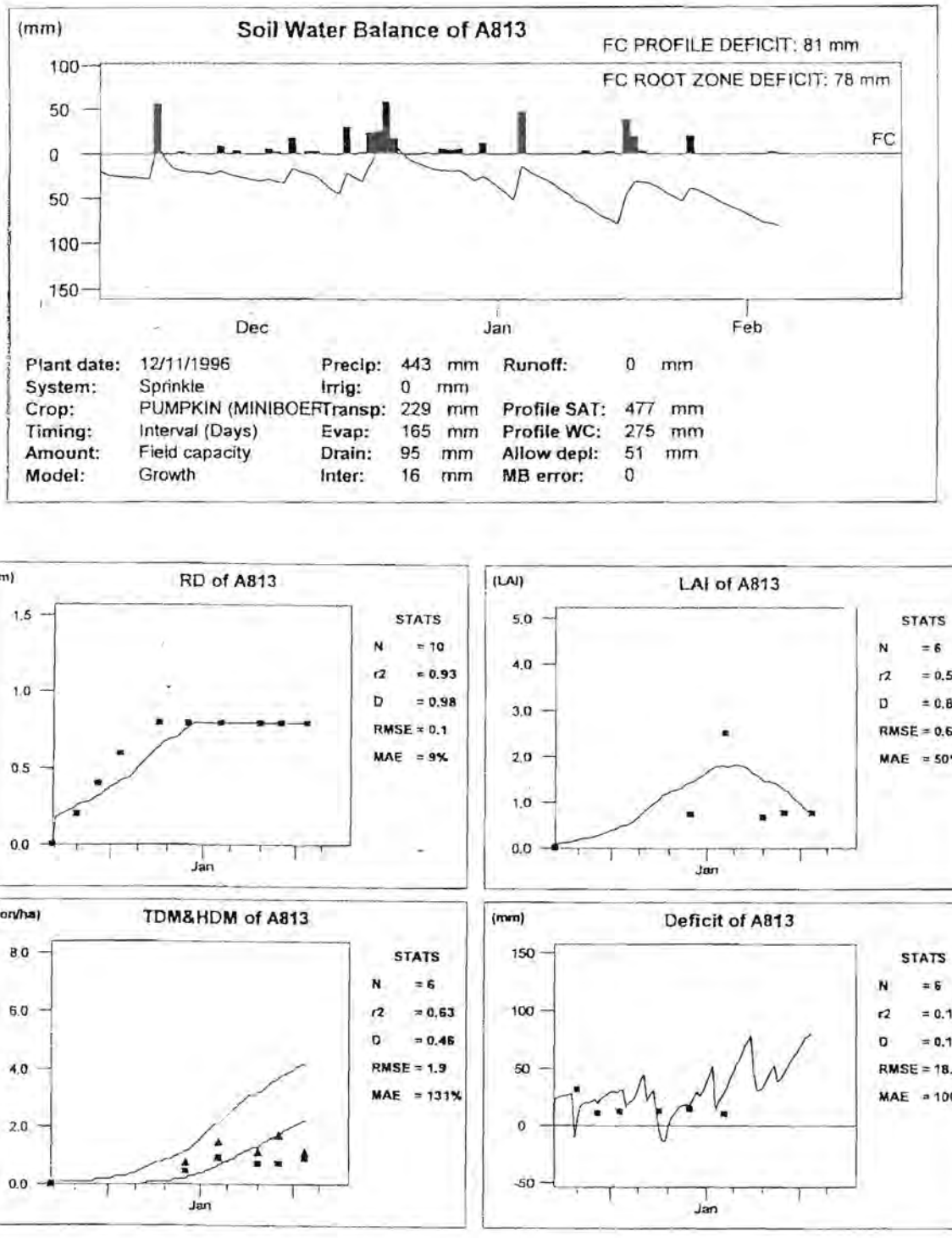


Figure 3.14 : Soil water balance output graph, simulated (solid lines) and measured (symbols) root depth (RD), leaf area index (LAI), total above ground (TDM) and harvestable dry matter (HDM), as well as soil water deficit for pumpkin (cv. Miniboer).

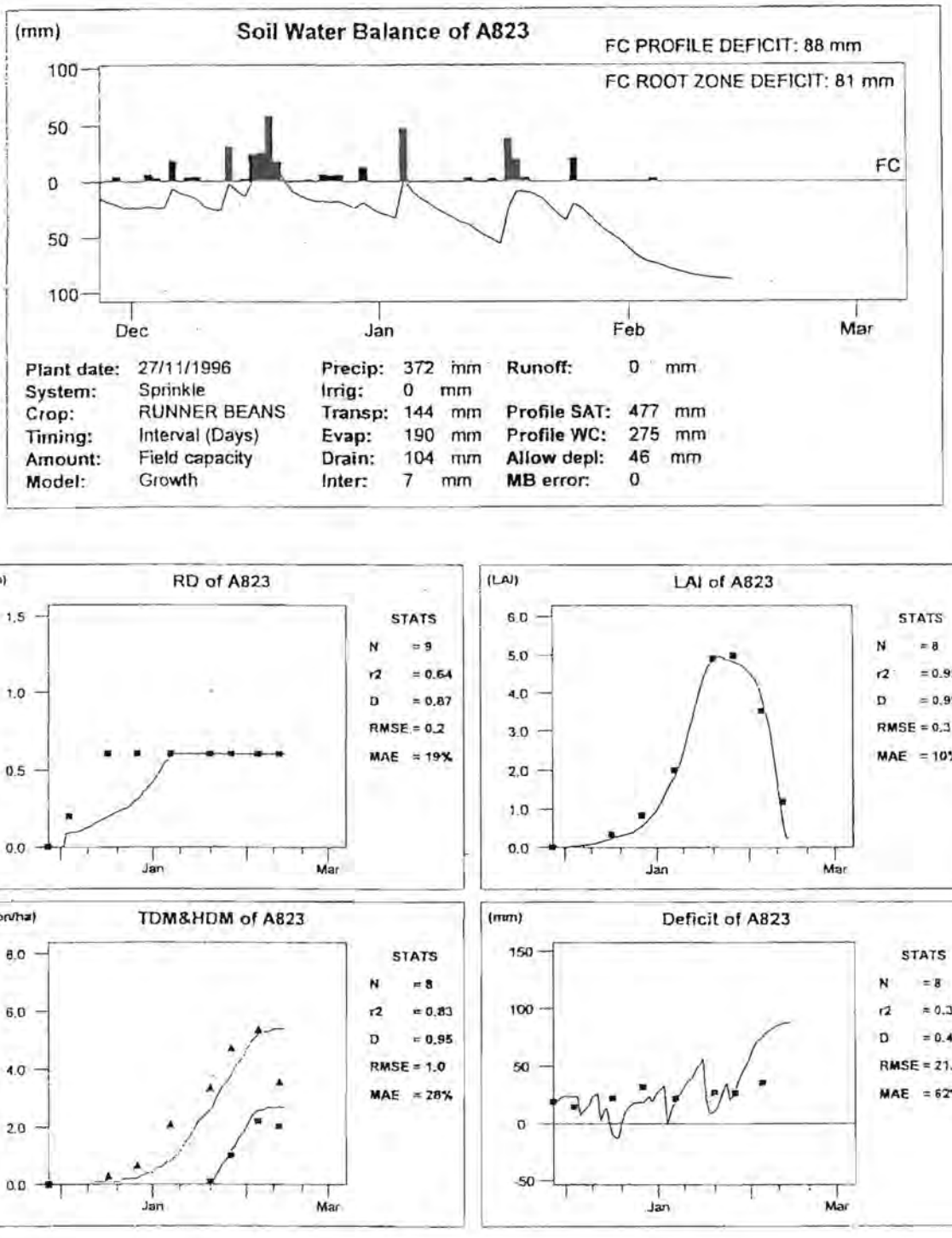


Figure 3.15 : Soil water balance output graph, simulated (solid lines) and measured (symbols) root depth (RD), leaf area index (LAI), total above ground (TDM) and harvestable dry matter (HDM), as well as soil water deficit for runner bean

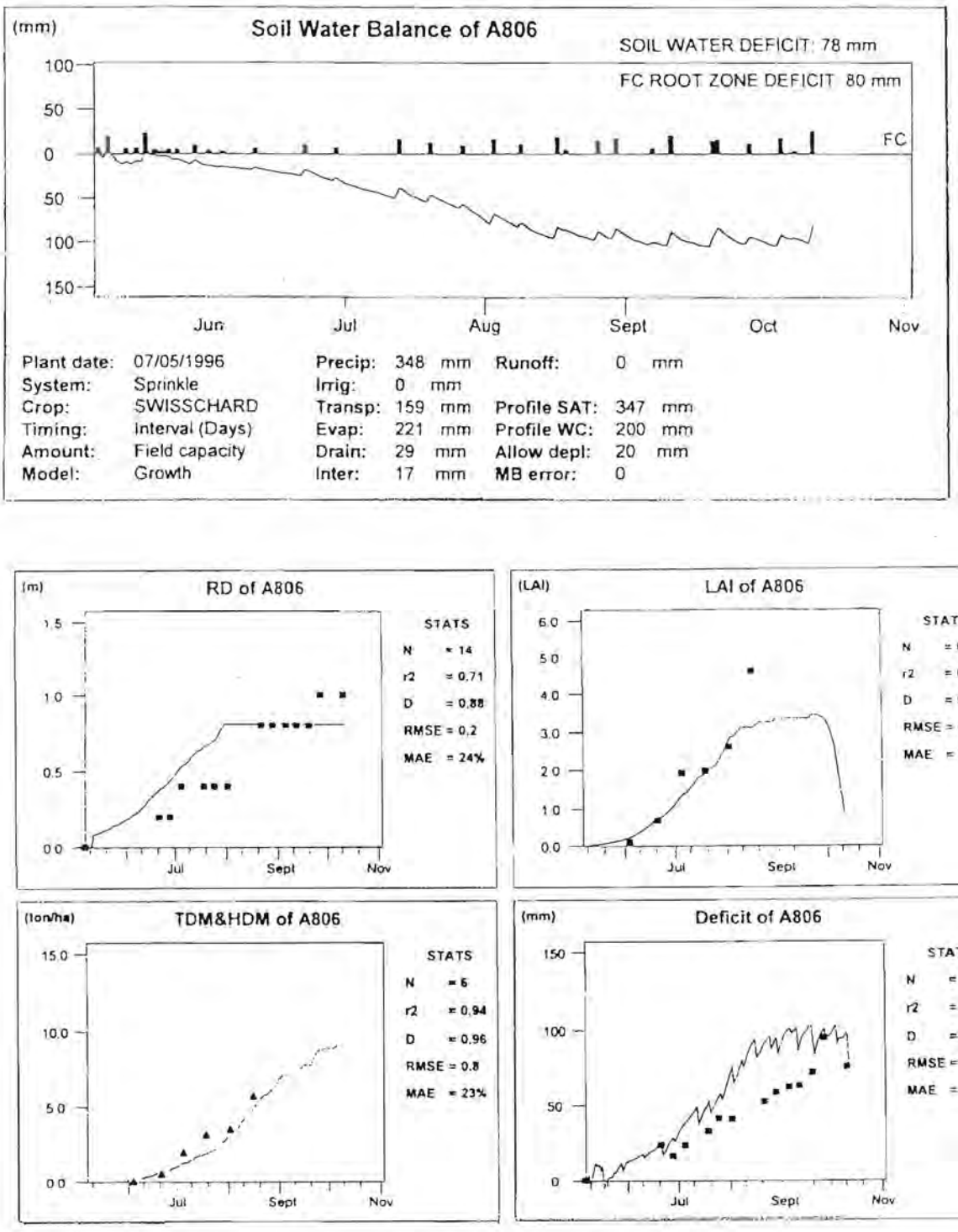


Figure 3.16 : Soil water balance output graph, simulated (solid lines) and measured (symbols0 root depth (RD), leaf area index (LAI), total above ground (TDM) and harvestable dry matter (HDM), as well as soil water deficit for swiss chard.

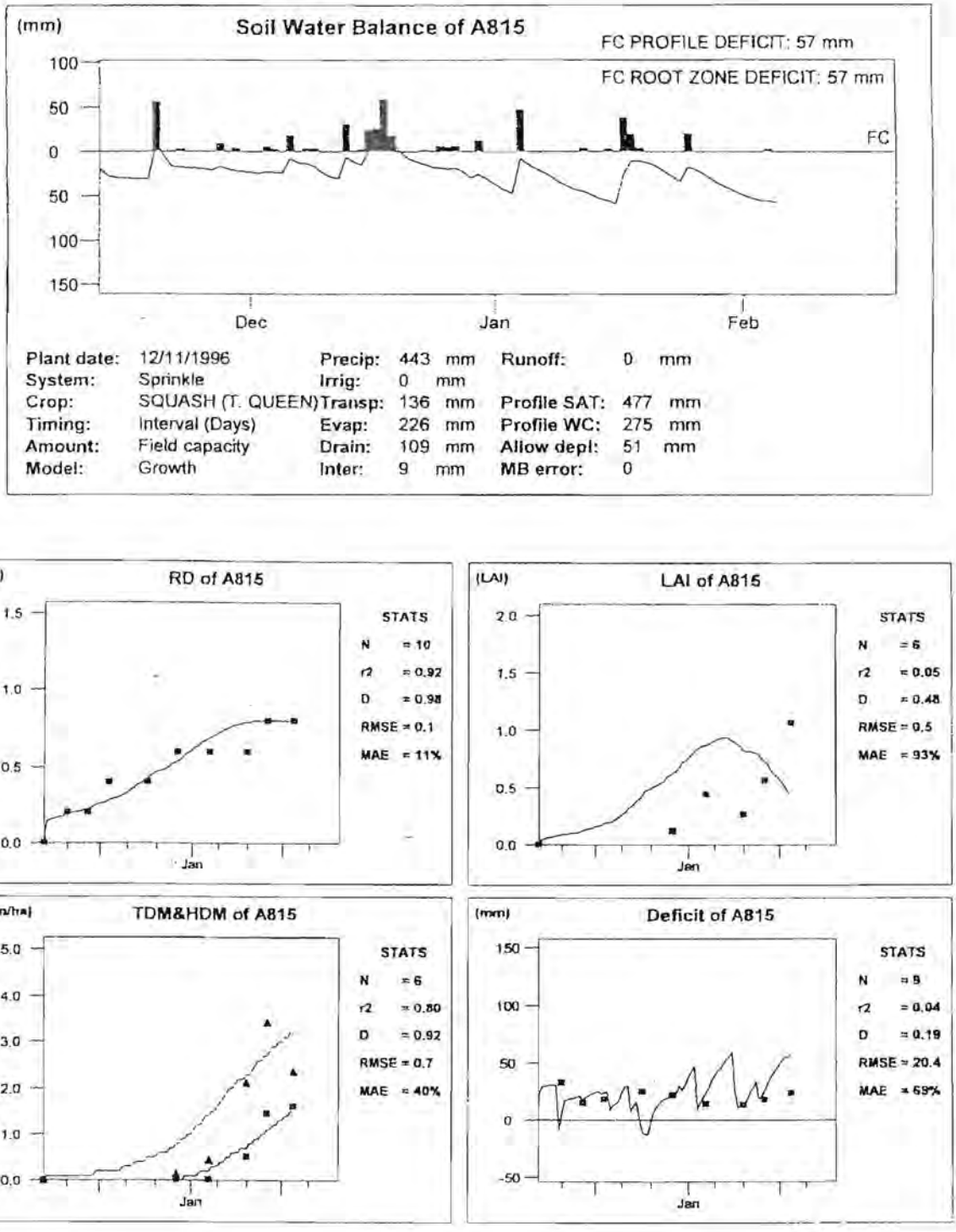
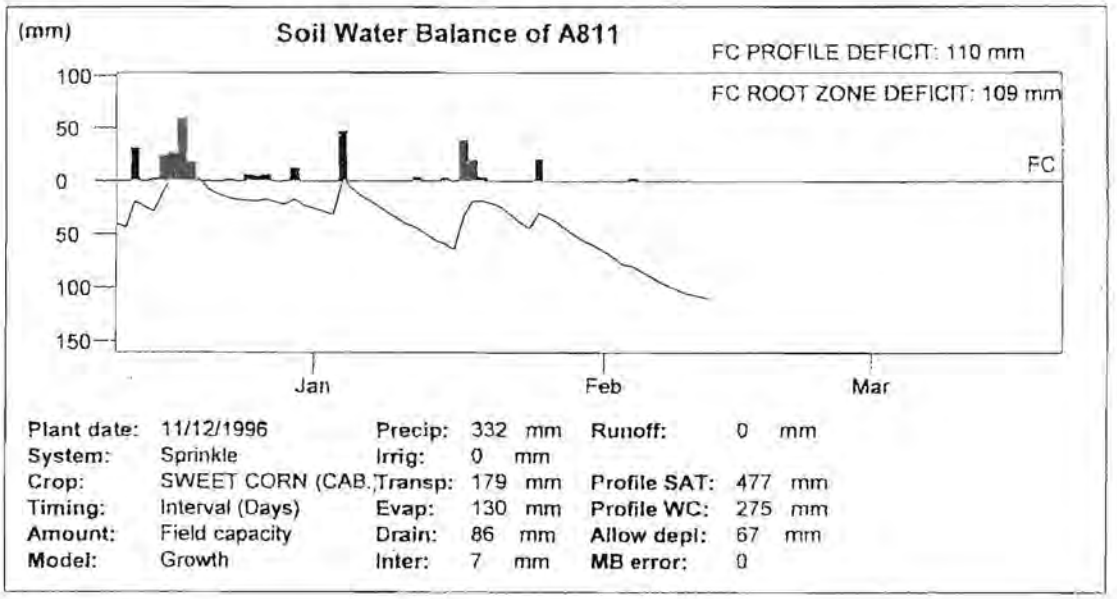


Figure 3.17 : Soil water balance output graph, simulated (solid lines) and measured (symbols) root depth (RD), leaf area index (LAI), total above ground (TDM) and harvestable dry matter (HDM), as well as soil water deficit for squash (cv. Table Queen).



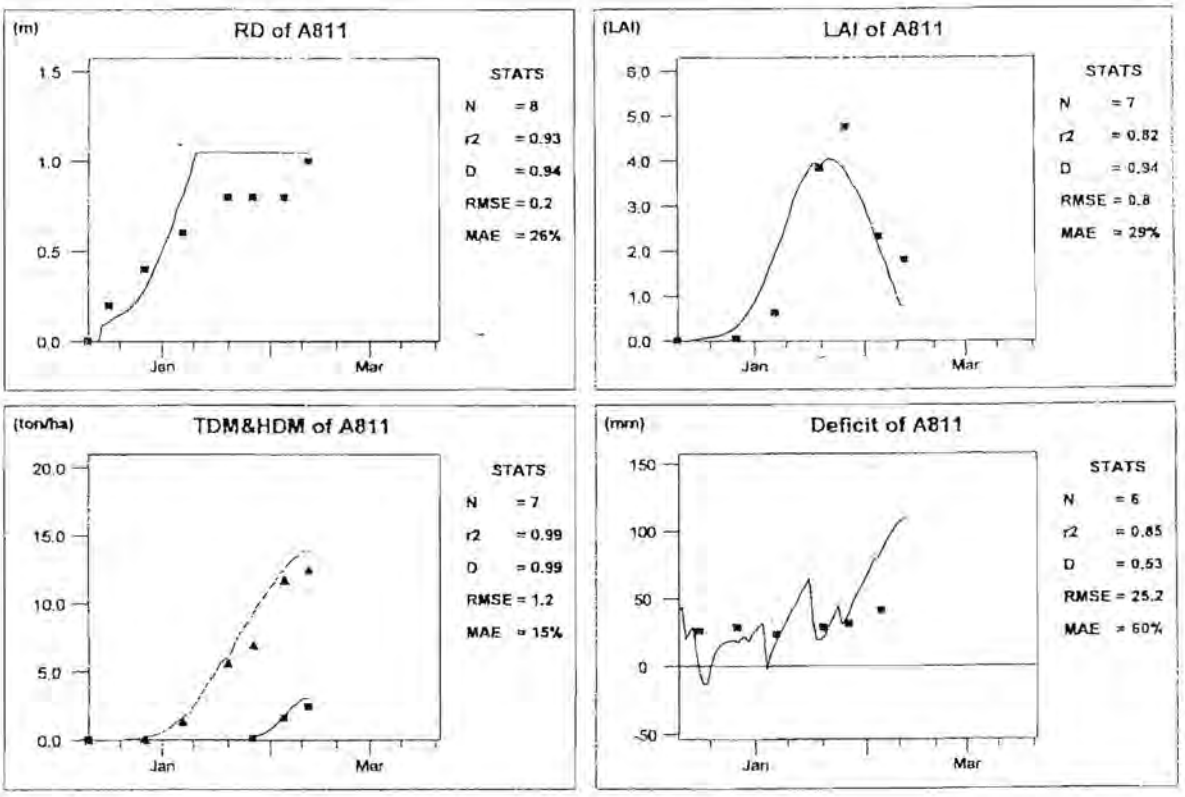


Figure 3.19 : Soil water balance output graph, simulated (solid lines) and measured (symbols) root depth (RD), leaf area index (LAI), total above ground (TDM) and harvestable dry matter (HDM), as well as soil water deficit for sweet-corn (cv. Cabaret)

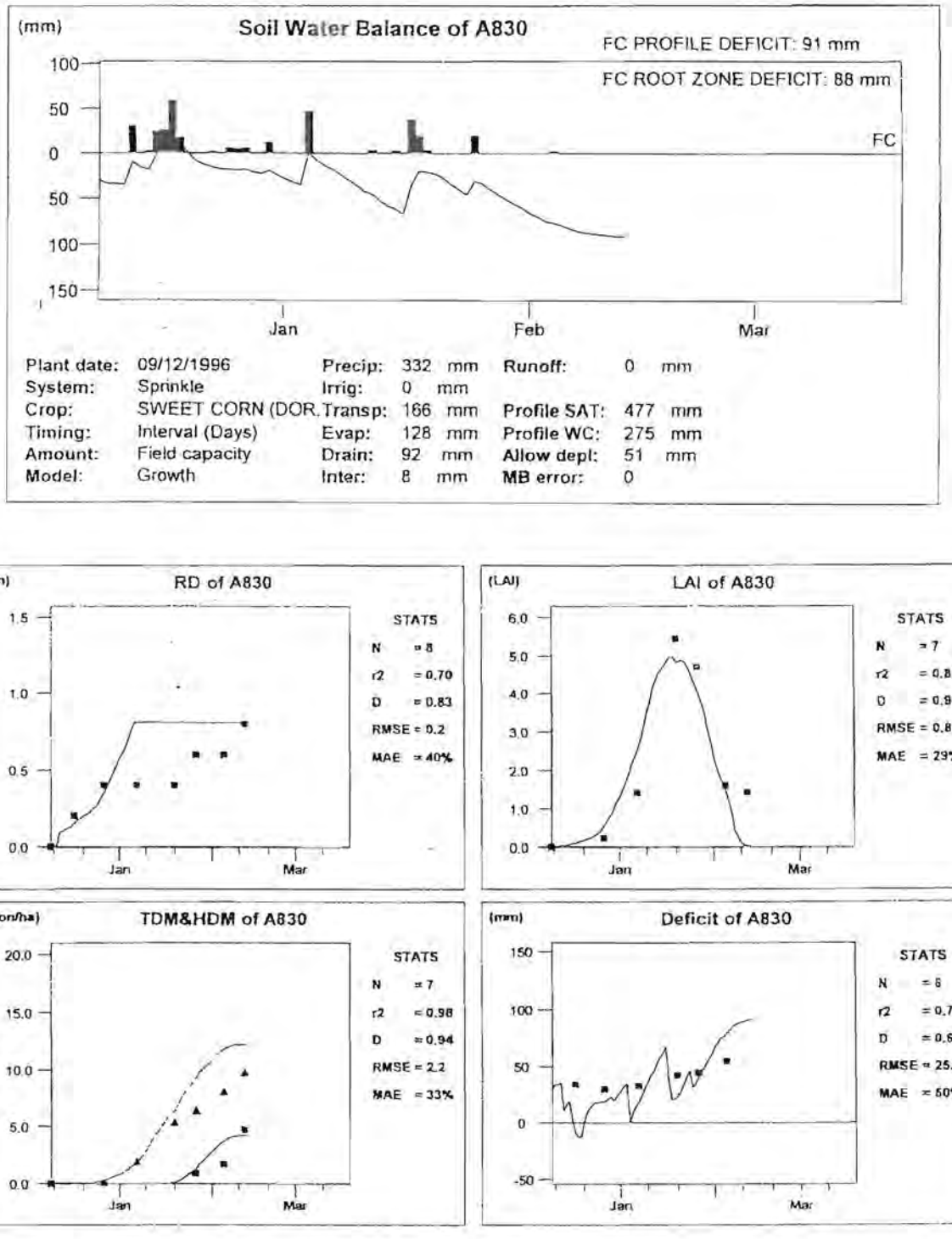


Figure 3.20 : Soil water balance output graph, simulated (solid lines) and measured (symbols) root depth (RD), leaf area index (LAI), total above ground (TDM) and harvestable dry matter (HDM), as well as soil water deficit for sweet-corn (cv. Dorado).

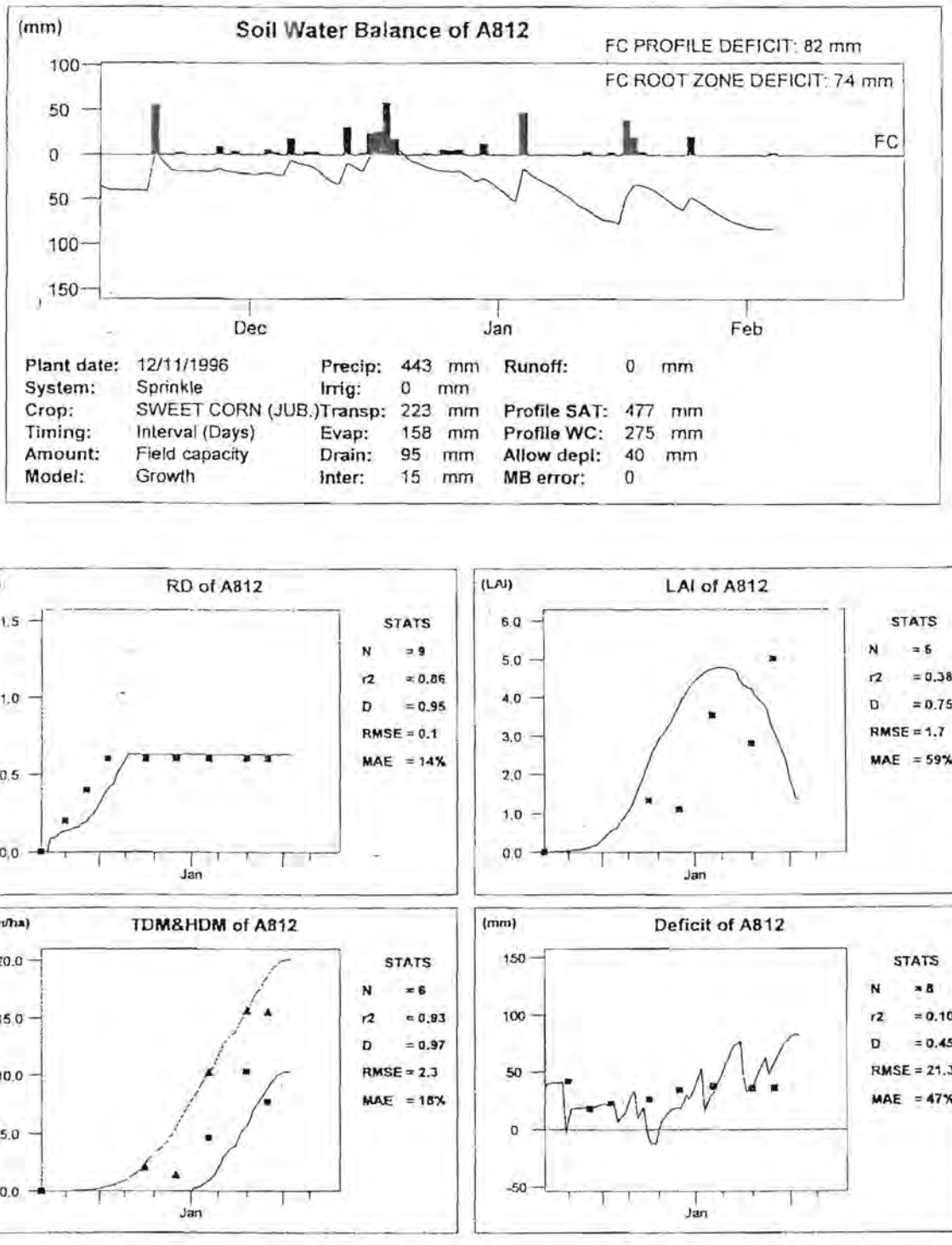
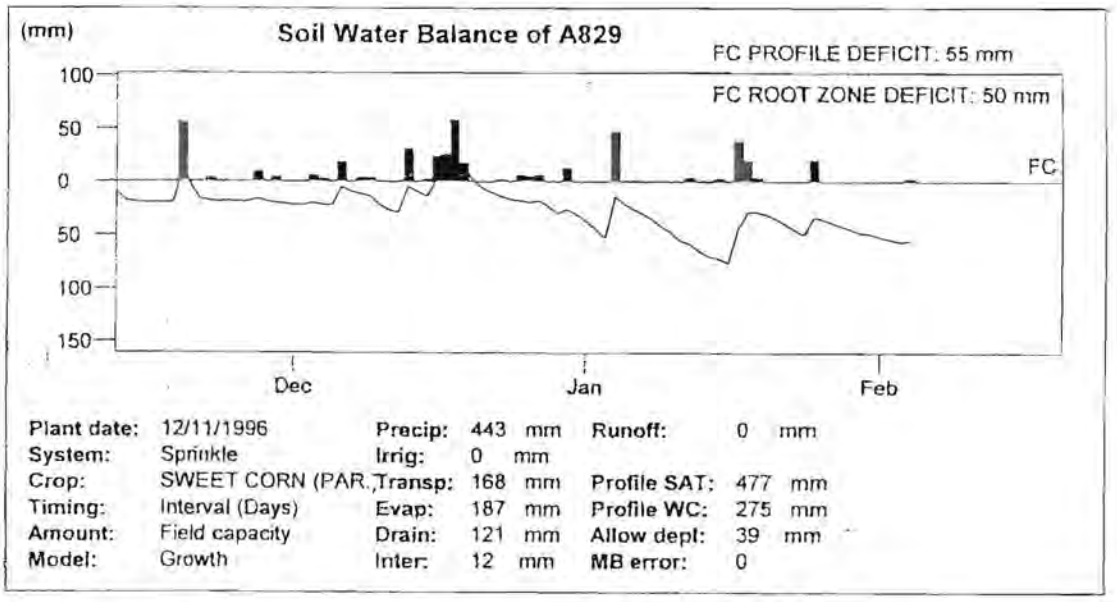


Figure 3.21 : Soil water balance output graph, simulated (solid lines) and measured (symbols) root depth (RD), leaf area index (LAI), total above ground (TDM) and harvestable dry matter (HDM), as well as soil water deficit for sweet-corn (cv. Jubilee).



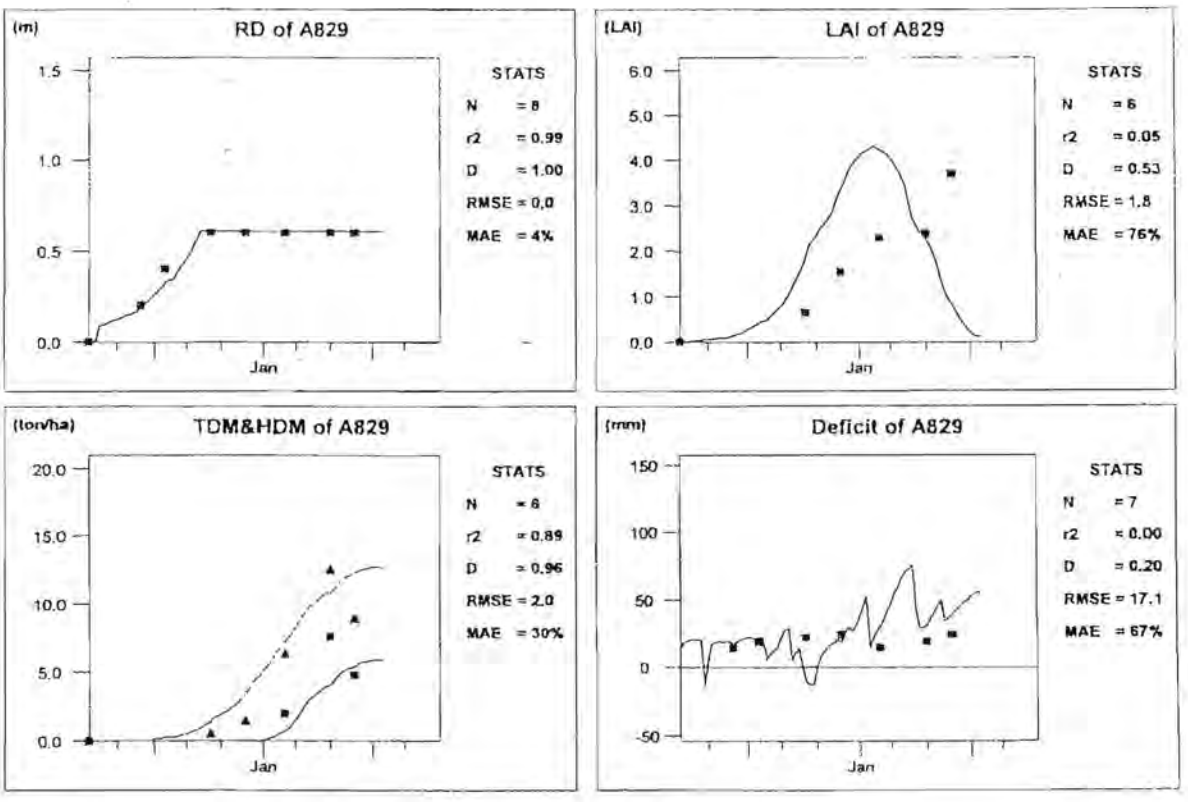


Figure 3.22 : Soil water balance output graph, simulated (solid lines) and measured (symbols) root depth (RD), leaf area index (LAI), total above ground (TDM) and harvestable dry matter (HDM), as well as soil water deficit for sweet-corn (cv. Paradise).

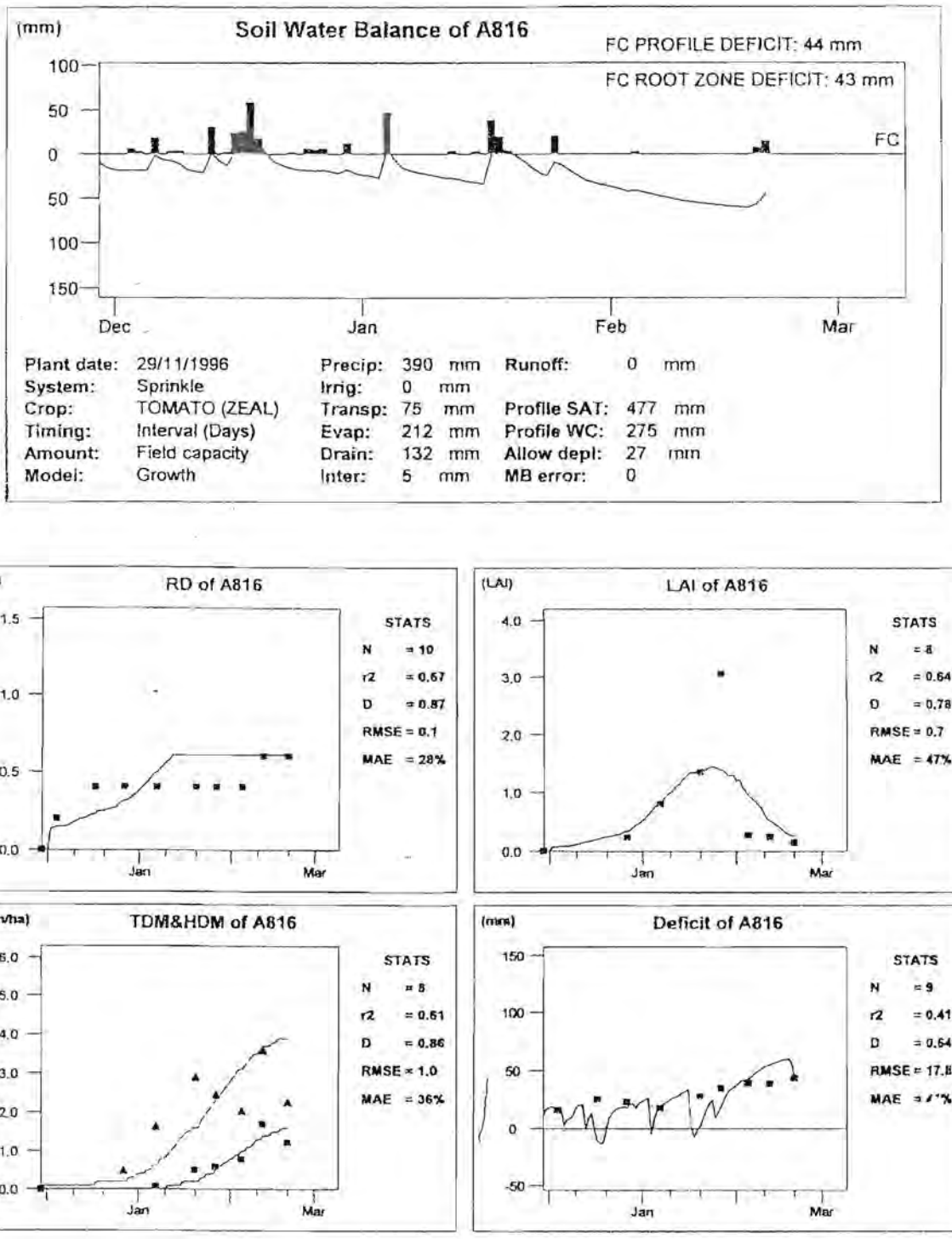


Figure 3.23 : Soil water balance output graph, simulated (solid lines) and measured (symbols) root depth (RD), leaf area index (LAI), total above ground (TDM) and harvestable dry matter (HDM), as well as soil water deficit for tomato (cv. Zeal).

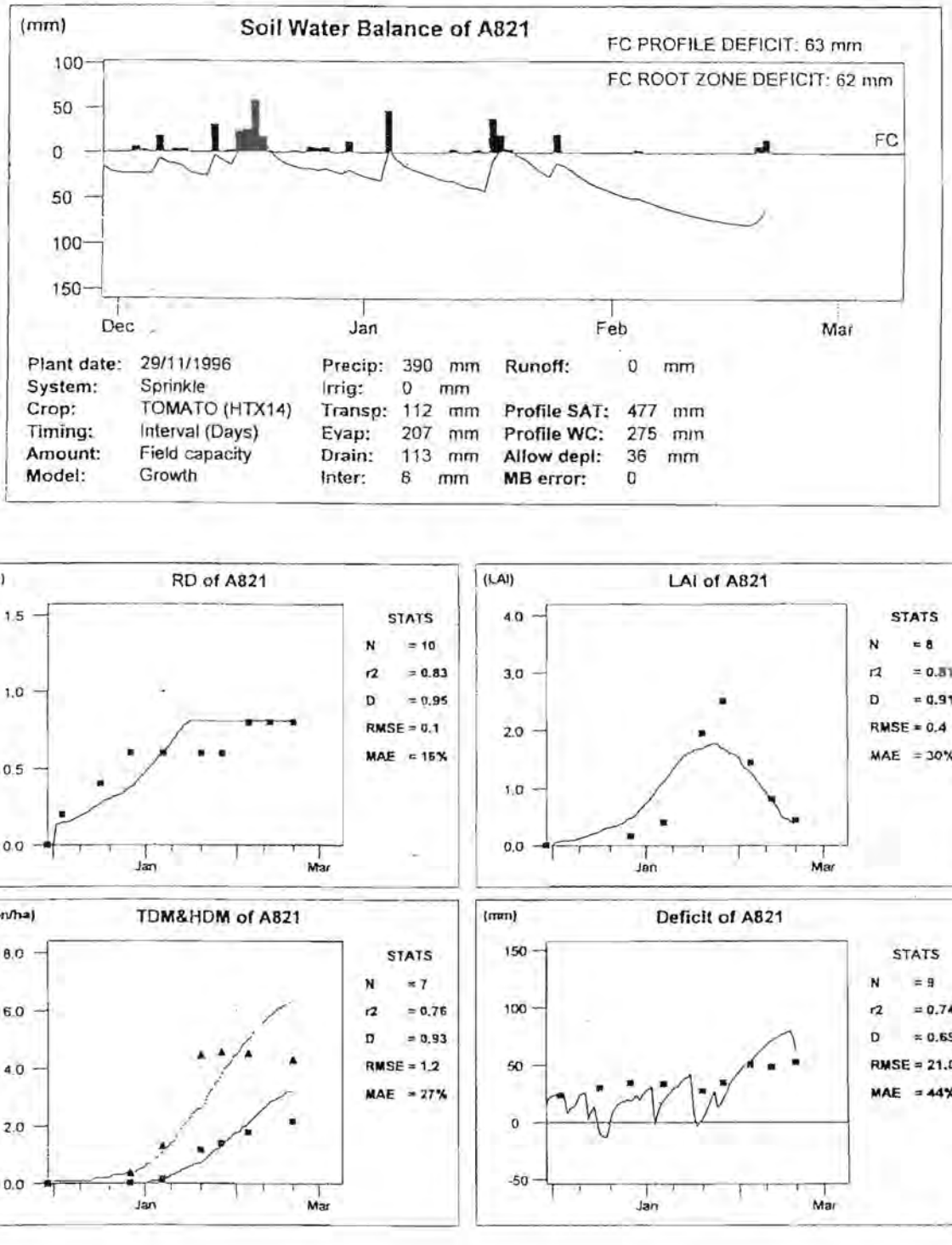


Figure 3.24 : Soil water balance output graph, simulated (solid lines) and measured (symbols) root depth (RD), leaf area index (LAI), total above ground (TDM) and harvestable dry matter (HDM), as well as soil water deficit for tomato (cv. HTX4).

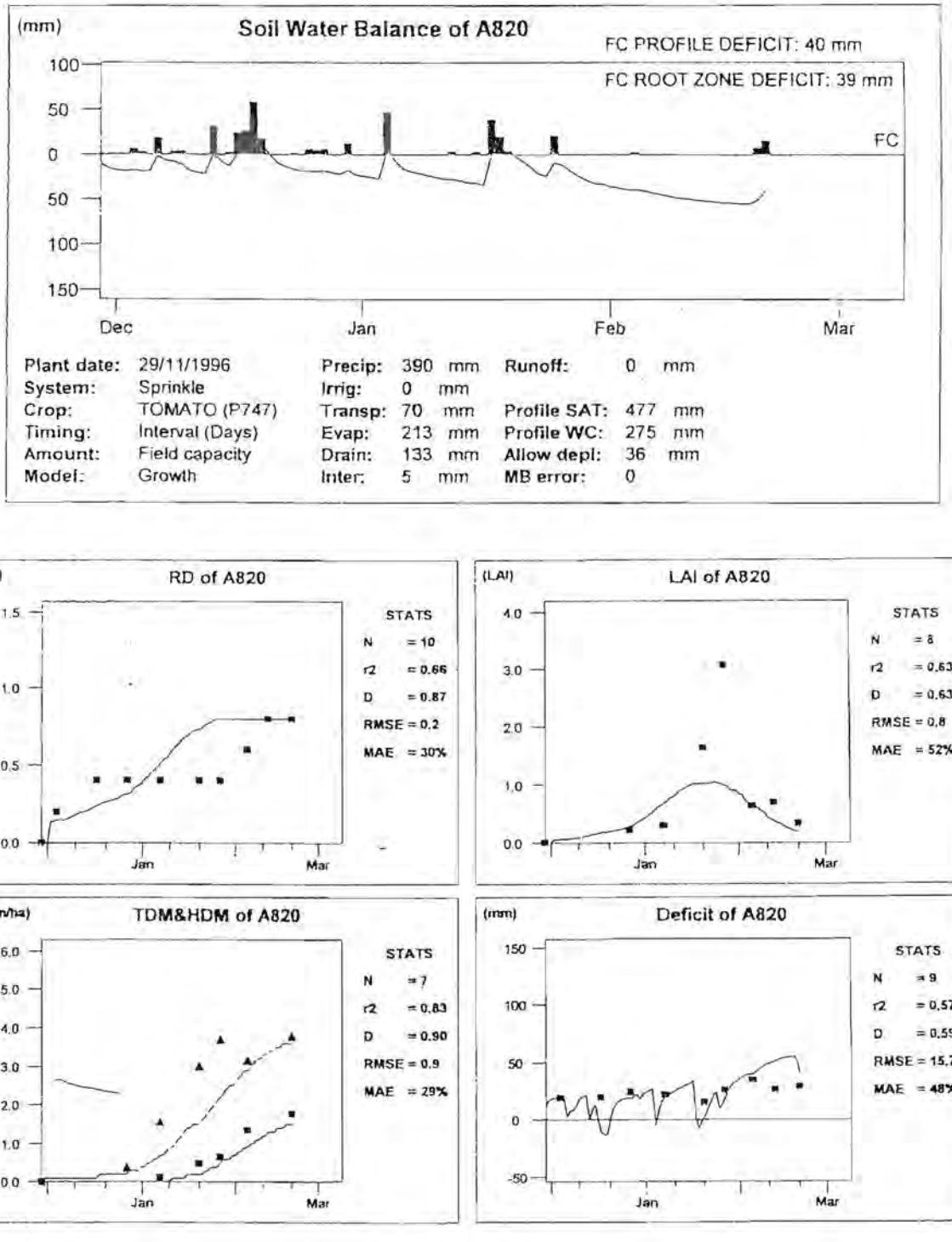


Figure 3.25 : Soil water balance output graph, simulated (solid lines) and measured (symbols) root depth (RD), leaf area index (LAI), total above ground (TDM) and harvestable dry matter (HDM), as well as soil water deficit for tomato (cv. P747).

Appendix D : Climatic data for the duration of the trials

Table A1: Daily rainfall and irrigation (R + I), maximum (Tmax) and minimum temperature (Tmin), solar radiation (Rs), wind speed (U), and average dry (Td) and wet bulb temperature (Tw), during 1996/97 at Roodeplaat

Date	R + I (mm)	Tmax (°C)	Tmin (°C)	Rs (MJm^{-2})	U (ms^{-1})	Td (°C)	Tw (°C)
7/5/96	6.6	22.4	9.8	12.2	-	15.1	13.0
8/5/96	0	24.4	7.9	15.1	-	14.8	12.1
9/5/96	19.1	23.4	7.9	12.9	-	14.3	11.8
10/5/96	0	23.8	6.5	14.4	-	13.9	11.2
11/5/96	0	22.3	6.9	15.2	-	15.0	11.6
12/5/96	0	25.4	5.7	14.9	-	14.6	11.0
13/5/96	5.5	22.7	8.0	10.9	-	13.2	11.1
14/5/96	0	21.2	8.5	10.6	-	13.2	11.3
15/5/96	6.2	21.2	5.9	7.9	-	13.5	11.6
16/5/96	0	21.9	10.3	9.3	-	16.1	13.0
17/5/96	22.3	21.5	11.9	9.6	-	15.7	13.4
18/5/96	0.2	20.4	9.5	11.9	-	13.7	12.2
19/5/96	4.6	21.4	8.3	9.5	-	13.6	11.9
20/5/96	2.7	22.3	6.6	13.9	-	13.6	11.5
21/5/96	2.2	21.8	5.9	10.2	-	12.9	10.9
22/5/96	4.4	20.0	7.6	10.2	-	12.9	11.3
23/5/96	0	23.1	4.8	14.3	-	12.3	9.7
24/5/96	4.4	23.8	3.6	14.5	-	12.7	9.6
25/5/96	0	23.1	4.9	14.7	-	13.3	9.7
26/5/96	0	16.7	10.6	6.2	-	13.0	10.5
27/5/96	0	15.7	8.5	5.6	-	11.6	10.0
28/5/96	8.5	18.3	4.5	4.5	-	10.1	7.9
29/5/96	0	20.0	2.4	2.4	-	10.0	7.6
30/5/96	0	21.2	1.5	1.5	-	10.1	7.5

Table A1 : Continued

Table A1: Daily rainfall and irrigation (R + I), maximum (Tmax) and minimum temperature (Tmin), solar radiation (Rs), wind speed (U), and average dry (Td) and wet bulb temperature (Tw), during 1996/97 at Roodeplaat

Date	R + I (mm)	Tmax (°C)	Tmin (°C)	Rs (MJm^{-2})	U (ms^{-1})	Td (°C)	Tw (°C)
31/5/96	3.8	22.9	1.9	14.5	-	11.2	8.4
01/6/96	0	23.1	4.2	14.1	-	12.3	8.9
02/6/96	0	18.4	1.0	14.9	-	9.9	6.3
03/6/96	3.1	17.7	5.8	6.9	-	11.1	9.9
04/6/96	0	21.8	5.5	13.5	-	11.9	9.2
05/6/96	0	20.2	3.7	12.7	-	10.2	8.2
06/6/96	0	21.2	2.2	13.3	-	10.5	8.2
07/6/96	0	22.5	3.8	13.2	-	11.2	8.7
08/6/96	0	23.8	2.3	10.7	-	11.3	8.1
09/6/96	0	22.5	2.8	10.7	-	12.3	9.1
10/6/96	5.6	21.4	6.3	11.6	-	12.9	10.7
11/6/96	0	20.8	5.5	13.1	-	11.5	9.5
12/6/96	0	21.1	3.8	13.0	-	10.9	8.3
13/6/96	0	20.9	4.5	13.3	-	-	-
14/6/96	0	21.8	5.1	13.6	-	-	-
15/6/96	0	20.1	3.7	12.9	-	-	-
16/6/96	0	19.4	3.5	12.7	-	-	-
17/6/96	0	21.2	4.1	13.4	-	-	-
18/6/96	0	22.3	4.8	13.8	-	-	-
19/6/96	0	18.8	3.1	13.5	-	-	-
20/6/96	0	18.9	2.2	12.9	-	-	-
21/6/96	9.7	17.9	2.8	13.9	-	-	-
22/6/96	0	15.6	1.6	4.6	-	-	-

Table A1 : Continued

Table A1: Daily rainfall and irrigation (R + I), maximum (Tmax) and minimum temperature (Tmin), solar radiation (Rs), wind speed (U), and average dry (Td) and wet bulb temperature (Tw), during 1996/97 at Roodeplaat

Date	R + I (mm)	Tmax (°C)	Tmin (°C)	Rs (MJm^{-2})	U (ms^{-1})	Td (°C)	Tw (°C)
23/6/96	0	17.8	1.6	11.5	-	8.1	6.2
24/6/96	0	17.2	1.4	8.2	-	8.5	6.2
25/6/96	0	20.3	0.9	12.4	-	9.9	6.9
26/6/96	0	20.8	0.3	13.4	-	8.9	5.4
27/6/96	0	20.9	1.4	13.4	-	8.5	5.2
28/6/96	6.6	20.1	1.0	13.4	-	8.9	5.0
29/6/96	0	21.2	0.8	13.4	-	8.9	5.2
30/6/96	0	21.6	0.3	13.4	-	9.0	5.6
01/7/96	0	23.7	0.0	13.6	-	8.8	5.4
02/7/96	0	23.9	0.5	13.7	-	10.2	5.9
03/7/96	0	22.4	0.2	14.1	-	9.4	5.3
04/7/96	0	22.6	0.1	13.7	-	9.9	5.9
05/7/96	0	21.0	0.4	13.5	-	9.7	5.6
06/7/96	0	15.2	1.8	14.5	-	7.9	4.5
07/7/96	0	11.8	4.3	8.2	-	7.4	5.5
08/7/96	0	13.4	1.1	12.6	-	5.9	3.6
09/7/96	0	18.8	0.3	14.0	-	7.7	4.2
10/7/96	0	20.2	1.0	14.5	-	10.2	6.8
11/7/96	0	21.1	-0.1	14.7	-	11.1	7.6
12/7/96	16.0	21.3	-0.1	14.6	-	10.3	6.7
13/7/96	0	21.1	-0.1	14.5	-	9.4	5.2
14/7/96	0.0	19.3	-0.1	14.0	-	8.7	5.0
15/7/96	0.0	17.9	0.8	14.6	-	8.3	5.0
16/7/96	0.0	17.5	-0.1	15.3	-	8.2	4.5

Table A1 : Continued

Table A1: Daily rainfall and irrigation (R + I), maximum (Tmax) and minimum temperature (Tmin), solar radiation (Rs), wind speed (U), and average dry (Td) and wet bulb temperature (Tw), during 1996/97 at Roodeplaat

Date	R + I (mm)	Tmax (°C)	Tmin (°C)	Rs (MJm^{-2})	U (ms^{-1})	Td (°C)	Tw (°C)
17/7/96	0.4	7.8	5.3	13.0	-	6.9	5.5
18/7/96	0.0	15.2	2.4	14.3	-	7.4	5.2
19/7/96	12.0	16.0	-0.1	13.3	-	6.9	4.6
20/7/96	0.0	17.4	-0.1	14.4	-	7.6	4.9
21/7/96	0.0	17.8	-0.1	10.4	-	8.3	5.5
22/7/96	0.0	18.4	3.7	10.1	-	8.9	6.6
23/7/96	0.0	17.5	2.3	10.1	-	10.1	7.6
24/7/96	0.0	15.6	1.3	9.3	-	9.3	6.8
25/7/96	0.0	15.1	2.8	7.9	-	9.9	7.6
26/7/96	9.0	17.7	3.6	14.1	-	11.6	8.8
27/7/96	0.0	22.4	3.8	15.2	-	12.0	8.9
28/7/96	0.0	25.0	3.0	15.6	-	12.9	9.0
29/7/96	0.4	24.9	2.0	15.0	-	12.4	8.5
30/7/96	0.0	23.0	4.1	14.6	-	14.0	10.1
31/7/96	0.0	22.6	3.5	14.8	-	12.3	9.5
01/8/96	0.0	25.6	4.5	13.8	-	13.8	9.8
02/8/96	16.0	24.6	1.2	15.1	-	12.2	7.2
03/8/96	0.0	20.4	5.0	8.0	-	12.4	9.3
04/8/96	0.0	14.9	8.3	2.0	-	12.8	11.0
05/8/96	1.2	14.0	9.8	2.1	-	10.7	9.9
06/8/96	0.0	17.3	-0.1	16.9	-	8.0	4.6
07/8/96	0.0	19.2	-0.1	17.0	-	8.7	4.8
08/8/96	10.0	20.8	-0.1	17.4	-	9.7	5.3
09/8/96	0.0	23.4	-0.1	17.8	-	10.4	5.8

Table A1 : Continued

Table A1: Daily rainfall and irrigation (R + I), maximum (Tmax) and minimum temperature (Tmin), solar radiation (Rs), wind speed (U), and average dry (Td) and wet bulb temperature (Tw), during 1996/97 at Roodeplaat

Date	R + I (mm)	Tmax (°C)	Tmin (°C)	Rs (MJm^{-2})	U (ms^{-1})	Td (°C)	Tw (°C)
10/8/96	0.0	26.1	1.5	16.9	-	13.1	8.4
11/8/96	0.0	27.4	6.4	15.7	-	16.4	11.2
12/8/96	0.0	26.4	11.1	13.5	-	16.6	12.7
13/8/96	0.0	26.8	6.0	16.8	-	15.3	10.4
14/8/96	0.0	22.0	-0.1	9.1	-	11.9	6.9
15/8/96	0.0	17.7	8.7	9.7	-	12.1	9.3
16/8/96	18.0	22.7	0.3	17.6	-	11.0	7.9
17/8/96	0.0	26.6	4.4	18.2	-	14.2	9.0
18/8/96	4.4	23.3	6.7	13.7	-	15.3	11.6
19/8/96	0.0	24.5	7.3	14.9	-	14.8	11.3
20/8/96	0.0	15.2	11.3	2.6	-	12.7	10.7
21/8/96	0.0	18.7	4.8	13.4	-	11.7	9.2
22/8/96	0.4	19.1	8.7	12.4	-	-	-
23/8/96	0.0	19.7	4.1	12.4	-	-	-
24/8/96	0.0	22.3	-0.1	12.4	-	-	-
25/8/96	14.0	25.1	4.3	12.4	-	-	-
26/8/96	0.0	29.2	3.7	12.4	-	-	-
27/8/96	0.0	26.2	4.2	12.4	-	-	-
28/8/96	0.0	26.2	4.2	12.4	-	-	-
29/8/96	17.2	23.2	4.7	11.4	0.8	12.8	7.9
30/8/96	0.0	23.1	2.5	21.3	1.3	12.2	7.7
31/8/96	0.0	25.4	2.3	21.3	1.8	13.3	7.9
01/9/96	0.0	28.3	4.2	21.5	1.6	16.4	9.8
02/9/96	0.0	29.4	5.5	21.4	1.8	16.5	11.1

Table A1 : Continued

Table A1: Daily rainfall and irrigation (R + I), maximum (Tmax) and minimum temperature (Tmin), solar radiation (Rs), wind speed (U), and average dry (Td) and wet bulb temperature (Tw), during 1996/97 at Roodeplaat

Date	R + I (mm)	Tmax (°C)	Tmin (°C)	Rs (MJm^{-2})	U (ms^{-1})	Td (°C)	Tw (°C)
03/9/96	0.0	29.4	5.5	21.0	1.7	17.5	11.0
04/9/96	0.0	25.8	7.4	19.6	2.0	16.3	12.1
05/9/96	0.0	28.3	6.6	21.3	2.3	16.7	11.5
06/9/96	0.7	29.2	4.0	22.6	2.3	16.4	9.5
07/9/96	0.0	28.4	3.7	22.9	2.0	15.8	9.4
08/9/96	0.0	30.2	3.8	23.2	1.2	17.0	10.3
09/9/96	0.0	31.0	6.8	23.4	1.6	17.5	10.8
10/9/96	20.0	32.4	8.6	20.8	1.9	21.0	13.6
11/9/96	0.0	31.9	8.8	21.6	1.9	20.9	13.0
12/9/96	0.0	32.4	8.0	20.4	3.6	21.7	13.4
13/9/96	0.0	24.4	6.7	22.7	2.2	16.0	9.6
14/9/96	0.0	25.6	2.8	24.4	1.3	14.4	11.7
15/9/96	0.0	25.9	6.8	23.7	3.1	17.4	17.4
16/9/96	0.0	27.8	8.4	22.1	2.1	17.8	15.1
17/9/96	0.0	32.0	8.8	21.7	4.2	21.7	14.0
18/9/96	0.0	20.8	9.6	17.3	4.1	14.7	9.7
19/9/96	13.4	20.9	3.3	23.0	2.5	13.8	8.8
20/9/96	15.0	15.3	8.2	4.1	2.0	12.8	10.7
21/9/97	0.0	24.4	9.3	19.4	1.5	16.0	12.9
22/9/97	0.4	28.1	8.2	22.5	1.8	18.5	13.7
23/9/96	0.0	25.1	13.0	20.1	3.5	17.3	13.5
24/9/96	0.0	27.7	10.8	21.3	2.3	18.2	13.9
25/9/96	0.0	30.5	10.1	20.4	2.5	20.3	14.7
26/9/96	0.0	28.3	3.7	26.2	1.8	17.1	10.3
27/9/96	11.0	28.8	6.9	25.2	2.6	19.1	13.1

Table A1 : Continued

Table A1: Daily rainfall and irrigation (R + I), maximum (Tmax) and minimum temperature (Tmin), solar radiation (Rs), wind speed (U), and average dry (Td) and wet bulb temperature (Tw), during 1996/97 at Roodeplaat

Date	R + I (mm)	Tmax (°C)	Tmin (°C)	Rs (MJm^{-2})	U (ms^{-1})	Td (°C)	Tw (°C)
28/9/96	0.0	28.0	8.0	22.5	1.6	17.4	13.7
29/9/96	0.0	29.1	8.6	25.4	1.2	18.2	13.9
30/9/96	0.0	31.2	9.4	25.8	1.5	20.2	14.6
01/10/96	0.0	32.5	9.9	26.4	1.5	20.8	13.8
02/10/96	0.0	34.1	9.4	26.1	2.6	22.5	14.1
03/10/96	0.0	32.2	9.8	26.2	3.5	22.5	14.8
04/10/96	17.6	32.0	10.9	25.3	3.3	23.4	15.9
05/10/96	0.6	28.4	16.4	12.7	2.5	22.0	16.4
06/10/96	1.6	30.0	15.2	21.7	3.1	21.9	15.8
07/10/96	3.2	31.8	11.8	21.7	1.8	22.5	15.9
08/10/96	0.0	31.7	13.6	23.5	1.6	22.6	16.6
09/10/96	0.0	31.9	15.1	19.3	1.7	22.7	16.8
10/10/96	0.0	27.7	16,5	23.9	3.6	21.5	16.7
11/10/96	25.0	30.6	10.7	24.8	2.3	20.7	15.7
12/10/96	0.0	25.7	15.1	10.4	2.3	20.3	15.9
13/10/96	0.0	29.6	12.7	21.5	3.0	21.3	16.7
14/10/96	0.0	32.1	13.6	23.6	2.1	23.5	17.9
15/10/96	0.6	33.0	15.8	26.1	2.6	23.4	17.8
16/10/96	9.6	21.4	12.3	14.1	3.2	16.8	13.2
17/10/96	0.0	26.2	7.0	27.2	1.6	16.8	13.1
18/10/96	0.0	30.2	10.2	26.3	1.4	20.3	15.3
19/10/96	0.0	32.5	12.4	28.4	2.4	22.4	16.3
20/10/96	0.0	32.1	11.1	26.4	2.5	22.4	15.9
21/10/96	0.0	28.6	15.7	24.6	4.8	21.2	16.0

Table A1 : Continued

Table A1: Daily rainfall and irrigation (R + I), maximum (Tmax) and minimum temperature (Tmin), solar radiation (Rs), wind speed (U), and average dry (Td) and wet bulb temperature (Tw), during 1996/97 at Roodeplaat

Date	R + I (mm)	Tmax (°C)	Tmin (°C)	Rs (MJm^{-2})	U (ms^{-1})	Td (°C)	Tw (°C)
22/10/96	6.0	26.7	11.8	19.8	2.8	19.1	15.8
23/10/96	20.4	21.3	14.7	11.1	3.0	17.5	15.7
24/10/96	0.0	28.5	14.0	23.6	2.0	20.7	17.5
25/10/96	0.0	31.5	16.1	24.7	2.0	22.8	18.1
26/10/96	32.6	29.3	12.7	26.9	2.7	20.5	16.7
27/10/96	0.2	29.6	14.1	28.9	1.4	21.1	17.0
28/10/96	22.6	30.4	13.9	27.7	2.5	21.9	17.5
29/10/96	0.0	27.0	15.7	24.6	2.2	19.3	16.1
30/10/96	30.0	26.7	11.8	19.8	3.4	18.9	16.3
31/10/96	102.0	21.3	14.7	11.1	1.8	20.3	16.6
01/11/96	0.0	28.5	14.0	23.6	1.5	22.4	17.4
02/11/96	0.0	31.5	16.1	24.7	1.5	23.7	18.0
03/11/96	163.0	29.3	12.7	26.9	1.8	25.2	18.8
04/11/96	1.0	29.6	14.1	28.9	1.9	25.4	19.1
05/11/96	113.0	30.4	13.9	27.7	2.4	26.0	17.9
06/11/96	27.4	28.4	13.7	22.4	4.0	23.3	18.0
07/11/96	33.6	25.7	14.0	19.5	4.5	21.7	17.5
08/11/96	2.0	28.7	13.4	27.3	3.0	21.9	18.2
09/11/96	0.0	31.5	13.0	29.5	1.6	22.1	17.1
10/11/96	0.0	33.4	14.4	29.1	2.9	23.0	18.4
11/11/96	0.0	35.4	15.9	29.9	2.2	22.3	17.8
12/11/96	0.0	33.5	17.1	29.1	2.0	23.9	18.6
13/11/96	0.0	33.2	15.9	30.3	2.1	22.5	18.3
14/11/96	0.0	28.8	16.1	29.1	3.5	17.9	16.2

Table A1 : Continued

Table A1: Daily rainfall and irrigation (R + I), maximum (Tmax) and minimum temperature (Tmin), solar radiation (Rs), wind speed (U), and average dry (Td) and wet bulb temperature (Tw), during 1996/97 at Roodeplaat

Date	R + I (mm)	Tmax (°C)	Tmin (°C)	Rs (MJm^{-2})	U (ms^{-1})	Td (°C)	Tw (°C)
15/11/96	0.0	27.1	16.7	24.0	3.5	17.8	15.5
16/11/96	0.0	28.4	17.6	17.3	2.8	17.5	16.4
17/11/96	0.0	30.2	13.4	27.4	1.7	18.9	16.5
18/11/96	0.0	31.0	15.2	25.9	2.4	18.9	15.2
19/11/96	55.8	28.3	18.1	20.6	2.6	17.5	15.0
20/11/96	0.0	30.8	16.8	25.7	3.4	19.5	16.0
21/11/96	0.0	29.5	18.7	14.8	3.6	20.0	16.1
22/11/96	2.8	22.6	14.9	14.1	1.6	15.6	10.1
23/11/96	0.2	23.0	13.7	14.4	1.7	19.0	13.4
24/11/96	1.2	19.9	16.1	6.8	2.5	18.3	15.7
25/11/96	0.6	22.8	14.4	15.7	2.0	18.3	16.0
26/11/96	0.6	28.1	13.4	26.6	2.0	19.7	16.0
27/11/96	9.4	26.5	14.0	22.9	1.8	18.2	15.9
28/11/96	0.6	25.9	12.0	22.1	2.8	14.4	15.8
29/11/96	4.6	28.5	13.4	23.3	2.3	18.3	13.8
30/11/96	0.0	25.1	4.5	32.5	1.9	21.1	16.3
01/12/96	0.0	28.0	7.3	32.4	1.6	21.9	18.0
02/12/96	0.0	25.0	13.2	18.5	2.7	22.2	18.6
03/12/96	6.3	26.1	12.3	22.9	1.9	24.1	18.8
04/12/96	2.8	30.9	12.7	26.3	2.6	22.1	18.4
05/12/96	0.0	21.4	15.7	9.4	2.1	20.0	18.1
06/12/96	18.4	16.0	13.7	4.5	2.5	14.8	14.7
07/12/96	0.2	24.8	14.4	22.9	1.7	20.7	17.9
08/12/96	3.6	28.5	14.6	23.0	1.4	19.2	17.6

Table A1 : Continued

Table A1: Daily rainfall and irrigation (R + I), maximum (Tmax) and minimum temperature (Tmin), solar radiation (Rs), wind speed (U), and average dry (Td) and wet bulb temperature (Tw), during 1996/97 at Roodeplaat

Date	R + I (mm)	Tmax (°C)	Tmin (°C)	Rs (MJm^{-2})	U (ms^{-1})	Td (°C)	Tw (°C)
09/12/96	4.0	29.8	16.2	26.2	1.7	19.8	17.3
10/12/96	0.0	32.2	15.6	27.8	1.6	19.7	17.0
11/12/96	0.0	31.2	16.8	30.1	1.4	19.3	16.8
12/12/96	0.0	29.9	14.2	31.8	1.7	19.3	17.1
13/12/96	31.0	26.5	12.7	24.8	1.4	-	-
14/12/96	0.0	28.6	14.7	24.2	1.4	22.3	18.8
15/12/96	2.2	28.5	14.7	23.6	1.6	-	-
16/12/96	24.0	25.2	15.4	20.3	-	-	-
17/12/96	26.0	27.1	13.5	26.3	1.6	-	-
18/12/96	58.4	29.1	14.3	31.8	2.3	23.1	18.7
19/12/96	17.9	27.5	14.8	9.7	1.7	21.7	18.7
20/12/96	0.0	23.9	14.8	13.1	2.5	19.1	16.4
21/12/96	0.0	28.5	16.1	20.1	1.4	18.6	16.2
22/12/96	0.0	20.4	15.9	8.7	1.3	21.1	17.8
23/12/96	1.7	28.9	15.7	12.5	2.8	22.3	18.1
24/12/96	0.0	22.6	14.8	12.6	1.2	20.5	18.2
25/12/96	6.4	30.6	15.6	31.0	0.8	20.9	18.5
26/12/96	5.2	28.6	16.4	25.6	1.5	24.0	19.5
27/12/96	6.4	25.0	12.6	19.4	1.5	24.5	19.8
28/12/96	0.0	25.8	14.9	20.6	1.4	22.8	18.8
29/12/96	0.0	28.6	14.9	31.0	1.8	22.5	18.4
30/12/96	12.6	29.6	16.6	29.4	3.0	22.9	18.5
31/12/96	0.0	26.9	15.9	17.8	2.5	21.9	18.7

Table A1 : Continued

Table A1: Daily rainfall and irrigation (R + I), maximum (Tmax) and minimum temperature (Tmin), solar radiation (Rs), wind speed (U), and average dry (Td) and wet bulb temperature (Tw), during 1996/97 at Roodeplaat

Date	R + I (mm)	Tmax (°C)	Tmin (°C)	Rs (MJm^{-2})	U (ms^{-1})	Td (°C)	Tw (°C)
25/01/97	20.6	28.4	18.3	18.1	1.5	23.8	19.7
26/01/97	0.0	26.0	17.6	15.0	1.3	23.1	19.5
27/01/97	0.0	30.2	15.8	26.8	1.2	23.0	19.1
28/01/97	0.0	30.6	16.7	26.1	1.1	22.9	19.8
29/01/97	0.2	29.1	20.0	24.2	2.0	23.8	19.2
30/01/97	0.0	28.9	17.5	19.4	2.0	22.1	18.1
31/01/97	0.0	27.7	18.6	17.1	1.6	23.1	19.0
01/02/97	0.0	31.8	16.6	30.3	1.4	23.5	19.1
02/02/97	0.0	29.8	17.0	19.8	1.7	23.9	18.1
03/02/97	2.8	31.6	14.9	28.7	1.6	23.7	19.5
04/02/97	0.0	28.9	18.6	16.0	1.9	24.7	20.3
05/02/97	0.0	29.5	18.1	22.2	1.3	23.4	18.7
06/02/97	0.0	31.2	15.2	28.3	1.1	23.7	18.7
07/02/97	0.0	32.8	13.6	27.5	1.3	23.8	19.1
08/02/97	0.0	32.9	17.3	28.9	1.9	23.8	20.0
09/02/97	0.0	33.4	13.1	31.4	2.1	22.4	18.8
10/02/97	0.0	32.1	15.5	29.0	2.4	21.8	18.5
11/02/97	0.0	31.1	18.3	22.9	2.5	22.0	18.6
12/02/97	0.0	33.0	15.7	27.5	1.5	22.2	19.8
13/02/97	0.0	33.0	14.6	26.1	1.7	22.2	19.8
14/02/97	0.0	32.6	14.8	24.0	2.6	-	-
15/02/97	0.2	32.4	17.0	26.3	2.0	22.9	19.8
16/02/97	0.0	28.6	18.3	21.3	1.3	21.0	17.9
17/02/97	0.0	30.1	17.4	25.1	1.3	21.6	18.1

Table A1 : Continued

Table A1: Daily rainfall and irrigation (R + I), maximum (Tmax) and minimum temperature (Tmin), solar radiation (Rs), wind speed (U), and average dry (Td) and wet bulb temperature (Tw), during 1996/97 at Roodeplaat

Date	R + I (mm)	Tmax (°C)	Tmin (°C)	Rs (MJm^{-2})	U (ms^{-1})	Td (°C)	Tw (°C)
18/02/97	0.2	30.1	14.9	24.2	1.3	22.8	19.1
19/02/97	7.6	30.1	16.7	17.4	1.6	23.4	19.0
20/02/97	1.5	28.7	18.0	22.0	1.2	24.7	19.2
21/02/97	0.0	27.8	17.5	21.2	1.5	24.2	19.2
22/02/97	1.4	28.4	17.4	18.6	1.1	24.4	19.6
23/02/97	0.0	28.5	16.5	20.5	2.2	24.5	19.4
24/02/97	0.0	31.6	14.0	25.4	2.4	22.5	18.0
25/02/07	3.6	32.5	16.0	22.3	2.2	21.2	17.9
26/02/97	0.0	31.3	16.3	24.9	1.1	20.9	17.6
27/02/97	0.0	32.4	17.0	22.6	2.3	22.6	19.8
28/02/97	0.0	32.6	15.7	27.4	2.5	20.1	17.4
01/03/97	0.0	33.7	16.1	24.6	1.3	19.7	17.7
02/03/97	4.8	34.5	17.2	27.3	1.1	21.2	18.5
03/03/97	3.2	32.7	14.3	27.1	1.8	22.7	19.0
04/03/97	0.0	28.1	16.4	21.7	1.8	23.9	19.3

Appendix E : Growth analyses data

Table A2 : Fractional interception of photosynthetically active radiation (FI), leaf area index of green (LAI) and senesced leaves (LAIs), leaf dry matter of green (LDM) and senesced leaves (LDMs), harvestable dry matter (HDM) and stem dry matter (SDM) during the 1996/97 season at Roodeplaat

CROP	DATE	FI	LAI	LAIs	LDM ($Mgha^{-1}$)	LDMs ($Mgha^{-1}$)	HDM ($Mgha^{-1}$)	SDM ($Mgha^{-1}$)
Onion	7/5/96	0	0.018	0	0.001	0	0.0005	0
(cv Mercedes)	4/6/96	0.009	0.036	0	0.0036	0	0.001	0
	21/6/96	0.04	0.072	0	0.0085	0	0.003	0
	28/6/96	0.15	-	0	-	0	-	0
	5/7/96	0.07	0.112	0	0.02	0	0.005	0
	12/7/96	0.21	-	0	-	0	-	0
	19/7/96	0.28	0.26	0	0.05	0	0.017	0.009
	2/8/96	0.37	0.85	0	0.073	0	0.026	0.011
	8/8/96	0.57	-	0	-	0	-	-
	16/8/96	0.73	0.905	0	0.14	0.0067	0.05	0.024
	6/9/96	-	2.18	0	0.22	-	0.17	0.079
	12/9/96	0.76	-	0	-	-	-	-
	20/9/96	-	1.81	0	0.26	0.019	0.308	0.065
	27/9/96	0.73	-	0	-	-	-	-
	11/10/96	0.44	0.43	0.004	0.071	0.039	4.34	0.034
Cabbage								
(cv. Grand	07/05/96	0	0.0085	0	0.0057	0	0	0.0002
Slam)	04/06/96	0.21	0.406	0.0009	0.031	0.00019	0	0.0029
	21/06/96	0.64	1.04	5	0.111	0.00063	0.004	0.0098
	28/06/96	0.82	-	-	-	-	-	-
	05/07/96	0.68	1.75	-	0.259	-	0.021	0.005
	12/07/96	0.69	-	-	-	-	-	-
	19/07/96	0.84	1.96	-	0.32	0.001	0.02	0.048
	02/08/96	0.94	2.14	-	0.39	0.009	0.05	0.069
	08/08/96	0.84	-	0.072	-	-	-	-
	16/08/96	0.91	2.22	-	0.47	0.021	0.367	0.85
	22/08/96	0.86	-	-	-	-	-	-
	06/09/96	-	2.44	-	0.48	0.019	0.91	0.15
	12/09/96	0.93	-	0.08	-	-	-	-
	20/09/96	-	2.66	-	0.38	-	0.92	0.11
	27/09/96	0.92	-	-	-	-	-	-
	11/10/96	0.98	2.43	- 0.16	0.51	0.025	4.69	0.856

CROP	DATE	FI	LAI	LAIs	LDM ($Mgha^{-1}$)	LDMs ($Mgha^{-1}$)	HDM ($Mgha^{-1}$)	SDM ($Mgha^{-1}$)
Lettuce	04/6/96	0.01	0.019	0.012	0.0008	0.0001	0	0
(cv. Great	21/6/96	0.02	0.10	-	0.0049	-	0	0
Lakes)	28/6/96	0.01	-	-	-	-	0	0
	05/7/96	0.26	-	-	0.006	-	0.0064	0
	12/7/96	0.03	-	-	-	-	-	0
	19/7/96	0.04	0.423	-	-	-	0.032	0.005
	02/8/96	0.03	0.615	-	-	0.003	0.041	0.008
	08/8/96	0.79	-	0.022	-	-	-	-
	16/8/96	0.69	0.88	-	0.04	0.006	0.104	0.013
	06/9/96	-	0.75	0.11	0.05	0.015	0.199	0.02
SPINACH	04/06/96	0.03	0.07	0	0.004	-	-	-
(cv. Fort Hook	21/06/96	0.08	0.07	0	0.05	-	-	-
Giant)	28/06096	0.07	-	0	-	-	-	-
	05/07/96	0.62	1.91	0	-	-	0.18	-
	12/07/96	0.38	-	0	-	-	-	-
	19/07/96	0.44	1.96	0.04	-	0.005	0.23	0.024
	02/08/96	0.74	2.6	0.056	-	0.01	0.27	0.024
	08/08/96	0.48	-	-	-	-	-	-
	16/08/96	0.96	4.62	-	-	0.02	0.4	0.17
	22/08/96	0.76	-	-	-	-	-	-
	06/09/96	-	10.5	0.87	-	0.13	0.9	0.48
	12/09/96	0.99	-	-	-	-	-	-
	20/09/96	-	8.71	1.01	-	0.16	0.74	0.68
	27/09/96	0.99	-	-	-	-	-	-
	11/10/96	0.99	11.1	2.12	-	0.37	1.44	1.03
Beetroot	04/6/96	0.06	0.046	0	0.0045	0	0	0
(cv. Kuroda)	21/6/96	0.34	0.28	0	0.024	0	0.0025	0
	28/6/96	0.25	-	0	-	0	-	0
	05/7/96	0.36	0.64	0	0.075	0	0.008	0
	12/7/96	0.65	-	0	-	0	-	0
	19/7/96	0.40	0.79	0.068	0.09	0.011	0.032	0.012
	02/8/96	0.98	1.58	0.04	0.11	0.007	0.072	0.043
	08/8/96	0.95	-	-	-	-	-	-
	16/8/96	0.97	2.93	-	0.23	0.029	0.128	0.086
	06/9/96	0.70	-	0.54	0.24	0.09	0.57	0.14
	20/9/96	0.89	5.66	0.87	0.46	0.25	1.2	0.28
	11/10/96	0.97	2.99	0.59	0.3	0.13	0.8	0.21

CARROT	04/06/96	0.05	0.044	0	0	0	0	0
(cv. KURODA)	21/06/96	0.09	0.27	0	0.012	0	0.0018	0.0053
	28/06/96	0.22	0.34	0	0.03	0	0.0096	0.01
	05/06/96	0.22	-	0	-	0	-	-
	12/07/96	0.11	0.64	0	0.052	0	0.04	0.017
	19/07/96	0.2	1.61	0	0.091	0	0.08	0.034
	02/08/96	0.64	-	0	-	0	-	-
	08/08/96	0.95	1.33	0	0.078	0	0.091	0.31
	16/08/96	0.62	-	0	-	0	-	-
	22/08/96	-	1.68	0.05	0.086	0.003	-	0.047
	06/09/96	0.99	-	-	-	-	-	-
	12/09/96	-	1.89	0.21	0.16	0.025	0.41	0.134
	20/09/96	0.99	-	-	-	-	-	-
	27/09/96	0.97	1.83	0.28	0.18	0.035	0.76	0.1
	11/10/96							
Bush beans	17/12/96	0.3	0.17	0	0.12	0	0	0
(cv. Bronco)	27/12/96	0.79	0.46	0.02	0.28	0.02	0	0.19
	01/01/97	0.74	1.24	0.04	1.91	0.06	0.82	0.93
	20/01/97	0.66	1.79	0.02	1.91	0.05	1.37	0.67
	27/01/97	0.65	1.83	0.29	1.25	0.48	1.73	1.27
Bush beans	17/12/96	0.44	0.68	0.02	0.44	0.03	0.02	0.27
(cv. Provider)	27/12/96	0.91	1.07	0.02	0.66	0.01	1.55	0.37
	07/01/97	0.7	1.48	0.02	0.67	0.03	1.17	0.70
	20/01/97	0.53	1.09	0.05	0.79	0.09	2.1	0.83
Chilli pepper	27/12/96	0.02	-	-	-	-	-	-
	07/01/97	0.04	0.02	0	0.04	0	-	0.02
	20/01/97	0.14	0.06	0	0.14	0	-	0.05
	27/01/97	0.1	0.34	0	0.2	0	-	0.13
	05/02/97	0.4	0.66	0	0.34	0	-	0.41
	12/02/97	0.33	0.52	0	0.41	0	-	0.51
	20/02/97	0.25	-	0	-	0	-	-
	04/03/97	0.25	0.52	0	0.6	0	-	0.67

CROP	DATE	FI	LAI	LAIs	LDM ($Mgha^{-1}$)	LDMs ($Mgha^{-1}$)	HDM ($Mgha^{-1}$)	SDM ($Mgha^{-1}$)
Green pepper	27/12/96	0	-	-	-	-	-	-
	07/01/97	0	0.02	0	0.03	0	-	0.02
	20/01/97	0.10	0.09	0	0.11	0	-	0.09
	27/01/97	0.10	0.40	0	0.19	0	-	0.12
	05/01/97	0.21	0.42	0	0.34	0	-	0.27
	12/01/97	0.29	0.51	0	0.35	0	-	0.32
	20/01/97	0.37	0.41	0	0.31	0	-	0.36
	04/03/97	0.35	0.33	0.01	0.34	0	-	0.60
Eggplant	27/12/96	0.02	-	-	-	-	-	-
	07/01/97	0.1	0.14	0	0.05	0	-	0.02
	20/01/97	0.2	0.09	0	0.12	0	-	0.05
	27/01/97	0.33	0.44	0.02	0.27	0.03	-	0.16
	05/02/97	0.46	0.46	0.01	0.27	0.02	-	0.28
	12/02/97	0.5	0.45	0.02	0.42	0.03	-	0.41
	20/02/97	0.46	0.63	0.02	0.48	0.03	-	0.49
	04/03/97	0.45	0.45	0.02	0.38	0.03	-	0.53
Marrow (cv. Long White Bush)	27/12/96	0.36	0.94	0.01	0.71	0	-	0.32
	07/01/97	0.85	2.28	0.04	0.71	0.27	-	0.55
	20/01/97	0.73	0.74	0.24	0.65	0.59	-	1.03
	27/01/97	0.74	1.05	0.77	0.8	0.98	-	1.47
	05/02/97	0.64	0.64	0.51	0.49	1.08	-	1.01
Marrow (cv. President)	17/12/96	0.23	0.24	0.01	0.22	0.02	-	0.11
	27/12/96	0.49	0.8	0.02	0.66	0.05	-	0.33
	07/02/97	0.63	1.8	0.24	1.33	0.44	-	1.01
	20/01/97	0.56	1.51	0.34	1.48	0.92	-	1.42
	27/01/97	0.7	0.53	0.62	0.49	1.22	-	1.37
	05/02/97	0.23	0.72	0.35	0.61	0.84	-	0.82
Pumpkin (cv. Minette)	27/12/96	0.6	0.6	0.03	0.35	0.06	-	0.16
	07/01/97	0.85	2.33	0.15	1.53	0.33	-	1.12
	20/01/97	0.84	2.79	0.36	1.74	0.44	-	1.80
	27/12/97	0.62	1.31	0.26	1.04	0.72	-	1.83
	05/12/97	0.44	0.48	0.26	0.26	0.35	-	0.5

CROP	DATE	FI	LAI	LAIs	LDM ($Mgha^{-1}$)	LDMs ($Mgha^{-1}$)	HDM ($Mgha^{-1}$)	SDM ($Mgha^{-1}$)
Pumpkin (cv. Miniboer)	27/12/96	0.47	0.74	0.02	0.58	0.04	-	0.19
	07/01/97	0.94	2.52	0.20	0.77	0.38	-	0.71
	20/01/97	0.73	0.67	0.15	0.50	0.41	-	0.64
	27/01/97	0.74	0.77	0.77	0.58	0.99	-	1.12
	05/02/97	0.91	0.77	0.39	0.50	0.42	-	0.64
Runner beans	17/12/96	0.35	0.33	0	0.20	0	0	0.08
	27/12/96	0.69	0.83	0.05	0.38	0.01	0	0.27
	07/01/97	0.82	2.0	0.07	1.32	0.11	0	0.75
	20/01/97	0.80	4.91	0.14	1.90	0.11	0.08	1.37
	27/01/97	0.92	5.0	0.08	1.89	0.14	0.98	1.85
	05/02/97	0.90	3.52	0.22	1.22	0.20	2.01	1.95
	12/02/97	0.62	1.18	0.13	0.45	0.14	2.20	1.09
Squash (cv. Table Queen)	27/12/96	0.39	0.12	0	0.09	0	-	0.04
	07/01/97	0.49	0.44	0.01	0.28	0.01	-	0.15
	20/01/97	0.50	0.26	0	0.86	0.05	-	0.74
	27/01/97	0.51	0.56	0.41	0.80	0.80	-	1.18
	05/02/97	0.52	1.06	0.17	0.22	0.30	-	0.54
Squash (cv. Waltham)	27/12/96	0.30	0.09	0	0.07	0	-	0.03
	07/01/97	0.72	1.12	0.04	0.37	0.24	-	0.24
	20/01/97	0.3	0.53	0.02	0.64	0.05	-	0.51
	27/01/97	0.67	0.61	0.12	0.68	0.22	-	0.59
	05/02/97	0.72	0.80	0.08	0.72	0.19	-	0.78
	12/02/97	0.5	0.38	0.02	0.49	0.11	-	0.78
Sweet-corn (cv. Cabaret)	27/12/96	0.01	0.05	0	0.02	0	0	0.01
	07.01/97	0.39	0.64	0	0.47	0.01	0	0.88
	20/01/97	0.82	3.83	0.01	1.80	0.06	0	3.72
	27/01/97	0.84	4.74	0.07	2.57	0.06	0.1	4.24
	05/02/97	0.90	2.32	0.14	3.21	0.22	1.61	6.89
	12/02/97	0.92	1.79	0.34	2.11	0.49	2.44	7.9
Sweet-corn (cv. Dorado)	27/12/96	0.11	0.22	0	0.07	0	0	0.03
	07/01/97	0.45	1.4	0.06	0.94	0	0	0.97
	20/01/97	0.63	5.44	0	2.40	0	0	2.93
	27/01/97	0.70	4.71	0.33	2.22	0.05	0.88	3.27
	05/02/97	0.69	1.61	0.16	2.57	0.28	1.69	3.77
	12/02/97	0.54	1.42	0.51	1.53	0.86	2.70	3.50

CROP	DATE	FI	LAI	LAIs	LDM ($Mgha^{-1}$)	LDMs ($Mgha^{-1}$)	HDM ($Mgha^{-1}$)	SDM ($Mgha^{-1}$)
Sweet-corn	17/12/96	0.35	1.33	0	0.9	0	0	1.19
(cv. Jubilee)	27/12/96	0.58	1.11	0.03	0.82	0	0	0.57
	07/01/97	0.87	3.54	0.09	2.52	0.07	4.59	3.13
	20/01/97	0.89	-	0	-	0	-	3.88
	27/01/97	0.86	5.01	0.05	3.08	0.07	-	4.76
	05/02/97	0.78	1.57	0.76	2.24	1.34	-	5.81
Sweet-corn	17/12/96	0.12	0.64	0	0.30	0	0	0.25
(cv. Paradise)	27/12/97	0.49	1.54	0.01	0.96	0.01	0	0.58
	07/01/97	0.83	2.29	0.03	1.45	0	1.97	2.89
	20/01/97	0.85	2.39	0	1.51	0	-	3.48
	27/01/97	0.75	3.69	0.17	1.87	0.13	4.73	2.29
	05/02/97	0.56	1.44	0.14	1.67	0.29	5.45	4.00
Tomato	27/12/96	0.04	0.16	0	0.17	0	-	0.18
(cv. HTX14)	07/01/97	0.19	0.40	0	0.75	0	-	0.40
	20/01/97	0.48	1.95	0.04	2.12	0.12	-	1.19
	27/01/97	0.72	2.5	0.28	1.73	0.57	-	1.44
	05/02/97	0.70	1.45	0.23	1.38	0.48	-	1.37
	12/02/97	0.57	0.81	0.24	0.88	0.73	-	2.07
	20/02/97	0.43	0.44	0.12	0.69	0.31	-	1.46
Tomato	27/12/96	0.04	0.22	0	0.20	0	-	0.17
(cv. P747)	07/01/97	0.39	0.30	0	0.66	0	-	0.76
	20/01/97	0.53	1.63	0.13	1.16	0.25	-	1.35
	27/01/97	0.56	3.06	0.23	1.46	0.42	-	1.58
	05/02/97	0.83	0.63	0.39	0.43	0.70	-	1.39
	12/02/97	0.63	0.69	0.29	0.74	0.77	-	1.55
	20/02/97	0.81	0.34	0.32	0.35	0.76	-	1.68
Tomato	27/12/96	0.07	0.24	0	0.23	0	-	0.25
(cv. Zeal)	07/01/97	0.19	0.80	0	0.60	0	-	0.95
	20/01/97	0.36	1.35	0.1	0.85	0	-	1.56
	27/01/97	0.53	3.06	0.11	0.75	0.26	-	1.12
	05/02/97	0.57	0.27	0.16	0.24	0.39	-	1.02
	12/02/97	0.49	0.25	0.20	0.32	0.63	-	1.58
	20/02/97	0.41	0.14	0.1	0.16	0.28	-	0.87