

Trial report

Variety testing of

***Poa pratensis, Festuca rubra,
Lolium perenne, Dactylis glomerata and
Festuca arundinacea***

First year harvest

AGRONOVA



LC Field Trials

2006

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1. Introduction

This report contains the results of five variety testing trials in *Poa pratensis*, *Festuca rubra*, *Dactylis glomerata*, *Lolium perenne* and *Festuca arundinacea*. The location of the trials was near Koge, Denmark.

Trial number by Agronova	Species
2005.541.00	<i>Poa pratensis</i>
2005.542.00	<i>Festuca rubra</i>
2005.543.00	<i>Dactylis glomerata</i>
2005.544.00	<i>Festuca arundinacea</i>
2005.545.00	<i>Lolium perenne</i>

The trials have been carried out by the GEP-unit, Agronova in 2006 for Barenbrug, Holland.

22 November 2006

Morten Lind
Agronova
LC Field Trials

2. Trial 2005.541.00 *Poa pratensis* (Engrapgræs)

2.1 Varieties

No.	Name
1	Baron
2	Bartender

2.2 Plot map

Replicate	1	2	3	4	5
	101 1	201 2	301 1	401 2	501 1
	102 2	202 1	302 2	402 1	502 2

2.3 Site description

Basic information for trial 2005.541.00 *Poa pratensis* (Engrapgræs)

Trial host	Bakkegaarden LandboCentrum		
Soil analysis	Coarsesand: 26,5 % Silt: 14,0 % Humus: 1,5 % Finesand: 49,6 % Clay: 12,5 %	Rt: 6,7 Pt: 2,9 Kt: 11,9 Mgt: 6,4	
Previous crop	Spring Barley		
Drilling date	06-04-2005	Seed rate	5 kg/ha
Fertilizer date type rate	05-10-2005 NS 27-4 60 N		21-03-2006 NPK 22-3-10 70N
Herbicides	17-01-2006 1.75 Reglone 04-05-2006 0.1 Primus + 0.05 Diflufenican 24-05-2006 1.0 MCPA		

2.4 Results

Two weeks before estimated harvest it was decided that lodging in all plots was too small why swarfing was needed and preformed 10st of July. The trial was harvested at 16th of July under fine conditions.

In the following table results from harvest and seed analysis is given.

Study Director: Morten Lind Location: Bakkegaarden							
<i>Poa pratensis (Engrapgræs)</i>							
Crop Code	POAPR	POAPR	POAPR	POAPR			
BBCH Scale	BGRM	BGRM	BGRM	BGRM			
Crop Name	Kentucky bluegrass	Kentucky bluegrass	Kentucky bluegrass	Kentucky bluegrass			
Part Rated							
Rating Date	16-7-2006	16-7-2006	16-7-2006	16-7-2006			
Rating Data Type	YIELD	MOIST CONTENT	WEIGHT LOSS	CORR. YIELD			
Rating Unit	KG	%	%	KG/HA			
Sample Size	1	1	1	1			
Sample Size Unit	plot	plot	plot	plot			
ARM Action Codes	+	+	+	T2			
Number of Decimals	2	1	2	1			
No.	Name	Plot					
1	Baron	101	3,74	5,3	41,95	984,7	
		202	3,88				1021,5
		301	3,70				974,1
		402	3,62				953,1
		501	3,69				971,5
	Mean =		3,73	5,3	41,95	981,0	
2	Bartender	102	3,38	5,5	43,02	871,6	
		201	3,85				992,9
		302	3,84				990,3
		401	3,48				897,4
		502	3,75				967,1
	Mean =		3,66	5,5	43,02	943,9	

ARM Action Codes

T2 = [C4]-([C4]*@MVAVGREP([C3])/100)

2.4.1 AOV Means Table

In the following table results from analysis of variance is given. Analysis was done by Student-Newman-Keuls test where different letters indicate statistical significant difference at 95% level.

Study Director: Morten Lind Location: Bakkegården				
<i>Poa pratensis</i> (Engrapgræs)				
Crop Code	POAPR	POAPR	POAPR	POAPR
BBCH Scale	BGRM	BGRM	BGRM	BGRM
Crop Name	Kentucky bluegrass	Kentucky bluegrass	Kentucky bluegrass	Kentucky bluegrass
Rating Date	16-7-2006	16-7-2006	16-7-2006	16-7-2006
Rating Data Type	YIELD	MOIST CONTENT	WEIGHT LOSS	CORR. YIELD
Rating Unit	KG	%	%	KG/HA
Sample Size	1	1	1	1
Sample Size Unit	plot	plot	plot	plot
ARM Action Codes	+	+	+	T2
Number of Decimals	2	1	2	1
No. Name				
1 Baron	3,73 a	5,3	41,95	981,0 a
2 Bartender	3,66 a	5,5	43,02	943,9 a
LSD (P=.05)	0,242	.	.	62,32
Standard Deviation	0,138	.	.	35,49
CV	3,73	.	.	3,69
Bartlett's X2	2,237	.	.	2,133
P(Bartlett's X2)	0,135	.	.	0,144
Replicate F	1,963			1,984
Replicate Prob(F)	0,2648			0,2617
Treatment F	0,574			2,737
Treatment Prob(F)	0,4908			0,1734

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

ARM Action Codes

T2 = [C4]-([C4]*@MVAVGREP([C3])/100)

3. Trial 2005.542.00 *Festuca rubra* (Rødsvingel)

3.1 Varieties

No.	Name
1	Bargena
2	Barbirdie
3	Barcrown
4	Bardiva
5	Bargaret
6	Baroyal
7	Barpearl
8	Barswing
9	Soberana

3.2 Plot map

Replicate	1	2	3	4	5
101	2	201 6	301 7	401 8	501 3
102	7	202 4	302 1	402 5	502 6
103	1	203 3	303 4	403 7	503 2
104	9	204 5	304 6	404 4	504 5
105	8	205 7	305 2	405 9	505 8
106	6	206 1	306 3	406 6	506 7
107	3	207 2	307 5	407 1	507 4
108	4	208 8	308 9	408 2	508 9
109	5	209 9	309 8	409 3	509 1

3.3 Site description

Basic information for trial 2005.542.00 *Festuca rubra* (Rødsvingel)

Trial host	Bakkegaarden LandboCentrum		
Soil analysis	Coarsesand: 26,5 %	Rt: 6,7	
	Silt: 14,0 %	Pt: 2,9	
	Humus: 1,5 %	Kt: 11,9	
	Finesand: 49,6 %	Mgt: 6,4	
	Clay: 12,5 %		
Previous crop	Spring Barley		
Drilling date	06-04-2005	Seed rate	5 kg/ha
Fertilizer	date	05-10-2005	21-03-2006
	type	NS 27-4	NPK 22-3-10
	rate	60 N	45 N
Herbicides	04-05-2006	0.1 Primus + 0.05 Diflufenican	
	24-05-2006	1.0 MCPA	

3.4 Results

Harvest conditions were fine. Lodging was suitable for red fescue harvest. The trial was harvested at 16th of July.

In the following table results from harvest and seed analysis is given.

Location: Bakkegården Study Director: Morten Lind					
<i>Festuca rubra</i> (Rødsvingel)					
Crop Code	FESRU	FESRU	FESRU	FESRU	
BBCH Scale	BGRM	BGRM	BGRM	BGRM	
Crop Name	Red fescue	Red fescue	Red fescue	Red fescue	
Crop Variety					
Description					
Part Rated					
Rating Date	16-7-2006	16-7-2006	16-7-2006	16-7-2006	
Rating Data Type	YIELD	MOIST CONTENT	WEIGHT LOSS	CORR. YIELD	
Rating Unit	KG	%	%	KG/HA	
Sample Size	1	1	1	1	
Sample Size Unit	plot	plot	plot	plot	
ARM Action Codes	+	+	+	T3	
Number of Decimals	2	1	2	1	
No. Name					
1 Bargena	103	5,95	9,5	41,39	1511,5
	206	6,20			1575,0
	302	6,08			1544,5
	407	5,87			1491,2
	509	5,80			1473,4
	Mean =	5,98	9,5	41,39	1519,1
2 Barbirdie	101	4,47	8,2	40,97	1160,1
	207	4,69			1217,2
	305	5,01			1300,2
	408	3,80			986,2
	503	4,38			1136,7
	Mean =	4,47	8,2	40,97	1160,1
3 Barcrown	107	5,59	6,3	47,32	1321,5
	203	5,09			1203,3
	306	5,31			1255,3
	409	4,71			1113,5
	501	4,60			1087,5
	Mean =	5,06	6,3	47,32	1196,2
4 Bardiva	108	4,50	8,1	38,17	1224,6
	202	4,60			1251,8
	303	4,04			1099,4
	404	3,96			1077,7
	507	3,99			1085,8
	Mean =	4,22	8,1	38,17	1147,9
5 Bargaret	109	5,28	12,1	43,70	1251,4
	204	5,12			1213,5
	307	5,14			1218,2
	402	4,88			1156,6
	504	4,56			1080,8
	Mean =	5,00	12,1	43,70	1184,1

Crop Code		FESRU BGRM	FESRU BGRM	FESRU BGRM	FESRU BGRM
BBCH Scale		Red fescue	Red fescue	Red fescue	Red fescue
Crop Name					
Crop Variety					
Description					
Part Rated					
Rating Date		16-7-2006	16-7-2006	16-7-2006	16-7-2006
Rating Data Type		YIELD	MOIST CONTENT	WEIGHT LOSS	CORR. YIELD
Rating Unit		KG	%	%	KG/HA
Sample Size		1	1	1	1
Sample Size Unit		plot	plot	plot	plot
ARM Action Codes		+	+	+	T3
Number of Decimals		2	1	2	1
No. Name					
6 Baroyal	106	4,09	12,0	35,08	1119,1
	201	3,88			1061,6
	304	3,81			1042,5
	406	3,58			979,5
	502	3,32			908,4
	Mean =	3,74	12,0	35,08	1022,2
7 Barpearl	102	5,47	10,1	36,21	1502,3
	205	5,36			1472,1
	301	5,12			1406,2
	403	4,93			1354,0
	506	5,20			1428,2
	Mean =	5,22	10,1	36,21	1432,6
8 Barswing	105	4,41	17,9	33,37	1155,4
	208	4,03			1055,8
	309	3,83			1003,4
	401	3,63			951,0
	505	3,62			948,4
	Mean =	3,90	17,9	33,37	1022,8
9 Soberana	104	3,86	16,1	38,10	960,1
	209	3,45			858,1
	308	3,29			818,3
	405	3,48			865,6
	508	3,21			798,4
	Mean =	3,46	16,1	38,10	860,1

ARM Action Codes

T3 = [C4]-([C4]*@MVAVGREP([C3])/100)

3.4.1 AOV Means Table

In the following table results from analysis of variance is given. Analysis was done by Student-Newman-Keuls test where different letters indicate statistical significant difference at 95% level.

Location: Bakkegården Study Director: Morten Lind					
<i>Festuca rubra</i> (Rødsvingel)					
Crop Code	FESRU	FESRU	FESRU	FESRU	
BBCH Scale	BGRM	BGRM	BGRM	BGRM	
Crop Name	Red fescue	Red fescue	Red fescue	Red fescue	
Crop Variety					
Description					
Part Rated					
Rating Date	16-7-2006	16-7-2006	16-7-2006	16-7-2006	
Rating Data Type	YIELD	MOIST CONTENT	WEIGHT LOSS	CORR. YIELD	
Rating Unit	KG	%	%	KG/HA	
Sample Size	1	1	1	1	
Sample Size Unit	plot	plot	plot	plot	
ARM Action Codes	+	+	+	T3	
Number of Decimals	2	1	2	1	
No.	Name				
1	Bargena	5,98 a	9,5	41,39	1519,1 a
2	Barbirdie	4,47 c	8,2	40,97	1160,1 c
3	Barcrown	5,06 b	6,3	47,32	1196,2 c
4	Bardiva	4,22 c	8,1	38,17	1147,9 c
5	Bargaret	5,00 b	12,1	43,70	1184,1 c
6	Baroyal	3,74 d	12,0	35,08	1022,2 d
7	Barpearl	5,22 b	10,1	36,21	1432,6 b
8	Barswing	3,90 d	17,9	33,37	1022,8 d
9	Soberana	3,46 e	16,1	38,10	860,1 e
LSD (P=.05)		0,264	.	.	67,58
Standard Deviation		0,205	.	.	52,33
CV		4,49	.	.	4,47
Bartlett's X2		5,407	.	.	5,162
P(Bartlett's X2)		0,713	.	.	0,74
Replicate F		12,824			12,893
Replicate Prob(F)		0,0001			0,0001
Treatment F		79,690			75,735
Treatment Prob(F)		0,0001			0,0001

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

ARM Action Codes

T3 = [C4]-([C4]*@MVAVGREP([C3])/100)

4. Trial 2005.543.00 *Dactylis glomerata* (Hundegræs)

4.1 Varieties

No.	Name
1	Barula
2	Barexcel
3	Barmoral

4.2 Plot map

Replicate	1	2	3	4	5				
101	2	201	3	301	1	401	2	501	1
102	3	202	1	302	2	402	3	502	2
103	1	203	2	303	3	403	1	503	3

4.3 Site description

Basic information for trial 2005.543.00 *Dactylis glomerata* (Hundegræs)

Trial host	Bakkegaarden LandboCentrum		
Soil analysis	Coarsesand: 26,5 %	Rt: 6,7	
	Silt: 14,0 %	Pt: 2,9	
	Humus: 1,5 %	Kt: 11,9	
	Finesand: 49,6 %	Mgt: 6,4	
	Clay: 12,5 %		
Previous crop	Spring Barley		
Drilling date	06-04-2005	Seed rate	6 kg/ha
Fertilizer	date	05-10-2005	21-03-2006
	type	NS 27-4	NPK 22-3-10
	rate	60 N	120N
Herbicides, Fungicides and Growthregulators	04-05-2006	0.1 Primus + 0.05 Diflufenican	
	24-05-2006	1.0 MCPA + 0,25 Zenit+ 0,15 Amistar + 0,4 Moddus + 1,5 CCC	

4.4 Results

To ensure full maturity at harvest all plots were swathed at the 10th of July. The trial was harvested at 25th of July.

In the following table results from harvest and seed analysis is given.

Location: Bakkegården						
Study Director: Morten Lind						
<i>Dactylis glomerata (Hundegræs)</i>						
Crop Code	DACGL	DACGL	DACGL	DACGL	DACGL	
BBCH Scale	BGRM	BGRM	BGRM	BGRM	BGRM	
Crop Name	Orchard grass	Orchard grass	Orchard grass	Orchard grass	Orchard grass	
Rating Date	25-7-2006	25-7-2006	25-7-2006	25-7-2006	25-7-2006	
Rating Data Type	YIELD	MOIST CONTENT	WEIGHT LOSS	CORR. YIELD		
Rating Unit	KG	%	%	KG/HA		
Sample Size	1	1	1	1	1	
Sample Size Unit	plot	plot	plot	plot	plot	
ARM Action Codes	+	+	+	+	T2	
Number of Decimals	2	2	2	2	1	
No.	Name	Plot				
1	Barula	103	4,29	7,30	12,91	1658,7
		202	4,43			1712,9
		301	4,55			1759,3
		403	4,59			1774,7
		501	4,79			1852,1
		Mean =	4,53	7,30	12,91	1751,5
2	Barexcel	101	3,24	7,80	19,56	1150,8
		203	3,24			1150,8
		302	2,94			1044,3
		401	3,34			1186,4
		502	3,13			1111,8
		Mean =	3,18	7,80	19,56	1128,8
3	Barmoral	102	3,22	7,70	15,13	1208,0
		201	4,10			1538,2
		303	3,84			1440,6
		402	3,99			1496,9
		503	3,79			1421,9
		Mean =	3,79	7,70	15,13	1421,1

ARM Action Codes

T2 = [C4]-([C4]*@MVAVGREP([C3])/100)

4.4.1 AOV Means Table

In the following table results from analysis of variance is given. Analysis was done by Student-Newman-Keuls test where different letters indicate statistical significant difference at 95% level.

Location: Bakkegården Study Director: Morten Lind					
<i>Dactylis glomerata</i> (Hundegræs)					
Crop Code	DACGL	DACGL	DACGL	DACGL	
BBCH Scale	BGRM	BGRM	BGRM	BGRM	
Crop Name	Orchard grass	Orchard grass	Orchard grass	Orchard grass	
Rating Date	25-7-2006	25-7-2006	25-7-2006	25-7-2006	
Rating Data Type	YIELD	MOIST CONTENT	WEIGHT LOSS	CORR. YIELD	
Rating Unit	KG	%	%	KG	
Sample Size	1	1	1	1	
Sample Size Unit	plot	plot	plot	plot	
ARM Action Codes	+	+	+	T2	
Number of Decimals	2	2	2	1	
Trt No.	Treatment Name				
1	Barula	4,53 a	7,30	12,91	1751,5 a
2	Barexcel	3,18 c	7,80	19,56	1128,8 c
3	Barmoral	3,79 b	7,70	15,13	1421,1 b
LSD (P=.05)	0,326	.	.	.	121,94
Standard Deviation	0,224	.	.	.	83,61
CV	5,84	.	.	.	5,83
Bartlett's X2	2,728	.	.	.	2,894
P(Bartlett's X2)	0,256	.	.	.	0,235
Replicate F	1,472				1,496
Replicate Prob(F)	0,2968				0,2904
Treatment F	45,766				69,422
Treatment Prob(F)	0,0001				0,0001

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

ARM Action Codes

T2 = [C4]-([C4]*@MVAVGREP([C3])/100)

5. Trial 2005.544.00 *Festuca arundinacae* (Strandsvingel)

5.1 Varieties

No.	Name
1	Barfelix
2	Barleduc
3	Barleroy
4	Barlexas II
5	Labarinth

5.2 Plot map

Replicate	1	2	3	4	5				
101	2	201	4	301	1	401	2	501	5
102	5	202	3	302	5	402	1	502	2
103	1	203	5	303	2	403	5	503	1
104	4	204	1	304	4	404	3	504	4
105	3	205	2	305	3	405	4	505	3

5.3 Site description

Basic information for trial 2005.544.00 *Festuca arundinacae* (Strandsvingel)

Trial host	Bakkegaarden LandboCentrum		
Soil analysis	Coarsesand: 26,5 % Silt: 14,0 % Humus: 1,5 % Finesand: 49,6 % Clay: 12,5 %	Rt: 6,7 Pt: 2,9 Kt: 11,9 Mgt: 6,4	
Previous crop	Spring Barley		
Drilling date	06-04-2005	Seed rate	6 kg/ha
Fertilizer date type rate	05-10-2005 NS 27-4 60 N		21-03-2006 NPK 22-3-10 120N
Herbicides, Fungicides and Growthregulators	04-05-2006 24-05-2006	0.1 Primus + 0.05 Diflufenican 1.0 MCPA + 0,4 Moddus + 1,5 CCC + 0,25 Zenit+ 0,15 Amistar	

5.4 Results

To ensure full maturity at harvest all plots were swathed at the 10th of July. The trial was harvested at 20th of July.

In the following table results from harvest and seed analysis is given.

Location: Bakkegården		<i>Festuca arundinacae</i> (Strandsvingel)			
Study Director: Morten Lind		FESAR	FESAR	FESAR	FESAR
		BGRM	BGRM	BGRM	BGRM
		Tall fescue	Tall fescue	Tall fescue	Tall fescue
		20-7-2006	20-7-2006	20-7-2006	20-7-2006
Rating Data Type		YIELD	MOIST CONTENT	WEIGHT LOSS	CORR. YIELD
Rating Unit		KG	%	%	KG/HA
Sample Size		1	1	1	1
Sample Size Unit		plot	plot	plot	plot
ARM Action Codes		+	+	+	T2
Number of Decimals		2	1	2	1
Trt					
No.	Name	Plot			
1	Barfelix	103	5,47	7,7	38,65
		204	5,96		1483,5
		301	5,92		1616,3
		402	6,09		1605,5
		503	6,06		1651,6
		Mean =	5,90	7,7	38,65
2	Barleduc	101	6,47	8,1	38,62
		205	6,50		1747,9
		303	7,07		1756,0
		401	6,31		1910,0
		502	6,42		1704,7
		Mean =	6,55	8,1	38,62
3	Barleroy	105	6,87	7,8	31,96
		202	6,73		2064,1
		305	6,45		2022,0
		404	6,69		1937,9
		505	6,30		2010,0
		Mean =	6,61	7,8	31,96
4	Barlexas II	104	6,73	8,9	35,69
		201	6,91		1888,3
		304	6,99		1938,9
		405	6,69		1961,3
		504	6,86		1877,1
		Mean =	6,84	8,9	35,69
5	Labarinth	102	5,26	9,5	34,51
		203	5,50		1493,1
		302	5,00		1561,2
		403	5,21		1419,3
		501	5,62		1478,9
		Mean =	5,32	9,5	34,51

ARM Action Codes

T2 = [C4]-([C4]*@MVAVGREP([C3])/100)

5.4.1 AOV Means Table

In the following table results from analysis of variance is given. Analysis was done by Student-Newman-Keuls test where different letters indicate statistical significant difference at 95% level.

Location: Bakkegården				
Study Director: Morten Lind				
<i>Festuca arundinacea</i> (Strandsvingel)				
Crop Code	FESAR	FESAR	FESAR	FESAR
BBCH Scale	BGRM	BGRM	BGRM	BGRM
Crop Name	Tall fescue	Tall fescue	Tall fescue	Tall fescue
Rating Date	20-7-2006	20-7-2006	20-7-2006	20-7-2006
Rating Data Type	YIELD	MOIST CONTENT	WEIGHT LOSS	CORR. YIELD
Rating Unit	KG	%	%	KG/HA
Sample Size	1	1	1	1
Sample Size Unit	plot	plot	plot	plot
ARM Action Codes	+	+	+	T2
Number of Decimals	2	1	2	1
Trt				
No. Name				
1 Barfelix	5,90 b	7,7	38,65	1600,1 c
2 Barleduc	6,55 a	8,1	38,62	1770,6 b
3 Barleroy	6,61 a	7,8	31,96	1985,3 a
4 Barlexas II	6,84 a	8,9	35,69	1918,1 a
5 Labarinth	5,32 c	9,5	34,51	1509,5 c
LSD (P=.05)	0,341	.	.	95,70
Standard Deviation	0,254	.	.	71,37
CV	4,07	.	.	4,06
Bartlett's X2	2,56	.	.	2,401
P(Bartlett's X2)	0,634	.	.	0,662
Replicate F	0,324			0,294
Replicate Prob(F)	0,8575			0,8777
Treatment F	30,092			40,277
Treatment Prob(F)	0,0001			0,0001

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

ARM Action Codes

T2 = [C4]-([C4]*@MVAVGREP([C3])/100)

6. Trial 2005.545.00 *Lolium perenne* (Rajgræs)

6.1 Varieties

No.	Name
1	Bartwingo 2n
2	Adeline 2n
3	Barelan 4n
4	Barfort 4n
5	Bargala 4n
6	Barillion 2n
7	Barminton 2n
8	Barnauta 4n
9	Barsoccer 2n
10	Barsunny 2n
11	Barvites 2n
12	Navan 4n

6.2 Plot map

Replicate	1	2	3	4	5
101	9	201 8	301 11	401 4	501 6
102	5	202 2	302 7	402 10	502 9
103	10	203 1	303 6	403 2	503 1
104	1	204 11	304 2	404 3	504 8
105	11	205 4	305 3	405 1	505 5
106	7	206 10	306 1	406 7	506 11
107	3	207 12	307 5	407 9	507 4
108	2	208 6	308 12	408 11	508 12
109	12	209 3	309 8	409 12	509 3
110	4	210 9	310 4	410 6	510 2
111	8	211 5	311 9	411 8	511 7
112	6	212 7	312 10	412 5	512 10

6.3 Site description

Basic information for trial 2005.545.00 *Lolium perenne* (Rajgræs)

Trial host	Bakkegaarden LandboCentrum		
Soil analysis	Coarsesand: 26,5 %	Rt: 6,7	
	Silt: 14,0 %	Pt: 2,9	
	Humus: 1,5 %	Kt: 11,9	
	Finesand: 49,6 %	Mgt: 6,4	
	Clay: 12,5 %		
Previous crop	Spring Barley		
Drilling date	06-04-2005	Seed rate	6 kg/ha
Fertilizer	date type rate	05-10-2005 NS 27-4 60 N	21-03-2006 NPK 22-3-10 140N
Herbicides	04-05-2006 0.1 Primus + 0.05 Diflufenican 24-05-2006 1.0 MCPA		

6.4 Results

The trial was harvested at 25th of July under fine conditions.
In the following table results from harvest and seed analysis is given.

Location: Bakkegården Study Director: Morten Lind						
<i>Lolium perenne (Rajgræs)</i>						
Crop Code	LOLPE	LOLPE	LOLPE	LOLPE	LOLPE	LOLPE
BBCH Scale	BGRM	BGRM	BGRM	BGRM	BGRM	BGRM
Crop Name	Perennial ryegrass	Perennial ryegrass	Perennial ryegrass	Perennial ryegrass	Perennial ryegrass	Perennial ryegrass
Rating Date	25-7-2006	25-7-2006	25-7-2006	25-7-2006	25-7-2006	25-7-2006
Rating Data Type	YIELD	MOIST CONTENT	WEIGHT LOSS	WEIGHT LOSS	CORR. YIELD	CORR. YIELD
Rating Unit	KG	%	%	%	KG/HA	KG/HA
Sample Size	1	1	1	1	1	1
Sample Size Unit	plot	plot	plot	plot	plot	plot
ARM Action Codes	+	+	+	+	T2	T2
Number of Decimals	2	1	2	2	1	1
No.	Name	Plot				
1	Bartwingo	104	5,18	12,8	21,19	1704,9
		203	5,59			1839,8
		306	5,13			1688,4
		405	4,90			1612,7
		503	4,79			1576,5
		Mean =	5,12	12,8	21,19	1684,5
2	Adeline	108	4,19	11,5	22,02	1384,9
		202	4,81			1589,8
		304	4,63			1530,3
		403	4,75			1570,0
		510	4,46			1474,1
		Mean =	4,57	11,5	22,02	1509,8
3	Barelan	107	6,36	12,3	17,37	2207,3
		209	5,68			1971,3
		305	5,83			2023,4
		404	6,75			2342,7
		509	6,16			2137,9
		Mean =	6,16	12,3	17,37	2136,5
4	Barfort	110	5,43	10,8	19,74	1861,8
		205	5,39			1848,1
		310	5,52			1892,7
		401	5,52			1892,7
		507	5,07			1738,4
		Mean =	5,39	10,8	19,74	1846,7
5	Bargala	102	5,91	11,8	17,74	2053,6
		211	6,26			2175,2
		307	5,59			1942,4
		412	5,64			1959,8
		505	5,64			1959,8
		Mean =	5,81	11,8	17,74	2018,2
6	Barillion	112	4,77	12,4	20,57	1589,6
		208	4,97			1656,2
		303	4,98			1659,5
		410	5,22			1739,5
		501	4,90			1632,9
		Mean =	4,97	12,4	20,57	1655,5

Crop Code		LOLPE BGRM	LOLPE BGRM	LOLPE BGRM	LOLPE BGRM
BBCH Scale		Perennial ryegrass	Perennial ryegrass	Perennial ryegrass	Perennial ryegrass
Crop Name		25-7-2006	25-7-2006	25-7-2006	25-7-2006
Rating Date					
Rating Data Type		YIELD	MOIST CONTENT	WEIGHT LOSS	CORR. YIELD
Rating Unit		KG	%	%	KG/HA
Sample Size		1	1	1	1
Sample Size Unit		plot	plot	plot	plot
ARM Action Codes		+	+	+	T2
Number of Decimals		2	1	2	1
No.	Name	Plot			
7	Barminton	106	5,19	9,8	17,87
		212	5,60		
		302	5,26		
		406	5,48		
		511	5,38		
		Mean =	5,38	9,8	17,87
8	Barnauta	111	6,05	10,7	17,23
		201	5,96		
		309	6,39		
		411	6,35		
		504	6,33		
		Mean =	6,22	10,7	17,23
9	Barsoccer	101	3,95	9,4	27,65
		210	3,91		
		311	4,27		
		407	4,35		
		502	4,06		
		Mean =	4,11	9,4	27,65
10	Barsunny	103	4,82	10,4	23,29
		206	4,95		
		312	5,41		
		402	5,14		
		512	5,12		
		Mean =	5,09	10,4	23,29
11	Barvites	105	4,09	8,9	26,13
		204	4,12		
		301	4,33		
		408	3,96		
		506	4,08		
		Mean =	4,12	8,9	26,13
12	Navan	109	5,34	10,3	22,04
		207	5,16		
		308	5,31		
		409	5,51		
		508	5,23		
		Mean =	5,31	10,3	22,04
ARM Action Codes					
T2 = [C4]-([C4]*@MVAVGREP([C3])/100)					

6.4.1 AOV Means Table

In the following table results from analysis of variance is given. Analysis was done by Student-Newman-Keuls test where different letters indicate statistical significant difference at 95% level.

Location: Bakkegården Study Director: Morten Lind		<i>Lolium perenne</i> (Rajgræs)			
Crop Code	LOLPE	LOLPE	LOLPE	LOLPE	
BBCH Scale	BGRM	BGRM	BGRM	BGRM	
Crop Name	Perennial ryegrass	Perennial ryegrass	Perennial ryegrass	Perennial ryegrass	
Rating Date	25-7-2006	25-7-2006	25-7-2006	25-7-2006	
Rating Data Type	YIELD	MOIST CONTENT	WEIGHT LOSS	CORR. YIELD	
Rating Unit	KG	%	%	KG/HA	
Sample Size	1	1	1	1	
Sample Size Unit	plot	plot	plot	plot	
ARM Action Codes	+	+	+	T2	
Number of Decimals	2	1	2	1	
No.	Name				
1	Bartwingo	5,12 c	12,8	21,19	1684,5 e
2	Adeline	4,57 d	11,5	22,02	1509,8 f
3	Barelan	6,16 a	12,3	17,37	2136,5 a
4	Barfort	5,39 c	10,8	19,74	1846,7 cd
5	Bargala	5,81 b	11,8	17,74	2018,2 b
6	Barillion	4,97 c	12,4	20,57	1655,5 e
7	Barminton	5,38 c	9,8	17,87	1909,5 c
8	Barnauta	6,22 a	10,7	17,23	2200,4 a
9	Barsoccer	4,11 e	9,4	27,65	1289,6 g
10	Barsunny	5,09 c	10,4	23,29	1674,9 e
11	Barvites	4,12 e	8,9	26,13	1326,6 g
12	Navan	5,31 c	10,3	22,04	1778,4 de
LSD (P=.05)		0,295	.	.	100,30
Standard Deviation		0,231	.	.	78,47
CV		4,46	.	.	4,48
Bartlett's X2		10,747	.	.	11,419
P(Bartlett's X2)		0,465	.	.	0,409
Replicate F		1,528			1,490
Replicate Prob(F)		0,2107			0,2216
Treatment F		44,512			68,460
Treatment Prob(F)		0,0001			0,0001

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

ARM Action Codes

T2 = [C4]-([C4]*@MVAVGREP([C3])/100)

7. Trial comments

Weather conditions for production of grass for seed in Denmark, 2005-2006

Generally autumn was warm and sunny with less than normal precipitation and grasses continued growing longer than normal. Compared to normal, winter was rather cold with average temperatures around 0 °C. Spring was generally cold and growth started late. April and start of May was dry but the rain came at the right moment. June and July gave fine conditions for flowering and harvest. All together, conditions were favourable for grass for seed production.

Poa pratensis (Engrapgræs)

Differences between varieties in yield were from (average) 944-981 kg/ha with, Bartender as lowest yielding and Baron as highest yielding.

There was no statistical significant difference on yield between the tested varieties.

Festuca rubra (Rødsvingel)

Differences between varieties in yield were from (average) 1519-860 kg/ha, with Soberana as lowest yielding and Bargena as highest yielding.

Between varieties Bargena yielded significantly more and Soberana less than the all other varieties tested. Except from Bargena, Barpearl yielded significantly more compared to the remaining varieties.

There were no significant differences between Barbirdie, Barcrown, Bardiva and Bargaret in yield but they were all significant higher yielding compared to Baroyal and Barswing.

Dactylis glomerata (Hundegræs)

Differences between varieties in yield were from (average) 1129-1752 kg/ha, with Barexcel as lowest yielding and Barula as highest yielding.

There was statistical significant difference on yield between all the tested varieties

Festuca arundinacea (Strandsvingel)

Differences between varieties in yield were from (average) 1510-1985 kg/ha, with Labarinth as lowest yielding and Barleroy as highest yielding.

Barleroy and Barlexas yielded significantly more and Barfelix and Labarinth less than the other tested varieties.

Barleduc had significantly higher yield compared to Barfelix and Labarinth.

Lolium perenne (Rajgræs)

Differences between varieties in yield were from (average) 1290-2200 kg/ha, with Barsoccer as lowest yielding and Barnauta as highest yielding.

Barnauta and Barelan yielded significantly more and Barvites and Barsoccer less than other tested varieties.

Yield in the trials compared to predicted average yields in Denmark

In the table below average yields from Barenbrug varieties in LandboCentrum trials is compared to average predicted yields in Denmark 2005.

Species	Average yields Barenbrug species (kg/ha)*	Predicted average yields in Denmark (kg/ha) **	Average yields in Denmark relative over 5 years **
<i>Poa pratensis</i> (Engrapgræs)	962	967	107
<i>Festuca rubra</i> (Rødsvingel)	1172	1304	97
<i>Dactylis glomerata</i> (Hundegræs)	1434	1193	116
<i>Festuca arundinacae</i> (Strandsvingel)	1757	1454	117
<i>Lolium perenne</i> (Rajgræs)	1753	1361	113

* Data from LandboCentrum Barenbrug trials 2006

** Data from: Tidsskrift for Frøavl Oktober – November 2006 nr. 2.

8. Appendix – Climate data

Date	Temp	Min Temp	Max Temp	Precipitation	Evaporation	Radiation
01.08.2005	16.8	14.7	20.7	1.5	2.8	15.3
02.08.2005	15.5	13.6	17.0	0.0	1.5	8.2
03.08.2005	16.7	14.2	19.3	2.6	3.2	17.4
04.08.2005	14.8	11.5	17.8	3.5	3.0	17.2
05.08.2005	14.2	10.9	16.9	13.0	1.9	11.0
06.08.2005	13.8	10.6	17.2	3.1	3.2	18.4
07.08.2005	12.9	9.0	16.3	7.4	2.7	16.0
08.08.2005	14.0	9.8	17.6	1.0	3.1	18.3
09.08.2005	16.6	14.3	19.2	0.1	3.6	20.0
10.08.2005	16.1	14.8	19.2	0.8	1.3	7.4
11.08.2005	14.7	13.3	16.4	0.3	0.9	5.1
12.08.2005	14.6	12.7	16.6	0.6	1.8	10.6
13.08.2005	13.4	9.1	16.6	0.2	2.0	12.0
14.08.2005	14.9	10.5	19.1	0.1	2.6	14.8
15.08.2005	16.7	11.2	21.4	0.7	3.5	19.0
16.08.2005	14.7	9.5	18.4	0.0	2.3	13.0
17.08.2005	15.3	9.7	20.5	0.0	3.9	22.1
18.08.2005	16.7	12.6	21.7	0.0	2.7	14.7
19.08.2005	18.2	15.1	22.1	0.0	4.0	21.1
20.08.2005	20.0	16.8	24.4	0.0	3.8	19.4
21.08.2005	19.8	14.6	25.2	0.0	3.6	18.8
22.08.2005	17.9	14.1	22.2	0.0	3.7	20.0
23.08.2005	17.0	13.8	20.9	0.1	2.5	13.9
24.08.2005	15.8	12.6	18.8	0.1	1.9	10.8
25.08.2005	14.2	12.1	15.6	10.1	0.6	3.6
26.08.2005	13.5	10.6	16.3	2.0	2.9	16.9
27.08.2005	15.2	12.5	17.6	0.5	3.0	16.8
28.08.2005	16.6	14.5	18.4	0.5	2.1	11.6
29.08.2005	18.3	11.7	22.3	0.0	3.6	19.2
30.08.2005	14.4	9.1	19.7	0.0	2.3	13.1
31.08.2005	15.8	13.4	19.1	0.0	2.3	13.0
01.09.2005	17.8	15.8	20.9	0.1	2.4	12.8
02.09.2005	15.8	10.4	18.0	3.0	0.9	5.2
03.09.2005	13.5	8.9	18.7	0.0	2.1	12.5
04.09.2005	13.7	8.5	19.5	0.2	2.5	14.6
05.09.2005	16.1	10.4	22.0	0.0	3.1	17.0
06.09.2005	18.2	13.8	23.7	0.0	2.3	12.1
07.09.2005	20.0	15.7	24.7	0.0	2.8	14.3
08.09.2005	18.3	13.6	23.3	0.0	3.1	16.7
09.09.2005	16.0	13.0	19.9	1.4	1.9	10.8
10.09.2005	16.1	13.1	19.8	0.0	2.4	13.3
11.09.2005	14.7	10.2	18.2	0.2	1.5	8.5
12.09.2005	14.1	9.7	17.6	0.0	2.4	13.9
13.09.2005	14.8	11.0	18.5	0.0	2.5	14.5
14.09.2005	15.6	13.4	18.4	0.3	1.4	7.7
15.09.2005	12.0	7.3	15.5	0.7	1.3	7.8
16.09.2005	10.1	5.9	14.3	0.6	1.7	10.7
17.09.2005	9.6	5.9	14.5	0.0	2.0	13.1
18.09.2005	13.0	9.4	14.2	0.1	0.7	3.9
19.09.2005	14.8	13.4	16.7	0.0	0.8	4.6
20.09.2005	14.4	11.6	17.9	0.0	1.4	8.3

Date	Temp	Min Temp	Max Temp	Precipitation	Evaporation	Radiation
21.09.2005	13.3	8.6	16.6	0.0	0.7	4.3
22.09.2005	13.5	10.7	17.2	0.0	1.4	7.9
23.09.2005	15.1	12.1	18.6	0.0	2.5	13.9
24.09.2005	15.4	12.4	20.4	0.0	2.0	11.1
25.09.2005	16.1	13.2	20.3	0.3	2.2	12.3
26.09.2005	14.4	11.6	19.0	0.4	1.2	7.2
27.09.2005	14.2	12.1	15.9	3.5	0.9	5.3
28.09.2005	11.6	7.4	15.1	1.3	1.1	7.0
29.09.2005	10.7	8.1	14.2	4.9	1.2	7.4
30.09.2005	11.8	9.7	13.9	0.0	1.5	9.2
01.10.2005	11.6	9.1	13.1	10.9	0.4	2.7
02.10.2005	10.6	6.6	15.4	3.3	1.5	9.2
03.10.2005	10.7	6.1	14.8	0.0	1.7	10.8
04.10.2005	10.3	6.6	15.8	0.0	1.7	11.1
05.10.2005	11.1	7.5	14.8	0.1	1.4	8.9
06.10.2005	13.0	11.0	16.4	0.0	1.6	9.4
07.10.2005	14.0	11.9	17.0	0.0	1.8	10.6
08.10.2005	14.2	11.9	16.6	0.0	1.7	9.7
09.10.2005	11.5	7.7	15.1	0.0	0.8	5.1
10.10.2005	14.0	11.7	17.5	0.0	1.3	7.6
11.10.2005	13.9	11.8	17.0	0.0	1.8	10.2
12.10.2005	13.3	10.5	16.7	0.0	1.7	9.8
13.10.2005	11.7	7.6	16.5	0.0	1.5	9.4
14.10.2005	9.8	5.4	14.3	0.0	0.9	6.0
15.10.2005	7.9	3.3	13.2	0.0	1.5	10.0
16.10.2005	6.3	2.3	11.0	0.0	0.9	6.6
17.10.2005	6.7	2.7	9.6	0.0	0.7	4.6
18.10.2005	5.4	1.1	10.6	0.0	1.2	8.8
19.10.2005	8.9	1.5	11.9	0.0	1.3	8.9
20.10.2005	10.9	9.1	11.9	0.6	0.5	2.9
21.10.2005	12.1	10.1	13.2	9.1	0.8	5.1
22.10.2005	11.6	9.1	13.1	2.5	0.4	2.3
23.10.2005	7.9	4.6	10.5	2.8	0.9	6.1
24.10.2005	7.2	3.4	9.9	10.0	0.9	6.1
25.10.2005	12.0	10.8	13.4	18.3	0.1	0.7
26.10.2005	11.6	9.7	13.8	0.2	0.8	4.9
27.10.2005	11.7	9.6	12.4	0.4	0.3	1.9
28.10.2005	11.4	9.3	13.2	0.0	1.1	6.7
29.10.2005	10.3	8.8	12.2	0.0	0.9	5.9
30.10.2005	10.5	8.8	12.7	0.0	0.9	5.9
31.10.2005	10.4	8.0	13.3	0.0	1.0	6.2
01.11.2005	10.4	8.2	12.0	2.4	0.2	1.0
02.11.2005	10.5	9.1	11.2	8.4	0.6	3.7
03.11.2005	12.4	10.8	13.0	1.5	0.3	1.7
04.11.2005	12.4	11.4	13.8	1.3	0.4	2.5
05.11.2005	10.2	8.9	10.8	1.4	0.4	2.3
06.11.2005	9.4	8.1	10.5	1.1	0.3	1.8
07.11.2005	9.6	8.8	10.0	0.3	0.2	1.2
08.11.2005	9.4	8.5	10.5	0.0	0.4	2.5
09.11.2005	8.9	6.5	10.6	0.0	0.7	4.4
10.11.2005	9.6	6.2	10.8	0.3	0.6	3.7
11.11.2005	11.4	10.7	12.4	5.2	0.1	0.8
12.11.2005	9.3	7.5	10.5	0.3	0.1	0.8
13.11.2005	7.5	4.4	10.2	1.8	0.5	3.2
14.11.2005	8.4	5.4	9.4	5.4	0.5	3.4

Date	Temp	Min Temp	Max Temp	Precipitation	Evaporation	Radiation
15.11.2005	6.7	3.2	9.9	0.5	0.5	3.7
16.11.2005	1.7	0.0	4.3	1.3	0.4	3.7
17.11.2005	1.0	-0.1	3.7	2.7	0.5	4.1
18.11.2005	0.6	-1.4	3.2	1.0	0.5	3.9
19.11.2005	1.8	-0.6	5.3	0.2	0.5	4.2
20.11.2005	2.2	-1.0	6.2	1.5	0.5	4.0
21.11.2005	-0.3	-2.1	2.7	0.1	0.5	4.2
22.11.2005	2.2	0.6	2.8	0.7	0.1	0.9
23.11.2005	4.5	3.3	5.3	0.8	0.3	2.6
24.11.2005	4.2	2.4	5.1	1.9	0.1	0.4
25.11.2005	0.8	0.1	1.6	2.5	0.1	0.8
26.11.2005	0.1	-1.2	2.1	0.1	0.4	3.2
27.11.2005	0.8	-1.1	3.9	0.5	0.4	3.6
28.11.2005	-1.1	-2.8	0.8	0.0	0.2	1.5
29.11.2005	1.4	0.1	2.8	0.2	0.2	1.5
30.11.2005	1.5	-0.9	4.1	0.0	0.3	2.9
01.12.2005	1.6	0.9	2.9	0.0	0.2	1.5
02.12.2005	1.6	1.4	2.1	0.0	0.2	1.3
03.12.2005	2.0	1.5	2.4	0.7	0.1	0.5
04.12.2005	3.6	2.5	4.7	0.2	0.1	0.4
05.12.2005	5.3	5.0	5.8	6.9	0.0	0.3
06.12.2005	5.1	4.6	5.7	0.2	0.1	0.8
07.12.2005	3.6	1.6	5.0	1.1	0.1	1.1
08.12.2005	2.3	-0.3	4.0	0.8	0.1	1.2
09.12.2005	-1.1	-1.7	0.8	0.0	0.3	2.8
10.12.2005	3.0	-0.3	6.5	0.4	0.1	0.9
11.12.2005	8.4	7.9	9.1	0.0	0.2	1.4
12.12.2005	3.7	1.3	6.9	0.0	0.3	2.5
13.12.2005	4.8	2.0	5.8	3.1	0.2	1.8
14.12.2005	5.7	4.2	7.2	1.0	0.1	1.0
15.12.2005	5.2	2.2	7.1	1.1	0.3	2.1
16.12.2005	0.0	-2.4	1.4	1.2	0.1	1.0
17.12.2005	-0.9	-1.9	0.5	0.0	0.3	2.7
18.12.2005	-2.3	-6.3	1.1	0.0	0.3	2.7
19.12.2005	1.5	-1.0	4.0	2.1	0.1	0.7
20.12.2005	2.0	0.1	4.6	3.1	0.2	1.6
21.12.2005	2.8	-0.4	5.1	2.3	0.1	1.2
22.12.2005	3.9	2.8	5.8	0.2	0.3	2.2
23.12.2005	4.9	1.0	7.3	1.0	0.1	1.0
24.12.2005	4.1	0.1	7.3	0.2	0.1	0.6
25.12.2005	1.0	-0.0	2.7	0.2	0.3	2.7
26.12.2005	-0.4	-1.3	0.2	1.5	0.1	1.2
27.12.2005	-0.3	-1.2	0.7	1.0	0.1	1.2
28.12.2005	-1.8	-2.5	-1.2	2.4	0.1	1.1
29.12.2005	-1.9	-2.5	-1.3	5.1	0.1	0.8
30.12.2005	-0.5	-1.6	0.5	0.5		
31.12.2005	-0.9	-1.7	0.9	1.6	0.1	1.1
01.01.2006	1.7	0.9	2.3	1.5	0.1	0.9
02.01.2006	-0.2	-1.1	0.8	0.0	0.1	1.0
03.01.2006	-1.3	-2.1	-0.2	0.0	0.1	1.2
04.01.2006	0.1	-1.9	1.8	0.0	0.1	1.3
05.01.2006	0.9	0.2	1.8	0.0	0.0	0.4
06.01.2006	0.7	0.3	1.2	0.2	0.0	0.4
07.01.2006	-0.2	-0.5	0.4	0.0	0.0	0.4
08.01.2006	-0.9	-4.1	1.1	0.0	0.3	3.2

Date	Temp	Min Temp	Max Temp	Precipitation	Evaporation	Radiation
09.01.2006	-2.2	-4.3	0.8	0.0	0.3	3.2
10.01.2006	0.4	-2.8	2.3	0.4	0.1	1.2
11.01.2006	2.7	2.2	3.6	0.9	0.1	0.9
12.01.2006	1.2	0.0	2.3	0.0	0.2	1.4
13.01.2006	0.0	-0.3	0.5	0.0	0.1	1.2
14.01.2006	-0.6	-1.0	-0.2	0.0	0.2	1.5
15.01.2006	-1.5	-2.9	-0.3	0.0	0.3	2.4
16.01.2006	-2.2	-3.2	-1.2	0.0	0.3	2.8
17.01.2006	-1.0	-2.1	-0.3	1.8	0.3	2.9
18.01.2006	-1.2	-1.9	-0.5	0.3	0.1	0.6
19.01.2006	-2.3	-3.1	-1.7	3.5	0.1	1.0
20.01.2006	-1.3	-2.8	0.4	5.4	0.1	0.6
21.01.2006	-3.7	-7.0	-0.2	0.5	0.1	1.4
22.01.2006	-6.5	-8.4	-4.3	0.0	0.4	4.3
23.01.2006	-7.3	-8.5	-5.7	0.3	0.3	4.1
24.01.2006	-4.4	-8.2	-2.3	0.7	0.3	2.9
25.01.2006	-1.2	-2.6	-0.4	1.2	0.2	1.7
26.01.2006	-5.1	-10.9	-1.1	0.1	0.4	4.3
27.01.2006	-5.3	-7.8	-1.8	0.1	0.3	3.4
28.01.2006	-3.3	-5.4	-0.8	0.0	0.4	3.7
29.01.2006	-3.2	-5.6	-1.3	0.0	0.2	2.3
30.01.2006	-0.7	-3.2	0.6	0.0	0.3	3.1
31.01.2006	0.3	-1.6	2.5	0.0	0.6	5.1
01.02.2006	0.8	-0.3	1.5	0.0	0.3	2.3
02.02.2006	0.9	0.6	1.3	0.0	0.3	2.4
03.02.2006	-0.6	-1.2	-0.2	0.1	0.3	3.0
04.02.2006	-4.8	-7.8	-2.3	0.4	0.5	5.9
05.02.2006	-3.0	-4.6	-2.3	1.7	0.3	3.2
06.02.2006	0.8	-2.2	4.2	10.2	0.2	1.7
07.02.2006	3.0	1.0	4.5	3.5	0.6	4.7
08.02.2006	2.1	0.5	3.4	2.4	0.2	2.0
09.02.2006	1.0	0.5	1.4	3.3	0.2	1.5
10.02.2006	0.8	-0.8	2.6	0.0	0.4	3.7
11.02.2006	-2.0	-3.9	0.2	0.0	0.6	5.9
12.02.2006	-1.3	-4.2	0.9	0.1	0.6	5.7
13.02.2006	0.4	-1.3	1.4	0.0	0.2	1.5
14.02.2006	0.5	-2.5	3.1	0.1	0.8	6.9
15.02.2006	0.6	-0.2	1.2	3.4	0.2	1.4
16.02.2006	0.9	0.3	1.5	2.5	0.2	1.6
17.02.2006	0.5	0.1	0.9	1.6	0.1	1.0
18.02.2006	1.8	1.0	2.9	1.2	0.2	1.7
19.02.2006	1.4	0.8	2.1	0.2	0.3	2.3
20.02.2006	1.7	1.1	2.4	0.1	0.3	2.3
21.02.2006	0.7	-0.6	1.5	0.0	0.2	1.3
22.02.2006	-0.5	-1.2	0.1	0.5	0.6	5.6
23.02.2006	0.5	-0.3	1.5	0.5	0.3	2.6
24.02.2006	0.4	-0.9	1.8	0.0	0.9	7.9
25.02.2006	-0.8	-2.6	0.2	0.1	0.3	3.0
26.02.2006	-1.8	-3.6	0.8	0.0	0.7	6.5
27.02.2006	-1.3	-4.2	0.3	0.3	0.9	8.8
28.02.2006	-0.4	-1.6	0.3	1.5	0.3	2.3
01.03.2006	-0.5	-1.3	0.4	0.7	0.8	6.8
02.03.2006	-0.2	-0.8	0.9	1.5	0.6	5.6
03.03.2006	-1.8	-3.6	-0.1	1.3	0.6	5.6
04.03.2006	-3.0	-5.0	-1.5	1.4	0.8	7.8

Date	Temp	Min Temp	Max Temp	Precipitation	Evaporation	Radiation
05.03.2006	-6.0	-10.3	-2.8	0.2	0.9	10.3
06.03.2006	-4.0	-7.4	-2.1	0.8	0.4	4.8
07.03.2006	-6.3	-11.4	-0.9	0.0	0.6	7.6
08.03.2006	-2.5	-8.9	-0.5	0.0	0.8	7.8
09.03.2006	-1.7	-4.3	0.3	0.0	1.1	10.6
10.03.2006	-4.1	-7.4	-2.0	0.1	0.8	8.8
11.03.2006	-5.9	-8.3	-3.2	0.1	0.7	8.2
12.03.2006	-6.0	-9.7	-1.8	0.0	0.7	8.4
13.03.2006	-5.8	-11.2	-1.3	0.0	0.9	11.0
14.03.2006	-2.9	-10.1	0.5	0.0	1.2	12.0
15.03.2006	-0.2	-1.6	0.3	0.1	0.7	6.2
16.03.2006	-0.7	-3.2	0.9	0.0	0.6	5.1
17.03.2006	-1.7	-4.2	0.5	0.0	0.6	6.1
18.03.2006	-0.6	-4.8	2.1	0.0	1.3	11.6
19.03.2006	0.3	-3.3	3.2	0.0	0.9	7.7
20.03.2006	-1.4	-4.9	0.8	0.0	0.6	5.4
21.03.2006	-0.8	-4.7	2.8	0.1	1.6	14.5
22.03.2006	-0.2	-2.7	2.9	0.1	1.6	14.5
23.03.2006	0.4	-2.2	3.7	0.0	1.1	10.0
24.03.2006	1.7	-1.3	4.9	0.0	1.6	13.5
25.03.2006	0.8	0.0	2.0	0.3	0.8	6.6
26.03.2006	2.9	0.7	6.1	7.9	0.2	1.8
27.03.2006	8.6	6.2	11.8	9.1	0.8	5.1
28.03.2006	7.2	5.0	9.3	0.3	1.0	7.3
29.03.2006	4.8	1.3	7.5	0.2	0.8	5.8
30.03.2006	6.2	1.7	8.2	5.7	0.7	5.0
31.03.2006	5.6	3.7	8.3	0.4	0.4	2.6
01.04.2006	5.8	3.7	7.8	3.7	0.6	4.3
02.04.2006	5.7	3.5	8.8	4.8	1.3	9.6
03.04.2006	4.4	1.5	6.7	1.5	0.6	4.7
04.04.2006	3.2	1.9	5.4	3.7	1.3	10.0
05.04.2006	1.9	-0.4	4.3	0.5	1.2	9.9
06.04.2006	4.3	0.7	6.1	2.4	1.2	8.9
07.04.2006	6.0	3.9	9.2	0.4	2.2	15.7
08.04.2006	4.6	1.9	8.5	3.8	1.2	8.7
09.04.2006	4.6	3.1	5.9	2.3	1.3	9.9
10.04.2006	4.1	0.5	7.8	0.0	1.3	9.9
11.04.2006	4.4	2.6	6.8	0.1	1.5	11.3
12.04.2006	4.5	3.6	5.0	0.9	0.5	3.5
13.04.2006	6.1	4.4	8.5	2.8	0.9	6.2
14.04.2006	6.6	3.9	9.5	0.5	1.9	13.6
15.04.2006	6.8	4.6	10.4	0.0	1.9	13.3
16.04.2006	8.0	4.5	11.5	0.0	2.0	13.6
17.04.2006	6.9	4.1	10.4	1.3	2.0	13.7
18.04.2006	6.8	4.0	9.8	0.7	2.5	17.3
19.04.2006	7.9	5.5	10.1	3.6	2.6	17.3
20.04.2006	5.9	4.1	8.7	0.4	1.2	8.6
21.04.2006	5.8	5.4	6.6	3.3	0.7	5.4
22.04.2006	7.2	4.4	10.5	0.0	2.8	19.2
23.04.2006	6.7	5.0	8.6	0.0	1.0	7.2
24.04.2006	6.8	1.6	11.0	0.0	1.4	10.0
25.04.2006	9.1	4.6	12.8	0.8	2.9	19.1
26.04.2006	8.3	6.4	10.7	2.2	1.3	8.8
27.04.2006	7.0	3.4	10.4	0.3	1.6	11.4
28.04.2006	7.1	3.5	9.9	1.2	2.4	16.7

Date	Temp	Min Temp	Max Temp	Precipitation	Evaporation	Radiation
29.04.2006	7.2	5.6	9.7	0.8	2.7	18.6
30.04.2006	5.8	4.4	7.6	0.3	1.2	8.8
01.05.2006	6.5	3.9	10.2	0.2	2.8	20.0
02.05.2006	8.2	5.3	12.3	0.4	2.2	14.7
03.05.2006	11.3	7.2	15.9	0.0	2.5	15.6
04.05.2006	13.2	8.6	17.7	0.0	2.7	15.7
05.05.2006	13.2	8.5	18.6	0.0	3.9	23.3
06.05.2006	13.5	10.2	18.1	0.0	3.7	21.8
07.05.2006	14.8	9.3	20.6	0.0	4.0	22.9
08.05.2006	14.4	8.8	19.8	0.0	2.8	16.2
09.05.2006	13.8	8.3	19.0	0.0	2.8	16.3
10.05.2006	15.2	8.3	20.7	0.0	2.9	16.4
11.05.2006	15.3	7.9	20.7	0.0	2.9	16.5
12.05.2006	13.8	7.2	18.8	0.0	2.9	16.6
13.05.2006	11.1	6.2	14.5	0.1	2.7	16.6
14.05.2006	8.9	4.0	12.5	0.0	3.6	23.7
15.05.2006	8.7	7.2	10.9	2.8	2.4	15.6
16.05.2006	7.9	7.5	8.5	5.2	0.6	3.8
17.05.2006	9.1	7.8	10.6	0.2	1.1	7.2
18.05.2006	10.7	8.9	13.3	9.3	1.0	6.5
19.05.2006	12.0	10.8	13.6	1.8	2.0	12.0
20.05.2006	11.9	10.3	13.9	6.3	1.7	10.2
21.05.2006	10.7	7.4	12.5	0.3	1.6	9.8
22.05.2006	12.7	11.7	14.6	5.1	2.0	12.0
23.05.2006	9.7	5.9	12.6	0.3	1.6	10.3
24.05.2006	9.7	6.8	12.8	6.3	2.6	17.0
25.05.2006	9.6	6.2	11.8	1.6	3.2	20.5
26.05.2006	9.5	5.6	13.2	0.5	3.8	24.5
27.05.2006	10.5	9.2	12.2	8.5	2.6	16.6
28.05.2006	9.3	7.3	11.1	11.6	1.4	9.3
29.05.2006	9.8	7.9	11.3	1.6	2.4	15.3
30.05.2006	11.4	8.8	14.3	0.5	3.7	23.1
31.05.2006	11.6	7.9	14.4	5.9	3.9	23.7
01.06.2006	10.1	7.1	12.6	1.8	3.3	21.0
02.06.2006	13.1	10.8	16.1	0.2	4.4	26.1
03.06.2006	10.9	7.0	13.7	0.7	1.9	11.9
04.06.2006	11.8	7.7	15.1	0.0	3.0	18.3
05.06.2006	12.6	9.8	14.6	2.6	3.7	22.4
06.06.2006	12.7	7.2	16.9	0.0	4.1	24.2
07.06.2006	13.2	8.4	16.7	0.0	3.1	18.4
08.06.2006	13.7	10.0	18.3	0.0	3.6	21.2
09.06.2006	13.1	8.0	17.3	0.0	4.2	24.8
10.06.2006	15.6	9.5	20.6	0.0	3.3	18.5
11.06.2006	18.6	12.2	23.7	0.0	3.5	18.6
12.06.2006	20.6	14.5	25.5	0.0	3.6	18.6
13.06.2006	20.8	14.4	25.4	0.0	3.7	18.6
14.06.2006	15.9	11.1	19.3	2.1	3.8	21.2
15.06.2006	15.6	12.9	18.5	0.6	4.2	23.3
16.06.2006	15.3	13.6	17.1	0.3	2.4	13.3
17.06.2006	15.9	13.9	18.7	1.4	2.8	15.7
18.06.2006	17.8	14.7	21.6	0.0	4.6	24.8
19.06.2006	19.2	15.1	22.9	0.5	4.3	22.3
20.06.2006	18.2	14.8	21.0	0.2	4.4	23.6
21.06.2006	16.7	14.5	19.1	1.3	2.3	12.4
22.06.2006	14.9	12.4	17.7	0.6	3.2	18.3

Date	Temp	Min Temp	Max Temp	Precipitation	Evaporation	Radiation
23.06.2006	14.4	9.1	18.2	0.0	4.2	23.9
24.06.2006	16.5	13.7	19.1	0.0	4.2	22.9
25.06.2006	19.5	17.0	22.8	5.9	4.7	24.5
26.06.2006	18.4	17.2	19.8	12.5	1.3	7.0
27.06.2006	15.4	12.3	17.0	0.1	1.8	10.2
28.06.2006	13.9	12.6	15.2	0.0	2.3	13.1
29.06.2006	13.9	10.2	16.7	0.0	2.5	14.6
30.06.2006	16.4	10.6	20.3	0.0	4.8	26.4
01.07.2006	18.1	13.4	22.4	0.0	3.5	18.6
02.07.2006	19.2	13.7	23.9	0.0	3.5	18.5
03.07.2006	19.8	14.2	24.4	0.0	3.6	18.5
04.07.2006	20.6	14.9	25.8	0.0	3.6	18.5
05.07.2006	22.0	16.6	26.8	0.0	3.7	18.4
06.07.2006	23.5	17.7	28.7	0.6	5.5	26.9
07.07.2006	21.8	17.8	26.1	0.3	3.9	19.6
08.07.2006	18.9	14.9	22.7	0.1	3.3	17.2
09.07.2006	20.8	18.8	23.8	2.0	4.2	21.4
10.07.2006	19.3	14.3	23.0	0.0	4.1	21.2
11.07.2006	18.5	10.8	24.4	2.4	3.0	16.0
12.07.2006	16.5	10.2	21.6	0.0	3.3	18.1
13.07.2006	18.7	12.0	23.8	0.0	5.0	26.4
14.07.2006	16.9	12.2	20.2	0.0	4.8	26.3
15.07.2006	17.9	10.9	23.1	0.0	3.4	18.0
16.07.2006	19.7	12.7	25.2	0.0	3.5	17.9
17.07.2006	21.4	15.1	26.4	0.0	3.5	17.8
18.07.2006	20.8	14.4	25.7	0.0	5.1	25.8
19.07.2006	21.4	15.2	26.7	0.2	3.5	17.7
20.07.2006	23.7	20.4	28.1	0.5	5.1	24.9
21.07.2006	21.5	17.3	25.0	2.0	3.6	18.1
22.07.2006	20.7	16.6	24.9	0.1	4.5	22.9
23.07.2006	22.1	19.0	26.3	5.1	3.0	15.1
24.07.2006	20.4	14.4	25.0	0.0	4.2	21.7
25.07.2006	20.9	14.0	26.3	0.1	3.4	17.2
26.07.2006	22.4	15.8	28.4	0.0	3.5	17.2
27.07.2006	23.6	20.2	27.2	5.0	5.0	24.4
28.07.2006	20.2	17.7	23.1	4.3	1.7	8.8
29.07.2006	21.4	16.5	26.2	0.5	3.7	18.7
30.07.2006	22.7	19.1	26.5	14.7	4.3	21.4
31.07.2006	20.0	15.0	23.5	0.1	3.5	18.2
01.08.2006	20.3	16.1	24.6	10.7	3.8	19.6