



Efficacy testing of hymexazol in sugar beets, Sweden 2011

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Trial ID/	HUD116	Glumslöv	Jörgen Mårtensson
Study technicians:	HUD117	Fjärestad	Jörgen Mårtensson
	HUD118	Skibaröd	Jörgen Mårtensson

HUSEC and NBR trial IDs: HUSEC NBR
HUD116 = 51-424 Glumslöv
HUD117 = 52-424 Fjärestad
HUD118 = 53-424 Skibaröd

Method: Field trial with randomised complete block design.

Purpose of trials: Evaluation of efficacy of hymexazol against *Aphanomyces cochlioides* on sugar beet.

Trial quality: According to GEP standards and EPPO guidelines PP 1/152(2) and PP 1/181(3).

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Summary

A number of soil borne pathogens may cause substantial damage in sugar beet fields. One of the most important pathogens is *Aphanomyces cochlioides*. In warm and wet soils, *A. cochlioides* infect young seedlings two to three weeks after emergence. Early infections can be controlled by treating the seed with hymexazol. The standard dose used on all commercial sugar beet seed in Sweden is 14 g a. i./unit. The seed treatment is effective for four to six weeks. In this trial series, hymexazol was tested in three doses; 14, 18 and 30 g a. i./unit seed.

This trial series included three seed treatments that were compared in three field trials and one experiment performed under controlled green house conditions.

The growing conditions during the spring 2011 were quite rainy but not warm enough for *A. cochlioides* to infect the sugar beet seedlings. The weather conditions in August and September were very rainy and warm which led to late infections of *A. cochlioides* in many fields. Roots with typical symptoms of *Aphanomyces* root rot was observed in all three trials.

When the plant number was counted the first time in the field trials 2011 at 20% emergence, the seed treatments with 18 and 30 g hymexazol showed significantly slower emergence than in the untreated control and 14 g hymexazol.

The results 2004–2011 (24 trials) show that seed treatment with hymexazol have a significant positive impact on all yield parameters; sugar content, sugar yield, amino-N and K+Na. There was also a tendency for increased root weight.

On average of 14 trials 2004–2011, all displaying high infestation levels of *A. cochlioides*, hymexazol shows a significant positive impact on all yield parameters; increased root weight, sugar content, sugar yield, cleanness and lower amino-N and K+Na. The increase in sugar yield was 5% corresponding to 500 kg sugar per hectare.

Sammanfattning

Ett flertal jordburna patogener kan ge upphov till stora skador och skördeförluster i sockerbeter. En av de allvarligaste är *Aphanomyces cochlioides*. Det är framförallt under regniga och varma vårar som problemen kan bli stora med betydande plantbortfall. Senare på tillväxtsäsongen, framförallt vid mycket regn, reduceras tillväxten och rötterna kan även bli deformerade. De tidiga angreppen kan minskas genom att fröet betas med hymexazol. Hymexazol är verksamt ca 4 veckor efter uppkomst.

I denna försöksserie testades tre doser av hymexazol; 14, 18 och 30 g per enhet och jämfördes med obehandlat. Hymexazolbetningen har kompletterats med 6 g fludioxonil.

Vädret under våren 2011 var regnigt men inte tillräckligt varmt för infektion och utveckling av rotbrand. Vädret under augusti var däremot mycket regnigt vilket gjorde att det blev en hel del sena angrepp på många fält.

Vid räkningen av plantor vid 20 % uppkomst hade behandlingarna med 18 och 30 g hymexazol något färre plantor än obehandlat och 14 g hymexazol. Vid full uppkomst fanns det inga signifikanta skillnader mellan behandlingarna.

Skörderesultaten från 2004–2011 visar att hymexazol har en signifikant positiv inverkan på sockerhalt, sockerskörd, blåtal och K+Na. Även tendens till ökad rotskörd finns.

Skörderesultaten från de 14 försök med medel till hög infektionsnivå av *A. cochlioides* 2004–2011 visar att hymexazol har en signifikant positiv inverkan på rotvikt, sockerhalt, socker-

skörd, blåtal, K+Na och renhet. Ökningen av sockerskörden ligger på 5 %, vilket motsvarar 500 kg socker per hektar.

Introduction

A number of soil borne pathogens may cause substantial damage in sugar beet fields. One of the most important pathogens in Sweden is *Aphanomyces cochlioides*. In warm and wet soils, *A. cochlioides* infect young seedlings two to three weeks after emergence (Harveson and Rush, 1993; Windels, 2000). The hypocotyl rots and the seedling dies. Early seedling infections of *A. cochlioides* may result in low plant numbers and permanent damage to the root, resulting in severe deformations. The pathogen infects sugar beet roots through the whole growing period thus causing a general growth reduction. *A. cochlioides* is found in most soils in Sweden and approximately 25% of the fields have a medium to high risk of *Aphanomyces* root rot. Identification of fields with high risk is important for disease control (Olsson *et al.*, 2010.).

Early infections can be controlled by treating the seed with hymexazol, the active ingredient of Tachigaren. The standard dose used on all sugar beet seed in Sweden is 14 g/unit. The seed treatment remains effective for four to six weeks. In highly infested fields it is important to use a tolerant sugar beet variety in combination with hymexazol.

Hymexazol is the only registered product that is effective against *A. cochlioides*. In this trial series, hymexazol was combined with 6 g fludioxonil, the active ingredient in Maxim tech. Fludioxonil is a broad spectrum, non systemic fungicide with effect against several soil borne fungi such as some *Fusarium* spp., *Rhizoctonia* and *Sclerotinia* (Olaya and Barnard, 1994; Mueller *et al.*, 1999; Munkvold and O'Mara 2002; Dorrance *et al.*, 2003; Broders *et al.*, 2007).

Materials and methods

General trial information

Three field trials were conducted in 2011 according to GEP (Good Experimental Practice) standards and the following EPPO guidelines: PP 1/152 (2) Design and analysis of efficacy evaluation trials; PP 1/181 (3) Conduct and reporting of efficacy evaluation trials including GEP.

Experimental design: Randomised complete block design with four replicates. The trials were located as indicated in Figure 1 and Table 1. The single plot size was 2.88 x 12 m = 34.56 m². The trial fields were naturally infested with *Aphanomyces cochlioides*. To be able to remove plants for analyses, an extra sample area was sown adjacent to the original plot.

Table 1. Trial series in HU-1152 2011. General information

Trial ID HUSEC	Location	Coordinates WGS 84	Soil type
HUD118	Skibaröd	N55.811848° E13.564889°	nmh1Sa
HUD117	Fjärestad	N55.982437° E12.836943°	mflMo
HUD116	Glumslöv	N55.950761° E12.798207°	mmh1Mo

Trial ID HUSEC	Previous crop	Variety	Sowing date	Seed distance, seeds/m
HUD118	Winter wheat	Opta	18 April	5,4
HUD117	Winter wheat	Opta	21 April	5,4
HUD116	Winter wheat	Opta	26 May	4,6

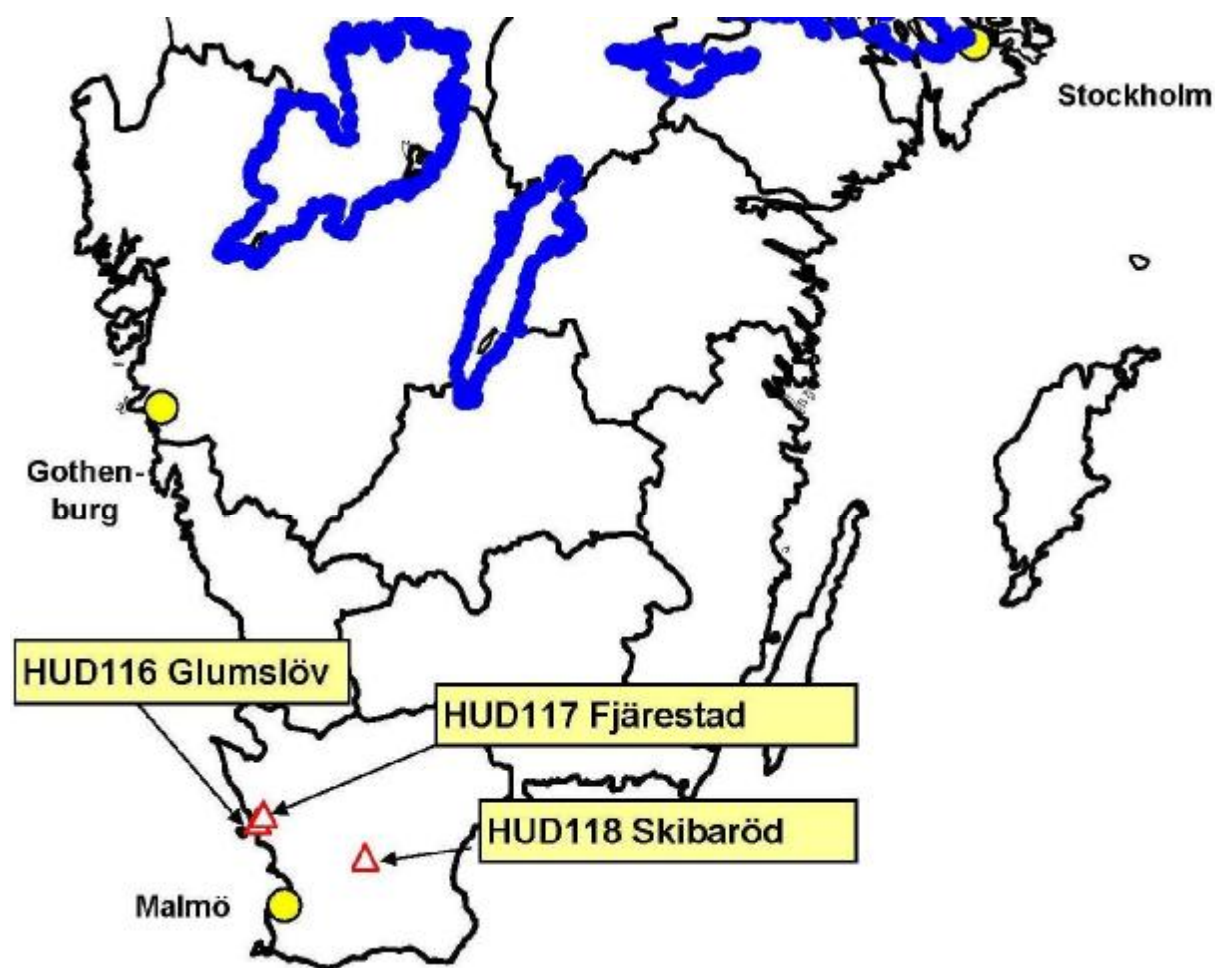


Figure 1. Location of the three trials in series HU-1152 2011.

Treatment information

Table 2. Treatment information of trial series HU-1152 in 2011

Trtm No.	Treatment	Fungicide g a. i. /unit	Fungicide g a. i. /unit	Insecticide g a. i. /unit
1	Untreated check	-	-	Imidacloprid 60
2	Hymexazol 14	Fludioxonil 6	Fludioxonil 6	Imidacloprid 60
3	Hymexazol 18	Fludioxonil 6	Fludioxonil 6	Imidacloprid 60
4	Hymexazol 30	Fludioxonil 6	Fludioxonil 6	Imidacloprid 60

In late autumn 2010, soil samples were taken from a number of different locations in the south of Sweden. The soil samples were analyzed for infestation level of soil borne pathogens. Sugar beet seeds were sown in pots with test soil and then put in greenhouse under conditions favorable for infection. The evaluation of the risk of damping-off (soil index 0–100) is shown in table 3. Three trial locations were chosen on the basis of the result from the soil tests. The results of the analyses of soil type on each locality are shown in the appendix.

Table 3. The risk of infection in soils analyzed for disease severity index

Index	Risk	Evaluation
0 – 20	No risk	-
20 – 50	Low	Normally no problems
50 – 70	Medium	Growing sugar beets could be hazardous
70 – 100	High	Under favourable conditions, damping-off is highly likely

This trial series included three seed treatments that were compared in three field trials and one experiment performed under controlled green house conditions.

Plant number

The number of plants in each plot was counted four times during emergence (20%, 50%, maximum and finally after inter-row cultivation (full emergence)).

Plant vigour and row coverage

Plant vigour was assessed once in each trial using a scale from 0 to 100 where values below 50 indicate plants in severely reduced growth (50% yield reduction), 50–79 indicates somewhat reduced growth that probably will affect yield. Values between 80 and 90 indicates that the plants only show minor damage that seldom has any effect on yield and values above 90 are nearly healthy plants.

Disease severity index

Assessment of disease severity index was performed twice in early spring. The first assessment took place when the plants had just developed cotyledons and the second two weeks later. In the sample area 20 randomly chosen plants were dug up and each plant was assessed for symptoms of damping-off and classified into one of six groups: 0 (healthy), 10, 25, 50, 75 and 100% (roots totally rotten, plant dead). A disease index (DSI) was calculated using the following equation developed by Larsson and Gerhardson (1990):

$$DSI = ((n_0 * 0 + n_{20} * 20 + n_{50} * 50 + n_{75} * 75 + n_{100} * 100) / \text{plant number})$$

where n = number of beets in each class.

The results are shown in the appendix. Pieces of roots were put on agar plates and fungi were determined to genera and species based on morphology.

Harvest

After harvest, the beets in each plot were assessed for symptoms of chronic root rot using a scale from 1–7. The evaluation of chronic root rot was carried out at the tare house in Örtofta (Agri Provtvätt, Örtofta Sockerbruk, Nordic Sugar).

Table 4. Assessment of chronic symptoms of Aphanomyces root rot

Score	Evaluation
1	Big healthy roots without deformations
2	Big healthy roots, some with deformations
3	Roots of normal size, several with slight deformations
4	Roots with reduced size, most with slight deformations
5	Roots with reduced size, most with medium deformations
6	Roots with reduced size, most with severe deformations
7	Very small roots, all with severe deformations

Green house experiment

Soil was collected from a field naturally infested with soil borne fungi. The soil was divided between six pots per treatment and replication and put in a green house in a randomized complete block design. Ten seeds of the variety Rasta were sown in each pot. The pots were checked daily for any dying sugar beet plants. After four weeks all remaining plants were washed from soil and inspected for symptoms of root rot. A DSI was calculated according to Larsson and Gerhardson (1990).

Statistical analysis

All variables were analyzed using Proc GLM in SAS, SAS Institute Inc. All shown treatment means are adjusted means (LSmeans) unless otherwise stated. In case of no missing values in the data set, LSmeans are equal to the arithmetic means.

Results

The growing conditions during the spring 2011 were quite rainy but not warm enough for *A. cochlioides* to infect the sugar beet seedlings. The weather conditions in August and September were very rainy which led to late infections of *Aphanomyces* in many fields. Roots with typical symptoms of *Aphanomyces* root rot was observed in all three trials. See Appendix 1 for details in daily weather.

The soil tests showed that the DSI before drilling was 69 at Glumslöv, 59 at Skibaröds gård and 61 at Fjärestad. Table 5 shows the results of isolations that were done on plants from the soil test.

Table 5. Soil borne pathogens and fungi isolated from soil test

Location	% plants found with infected roots
Glumslöv	60% <i>Aphanomyces cochlioides</i> , 10% <i>Fusarium culmorum</i>
Skibaröds gård	27% <i>A. cochlioides</i>
Fjärestad	60% <i>A. cochlioides</i>

Plant number

When the plant number was counted the first time at 20% emergence, the seed treatments with 18 and 30 g hymexazol showed significantly slower emergence than in the untreated control and 14 g hymexazol (figure 2).

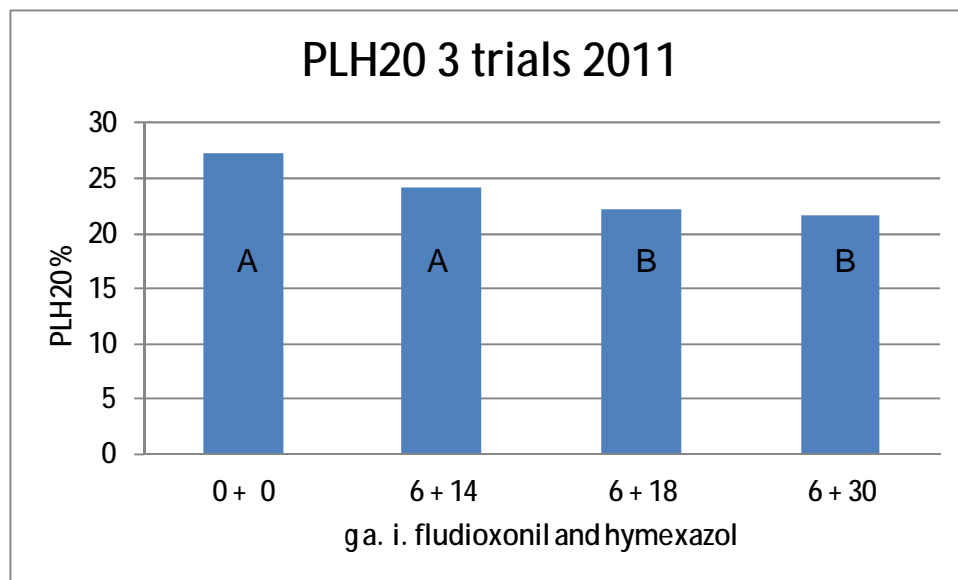


Figure 2. Plant number at 20% emergence, average over three trials 2011.
 Prob = 0,0105, LSD 5% = 3,5.

There were no significant differences in final plant number between the seed treatments in 2011. This is probably due to the very cold spring which resulted in low infestation levels of *A. cochliformis*.

The increase in plant number for 14, 18 and 30 g hymexazol in the trials displaying high infestation levels (14 trials 2004–2011) was 8,700; 7,600 and 9,800 compared to the control.

Disease severity

The cold and wet weather after emergence resulted in low infestations of *A. cochliformis*. There were no significant differences in DSI 1 and 2 between the seed treatments in 2011.

The average DSI 1 and 2 in 24 trials 2004–2011 showed that all seed treatments (14, 18 and 30 g hymexazol) had significantly lower DSI than the untreated control.

Green house experiment

The green house experiment 2011 (figure 3) showed that 14, 18 and 30 g hymexazol had significantly lower DSI (72, 71 and 70 respectively) than the untreated control (DSI = 88).

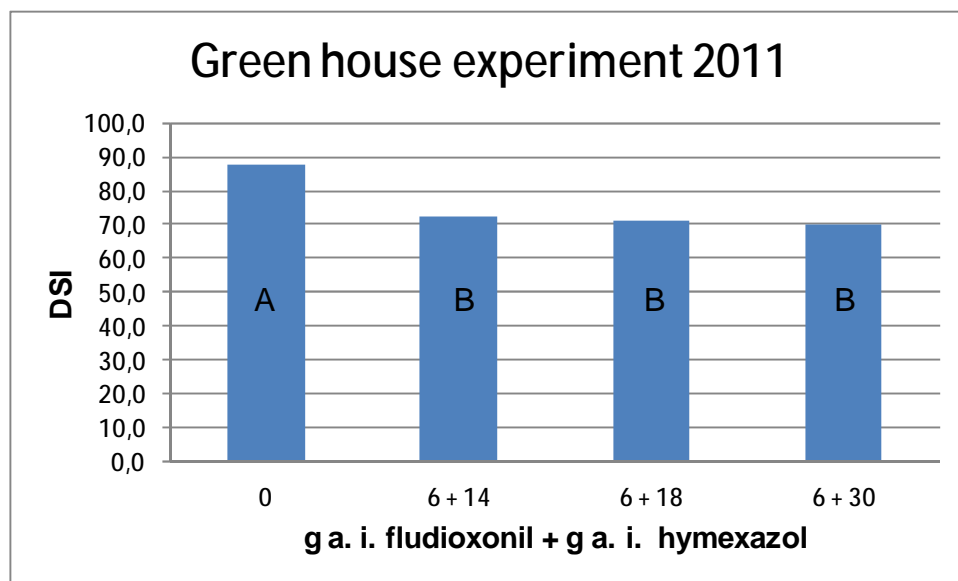


Figure 3. Average DSI in one green house experiments 2011 in 0, 14, 18 and 30 g hymexazol, Prob < 0.0001, LSD = 3.2.

The average DSI from seven green house trials showed that all treatments, 14, 18 and 30 g hymexazol, had significantly lower DSI than the untreated control, Prob < 0.0001, LSD = 2.8 (figure 4). There was no significant difference between the three doses of hymexazol.

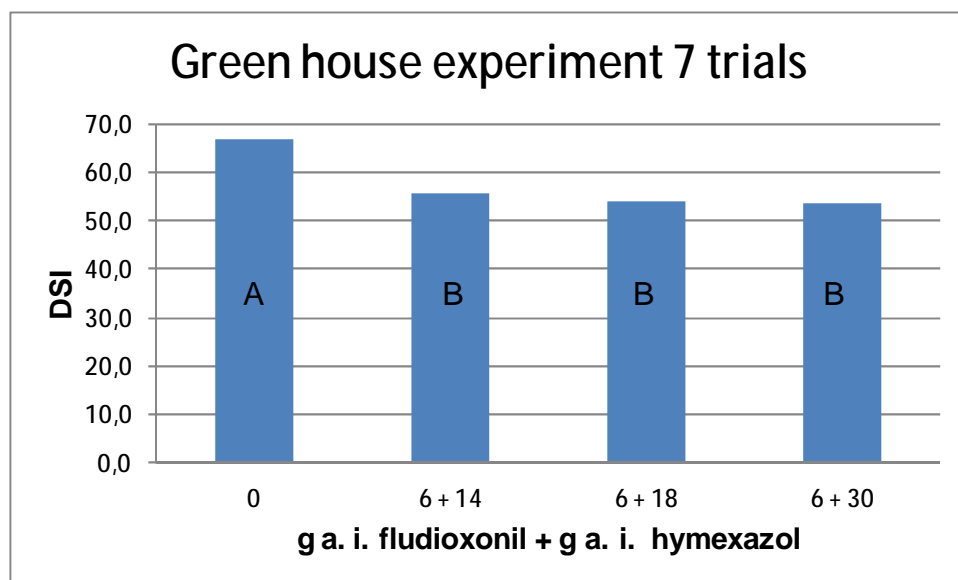
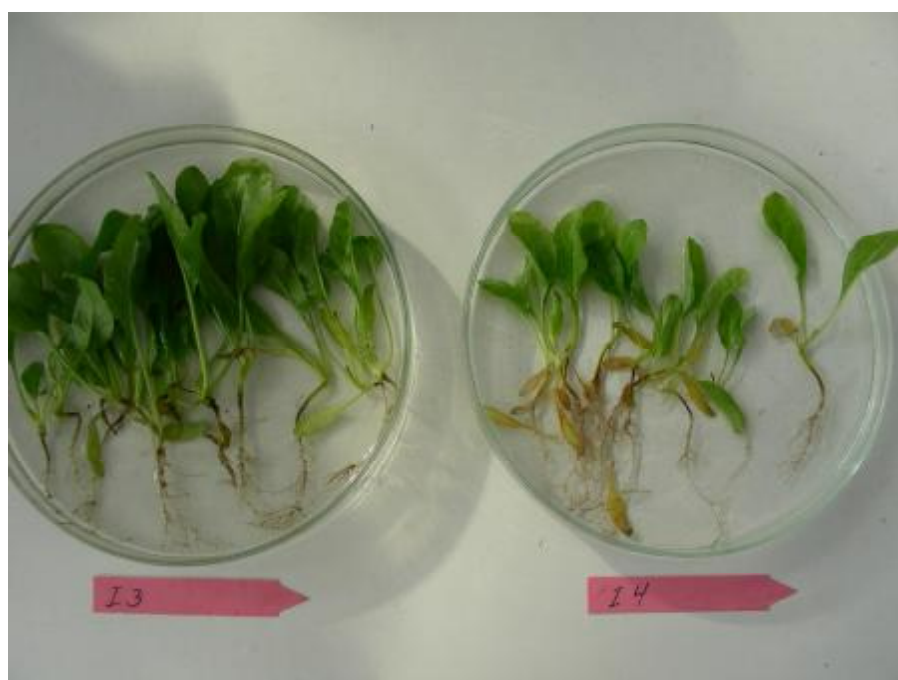


Figure 4. Average DSI in seven green house experiments 2004–2011 in 0, 14, 18 and 30 g hymexazol, Prob < 0.0001, LSD = 2.8.



Picture 1 and 2. Treatments 1 (untreated), 2 (14 g hymexazol), 3 (18 g) and 4 (30 g) in green house experiment 2011.



Picture 3 and 4. Four week old seedlings from treatments 1 (untreated), 2 (14 g hymexazol), 3 (18 g) and 4 (30 g) in green house experiment 2011.

Sugar yield 2011

The average yield in the three trials 2011 indicated an increase in sugar yield, though not significant, for the seed treatments 14, 18 and 30 g compared to the untreated control.

Sugar yield 2004–2011

In total, 24 trials have been analyzed since 2004. The results show that a seed treatment with hymexazol has a significant positive impact on all yield parameters; sugar content, sugar yield, amino-N and K+Na. There is also a tendency for increased root weight.

On average of trials with high infestation levels of *A. cochlioides* (14 trials in total), a significant positive impact on all yield parameters; increased root weight, sugar content, sugar yield, cleanness and lower amino-N and K+Na is shown. The increase in sugar yield is 5% corresponding to 500 kg sugar per hectare.

For the trials in which very low infestation levels were observed there were no significant differences in yield between the treatments.

Phytotoxicity

The seedlings in the treatment with 30 g hymexazol showed a slightly stunted growth after 4 weeks in the green house experiment (picture 4).

When the plant number was counted the first time in the field trials 2011 at 20% emergence, the seed treatments with 18 and 30 g hymexazol showed a significantly slower emergence than in the untreated control and 14 g hymexazol.

No stunting was observed in the field trials.

Chronic root rot 2011

Roots with typical symptoms of *Aphanomyces* root rot were observed on all trial locations.



Picture 5. Roots from treatment 1 (untreated) at Skibaröd 2011.



Picture 6. Roots from treatment 2 (14 g hymexazol) at Skibaröd 2011.

Conclusions

The growing conditions during the spring 2011 were quite rainy but not warm enough for *A. cochlioides* to infect the sugar beet seedlings. The weather conditions in August and September were very rainy and warm which led to late infections of *Aphanomyces* root rot in many fields and roots with typical symptoms were observed in all three trials.

When the plant number was counted the first time at 20% emergence, the seed treatments with 18 and 30 g hymexazol showed a significantly slower emergence than the untreated control and 14 g hymexazol.

The average over 14 trials 2004–2011, all with high infestation level of *A. cochlioides*, show a significant positive impact on all yield parameters; increased root weight, sugar content, sugar yield, cleanness and lower amino-N and K+Na. The increase in sugar yield is 5% corresponding to 500 kg sugar per hectare.

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Borgeby in December 2011

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Appendix 1

Väderstation	NR	DATUM	DAGNR	XTEMP	LTEMP	HTEMP	XHUM	LHUM	HHUM	NED	NEDA	XVH	XVR
Helsingborg	611	20110401	91	6,9	6,3	7,8	87	81	91	8	118,7	5	320
Helsingborg	611	20110402	92	10,4	7,7	13,8	88	78	94	0,2	118,9	3	50
Helsingborg	611	20110403	93	8,9	6,1	10,2	90	87	92	0,6	119,5	3	10
Helsingborg	611	20110404	94	7,1	3,8	11,5	82	68	93	0	119,5	2	310
Helsingborg	611	20110405	95	7	5,3	8,4	85	76	91	2	121,5	5	210
Helsingborg	611	20110406	96	9,7	7,9	10,9	90	87	92	0	121,5	5	240
Helsingborg	611	20110407	97	8,6	6,4	9,9	76	62	92	0,4	121,9	8	270
Helsingborg	611	20110408	98	7,4	5,7	10,3	79	72	84	0	121,9	9	290
Helsingborg	611	20110409	99	7,6	4,8	10,3	57	42	70	0	121,9	7	330
Helsingborg	611	20110410	100	8,3	4,6	13,3	65	50	78	0	121,9	3	310
Helsingborg	611	20110411	101	10	6,5	14,4	67	37	83	0	121,9	2	310
Helsingborg	611	20110412	102	5,2	4,1	6,3	89	85	91	10	131,9	5	360
Helsingborg	611	20110413	103	6,2	5,1	7,9	88	77	93	5,4	137,3	3	360
Helsingborg	611	20110414	104	5,6	3,5	7,5	87	79	91	0,1	137,4	3	320
Helsingborg	611	20110415	105	6,8	0,4	11,3	73	51	93	0	137,4	2	290
Helsingborg	611	20110416	106	8,1	5,7	10,1	81	68	87	0,3	137,7	3	240
Helsingborg	611	20110417	107	8,8	6,6	11,7	79	65	92	0	137,7	4	290
Helsingborg	611	20110418	108	9,6	6,6	13,4	73	58	86	0	137,7	2	300
Helsingborg	611	20110419	109	10,7	6,4	15,2	66	46	87	0	137,7	3	60
Helsingborg	611	20110420	110	10,9	6,8	15,8	61	52	66	0,6	138,3	3	30
Helsingborg	611	20110421	111	12	5,3	19,1	58	39	74	0	138,3	1	40
Helsingborg	611	20110422	112	14,2	7,1	20,2	49	33	68	0	138,3	2	80
Helsingborg	611	20110423	113	13,7	8,2	19,8	54	35	72	0	138,3	3	110
Helsingborg	611	20110424	114	13,9	7,5	19,9	55	35	73	0	138,3	2	70
Helsingborg	611	20110425	115	13,9	5,8	21,8	60	34	86	0	138,3	2	350
Helsingborg	611	20110426	116	12,9	5,4	19,5	65	40	88	0	138,3	2	350
Helsingborg	611	20110427	117	14,1	6,1	21,1	62	35	91	0	138,3	2	80
Helsingborg	611	20110428	118	13,8	7,7	20,4	47	33	68	0	138,3	3	80
Helsingborg	611	20110429	119	12,7	6,7	19,1	40	26	58	0	138,3	4	80
Helsingborg	611	20110430	120	11,5	5,7	17,6	49	22	68	0	138,3	3	30
Helsingborg	611	20110501	121	7,4	4,3	11,4	65	48	82	0	138,3	4	50

Helsingborg	611	20110502	122	5,5	0,3	9,9	56	32	76	0,3	138,6	4	60
Helsingborg	611	20110503	123	3,8	0,4	7,8	74	49	88	0,3	138,9	3	10
Helsingborg	611	20110504	124	5,2	-1,2	9,5	67	39	89	0	138,9	4	330
Helsingborg	611	20110505	125	8,6	3,7	12,1	72	57	87	2	140,9	3	260
Helsingborg	611	20110506	126	10,6	2,9	16,2	63	40	90	0	140,9	2	330
Helsingborg	611	20110507	127	13,1	7,5	19	41	25	63	0	140,9	4	120
Helsingborg	611	20110508	128	13,3	6,2	19,8	39	22	63	0	140,9	5	100
Helsingborg	611	20110509	129	15,7	9,5	21,4	58	37	85	0	140,9	4	120
Helsingborg	611	20110510	130	16	8,5	22,1	60	40	88	0	140,9	3	40
Helsingborg	611	20110511	131	15,1	10,8	21	72	53	91	0,2	141,1	3	350
Helsingborg	611	20110512	132	12,1	6,7	17	80	55	93	0	141,1	2	60
Helsingborg	611	20110513	133	12,3	9,8	15	72	53	92	1,2	142,3	3	280
Helsingborg	611	20110514	134	10,8	7,3	15,3	75	55	89	4	146,3	3	300
Helsingborg	611	20110515	135	10,4	7	13,1	77	58	91	2	148,3	3	240
Helsingborg	611	20110516	136	10,7	9	13,1	80	66	90	3,8	152,1	4	280
Helsingborg	611	20110517	137	12	10,8	14,1	81	64	93	10	162,1	5	250
Helsingborg	611	20110518	138	12,1	7,7	14,5	81	73	87	0	162,1	4	340
Helsingborg	611	20110519	139	13,7	9,6	16,1	72	49	86	0,1	162,2	3	270
Helsingborg	611	20110520	140	11,9	5,3	16,9	73	53	92	0	162,2	3	60
Helsingborg	611	20110521	141	13,3	7,7	17,7	70	52	90	0	162,2	3	300
Helsingborg	611	20110522	142	14,5	9,5	19,1	71	50	91	9	171,2	4	70
Helsingborg	611	20110523	143	13,8	10	17	72	54	90	2	173,2	5	310
Helsingborg	611	20110524	144	12,2	10,1	13,5	72	58	86	3	176,2	6	280
Helsingborg	611	20110525	145	11,6	9,4	13,9	62	50	73	0	176,2	6	260
Helsingborg	611	20110526	146	12,6	6	18,7	69	41	91	0	176,2	4	120
Helsingborg	611	20110527	147	12,1	10,5	14,5	84	70	89	7	183,2	5	260
Helsingborg	611	20110528	148	11,2	9,7	12,9	76	63	90	4	187,2	5	230
Helsingborg	611	20110529	149	12,3	10	14,5	82	66	93	8	195,2	5	210
Helsingborg	611	20110530	150	16	12,2	19,6	74	62	92	2	197,2	3	50
Helsingborg	611	20110531	151	17,4	12	22	75	65	89	0	197,2	5	50
Helsingborg	611	20110601	152	12,4	9,6	16	68	49	80	0,4	197,6	6	310
Helsingborg	611	20110602	153	14,7	8,3	19,3	76	63	89	0	197,6	3	280
Helsingborg	611	20110603	154	16,2	12,4	19,7	73	53	90	0	197,6	4	310
Helsingborg	611	20110604	155	17,1	9,1	21,9	67	47	91	0	197,6	2	20
Helsingborg	611	20110605	156	18,9	9,6	24,6	66	50	90	0	197,6	2	100

Helsingborg	611	20110606	157	21,6	16,7	26,2	69	57	79	0	197,6	4	110
Helsingborg	611	20110607	158	17,5	15,7	20,1	87	81	93	8	205,6	2	340
Helsingborg	611	20110608	159	19,1	14,9	23,4	81	64	92	0	205,6	2	60
Helsingborg	611	20110609	160	15,3	11,7	17,2	86	75	94	16	221,6	3	10
Helsingborg	611	20110610	161	14,1	12,6	16,4	70	62	79	0	221,6	4	300
Helsingborg	611	20110611	162	15	8,9	19,4	63	35	90	0	221,6	2	340
Helsingborg	611	20110612	163	14,4	9,7	18,4	71	56	88	0,5	222,1	2	330
Helsingborg	611	20110613	164	14,9	8	19,3	71	54	91	0	222,1	3	80
Helsingborg	611	20110614	165	15,7	14,3	16,7	77	63	93	2,1	224,2	4	280
Helsingborg	611	20110615	166	14,4	10,7	18,3	64	52	77	0	224,2	3	290
Helsingborg	611	20110616	167	15	8,3	19,6	73	52	91	0	224,2	3	10
Helsingborg	611	20110617	168	15,6	13	18,4	73	54	91	12,9	237,1	5	280
Helsingborg	611	20110618	169	14	10,7	16,7	83	71	90	0,9	238	2	60
Helsingborg	611	20110619	170	14	11,8	16,5	82	72	91	15	253	3	260
Helsingborg	611	20110620	171	14,1	12,7	16,5	83	66	93	24	277	4	270
Helsingborg	611	20110621	172	14,7	12,7	17,9	70	57	81	0	277	4	250
Helsingborg	611	20110622	173	17,5	14,1	20,8	75	58	91	0	277	4	290
Helsingborg	611	20110623	174	15,6	11,5	19,4	76	56	92	21	298	5	250
Helsingborg	611	20110624	175	14,2	12,4	16,6	67	53	89	1	299	5	260
Helsingborg	611	20110625	176	13,2	10,6	15,4	67	59	81	0	299	5	300
Helsingborg	611	20110626	177	14,3	6,6	18,5	74	56	92	0	299	1	330
Helsingborg	611	20110627	178	17,9	11,5	23,2	76	59	92	0	299	2	0
Helsingborg	611	20110628	179	17,9	12,9	21,8	68	50	91	0	299	3	10
Helsingborg	611	20110629	180	19,1	13,1	24,1	62	53	73	0	299	3	50
Helsingborg	611	20110630	181	17	12,3	22,4	78	62	90	0	299	3	20
Helsingborg	611	20110701	182	15,8	13,6	18,2	75	68	80	0	299	4	290
Helsingborg	611	20110702	183	19,1	14	26,7	86	70	93	15	314	5	340
Helsingborg	611	20110703	184	21,9	18,1	27,4	81	64	93	1	315	4	40
Helsingborg	611	20110704	185	19,1	17,3	21,2	87	79	93	1	316	2	0
Helsingborg	611	20110705	186	17,6	14	20,6	77	64	93	0	316	2	30
Helsingborg	611	20110706	187	17,7	11	22,8	77	63	91	0	316	2	10
Helsingborg	611	20110707	188	17,1	12,5	21,8	83	63	92	0,3	316,3	2	350
Helsingborg	611	20110708	189	15,7	12,7	17,7	92	90	94	9	325,3	2	140
Helsingborg	611	20110709	190	18,9	12,4	24,2	75	48	93	0	325,3	3	30
Helsingborg	611	20110710	191	17,9	15,4	21,8	77	60	92	2	327,3	2	310

Helsingborg	611	20110711	192	16,8	13,8	20,6	80	58	92	11	338,3	2	360
Helsingborg	611	20110712	193	16,4	12,5	19,4	70	55	84	0	338,3	3	320
Helsingborg	611	20110713	194	14,9	12,3	17	80	72	87	0,5	338,8	3	70
Helsingborg	611	20110714	195	15,5	14,4	16,1	86	72	92	16	354,8	5	340
Helsingborg	611	20110715	196	14,8	13,1	16,5	86	80	89	0,1	354,9	3	50
Helsingborg	611	20110716	197	16,6	13,7	19,8	76	65	91	1	355,9	3	340
Helsingborg	611	20110717	198	17	15,2	19,4	81	74	91	3	358,9	4	150
Helsingborg	611	20110718	199	17	15,2	19,2	82	65	93	3	361,9	4	170
Helsingborg	611	20110719	200	17	12,4	20,6	76	60	91	0	361,9	3	100
Helsingborg	611	20110720	201	17,1	11,9	22,3	78	63	92	0	361,9	3	30
Helsingborg	611	20110721	202	16,6	15	19,4	88	79	93	11	372,9	5	340
Helsingborg	611	20110722	203	18,7	15,7	22,7	90	77	94	16	388,9	3	30
Helsingborg	611	20110723	204	16,6	14	19,3	91	88	94	9	397,9	3	330
Helsingborg	611	20110724	205	12,9	12,3	13,4	90	83	92	11	408,9	6	80
Helsingborg	611	20110725	206	14,1	12,8	15,4	92	89	94	6	414,9	3	120
Helsingborg	611	20110726	207	16,6	12,7	20	80	56	94	0	414,9	2	340
Helsingborg	611	20110727	208	17,1	11,3	20,2	80	65	93	0	414,9	4	340
Helsingborg	611	20110728	209	17,3	16	19	86	79	91	0,8	415,7	5	320
Helsingborg	611	20110729	210	19,2	17,1	22,4	87	72	92	2,1	417,8	5	330
Helsingborg	611	20110730	211	19,2	15,7	22,3	84	72	92	1,1	418,9	4	10
Helsingborg	611	20110731	212	19,7	16,4	23	85	71	94	8	426,9	3	350
Helsingborg	611	20110801	213	19,1	16,1	22,1	86	78	94	2	428,9	2	310
Helsingborg	611	20110802	214	20,1	13,7	25,8	72	43	94	0	428,9	1	320
Helsingborg	611	20110803	215	19,2	14,4	24,3	66	43	90	0	428,9	2	120
Helsingborg	611	20110804	216	19,6	14,2	24,7	66	41	90	0	428,9	4	120
Helsingborg	611	20110805	217	19	17,7	21,1	84	71	91	0,1	429	4	130
Helsingborg	611	20110806	218	18,4	15,7	21,1	75	59	87	0	429	3	280
Helsingborg	611	20110807	219	18,1	16,1	20,5	79	54	94	13	442	4	300
Helsingborg	611	20110808	220	15,6	13,2	19	79	68	89	0,8	442,8	5	260
Helsingborg	611	20110809	221	16,1	13	18,3	78	67	88	2,3	445,1	4	250
Helsingborg	611	20110810	222	14,2	11,5	15,5	74	61	90	2,1	447,2	6	280
Helsingborg	611	20110811	223	12,3	11,3	13,5	89	84	91	19	466,2	2	10
Helsingborg	611	20110812	224	14,8	11,6	17,7	83	74	92	0,1	466,3	3	50
Helsingborg	611	20110813	225	15,5	10,6	18,3	76	60	88	0	466,3	4	80
Helsingborg	611	20110814	226	17	13,2	20,9	83	72	91	0	466,3	3	110

Helsingborg	611	20110815	227	17,1	15,4	19,4	85	70	93	27	493,3	4	320
Helsingborg	611	20110816	228	16	13,4	19,1	75	54	90	1	494,3	3	250
Helsingborg	611	20110817	229	16,1	13,4	18,1	83	77	92	4	498,3	3	20
Helsingborg	611	20110818	230	15,5	12,4	19,1	83	66	92	0	498,3	2	270
Helsingborg	611	20110819	231	14,7	13,5	15,5	85	75	92	0,7	499	5	20
Helsingborg	611	20110820	232	16,5	14,2	20,2	74	62	82	0,3	499,3	5	270
Helsingborg	611	20110821	233	17,4	12,5	21,9	74	50	93	0	499,3	4	80
Helsingborg	611	20110822	234	16,5	13,5	19,2	83	64	93	0,9	500,2	3	340
Helsingborg	611	20110823	235	15,9	10,2	19,9	79	60	94	0	500,2	1	340
Helsingborg	611	20110824	236	17,5	14,9	20,2	80	76	90	0,5	500,7	3	90
Helsingborg	611	20110825	237	17,9	15,2	20,2	89	84	93	0,3	501	2	90
Helsingborg	611	20110826	238	19,2	15,1	23,1	86	76	95	0	501	4	120
Helsingborg	611	20110827	239	17,5	15,2	20,4	90	86	92	14	515	3	340
Helsingborg	611	20110828	240	15,3	13,2	17,6	81	66	91	13	528	6	210
Helsingborg	611	20110829	241	13,9	13	14,9	82	68	91	1,2	529,2	6	210
Helsingborg	611	20110830	242	13,9	13,1	15,4	81	68	89	6	535,2	6	250
Helsingborg	611	20110831	243	13,5	11,5	14,9	84	75	90	2	537,2	3	240
Helsingborg	611	20110901	244	14,8	12	17,3	77	66	86	0	537,2	3	260
Helsingborg	611	20110902	245	14,2	10,3	17,1	73	55	86	0,3	537,5	2	320
Helsingborg	611	20110903	246	14,4	8,9	19,4	77	64	88	0	537,5	3	130
Helsingborg	611	20110904	247	19,1	14	25,2	75	53	89	1	538,5	3	130
Helsingborg	611	20110905	248	16,8	15	18,9	87	75	93	20,4	558,9	3	20
Helsingborg	611	20110906	249	15	13,2	16,8	82	74	90	0	558,9	6	290
Helsingborg	611	20110907	250	14	12,4	15,8	82	74	91	11	569,9	6	230
Helsingborg	611	20110908	251	13	11,8	15	81	69	88	4	573,9	4	250
Helsingborg	611	20110909	252	13,9	12,2	16,5	76	62	84	0,3	574,2	4	260
Helsingborg	611	20110910	253	15,5	12,8	18	87	81	92	0	574,2	3	50
Helsingborg	611	20110911	254	17,5	15,6	20,9	88	79	93	0,1	574,3	3	80
Helsingborg	611	20110912	255	15,9	14,7	17,5	89	77	94	11,5	585,8	5	260
Helsingborg	611	20110913	256	15,5	13	16,4	71	62	80	1	586,8	7	230
Helsingborg	611	20110914	257	13,5	11,2	16,5	80	72	91	4	590,8	5	240
Helsingborg	611	20110915	258	12,7	10,2	15,3	77	63	89	5	595,8	5	260
Helsingborg	611	20110916	259	12,4	7,6	15,6	79	64	91	0	595,8	2	340
Helsingborg	611	20110917	260	10,9	7,2	13,2	83	71	92	0,1	595,9	3	120
Helsingborg	611	20110918	261	13,8	12	16	89	82	93	0,4	596,3	3	80

Helsingborg	611	20110919	262	13,2	11,4	15,2	86	76	93	4	600,3	5	290
Helsingborg	611	20110920	263	13,8	12	15,8	88	80	91	0,9	601,2	5	250
Helsingborg	611	20110921	264	14,5	13,6	14,9	90	85	92	0,5	601,7	4	200
Helsingborg	611	20110922	265	13,7	11,7	16,1	78	58	90	3	604,7	5	240
Helsingborg	611	20110923	266	12,3	11	14,5	82	70	87	1,7	606,4	4	260
Helsingborg	611	20110924	267	12,8	10,8	16	87	76	93	0,3	606,7	2	290
Helsingborg	611	20110925	268	13,3	10	18,1	83	62	94	0	606,7	2	140
Helsingborg	611	20110926	269	14,9	10,5	18,9	85	75	94	0	606,7	3	10
Helsingborg	611	20110927	270	12,7	10,8	15,3	83	73	88	0	606,7	3	310
Helsingborg	611	20110928	271	13,7	10,4	16,2	87	80	92	0	606,7	3	270
Helsingborg	611	20110929	272	13,9	10,6	18,3	89	75	94	0	606,7	2	310
Helsingborg	611	20110930	273	14	8,8	21,4	85	65	94	0	606,7	1	10
Helsingborg	611	20111001	274	13,9	8,3	21,7	88	68	94	0	606,7	1	350
Helsingborg	611	20111002	275	12,5	10	16,2	93	85	96	0	606,7	3	80
Helsingborg	611	20111003	276	16,1	14,3	18,2	87	79	93	0,6	607,3	3	220
Helsingborg	611	20111004	277	15	13,1	16,2	76	64	91	0	607,3	5	290
Helsingborg	611	20111005	278	13,8	12,4	15,3	78	67	86	0,1	607,4	5	240
Helsingborg	611	20111006	279	12,8	8,9	15,5	85	76	91	7,9	615,3	6	230
Helsingborg	611	20111007	280	10,7	8,9	13,5	77	63	84	0,7	616	6	240
Helsingborg	611	20111008	281	9,9	6,2	11,3	75	68	86	0,1	616,1	5	330
Helsingborg	611	20111009	282	7,5	2,5	11,3	82	64	93	0,5	616,6	5	270
Helsingborg	611	20111010	283	11,2	9,3	12,6	89	80	93	15	631,6	4	260
Helsingborg	611	20111011	284	10,5	9,2	12,3	77	69	86	3	634,6	5	270
Helsingborg	611	20111012	285	10,7	8,2	13,2	71	63	79	0	634,6	6	310
Helsingborg	611	20111013	286	6,8	4,1	11	73	60	83	0	634,6	4	350
Helsingborg	611	20111014	287	4,6	-0,8	9,8	75	54	90	0	634,6	1	10
Helsingborg	611	20111015	288	5	0,7	10,4	82	61	92	0	634,6	2	120
Helsingborg	611	20111016	289	6,3	2,4	10,6	84	65	94	0	634,6	3	160
Helsingborg	611	20111017	290	7,7	4	11,3	89	81	93	0	634,6	3	160
Helsingborg	611	20111018	291	8,9	7,3	9,6	88	80	93	9	643,6	6	20
Helsingborg	611	20111019	292	9,3	7,8	11,8	74	64	85	0,8	644,4	7	230
Helsingborg	611	20111020	293	7,6	6	9,3	72	68	79	0	644,4	5	260
Helsingborg	611	20111021	294	8,3	6,2	10,2	78	67	86	1	645,4	4	240
Helsingborg	611	20111022	295	8,7	5,6	11,1	80	73	87	0	645,4	5	330
Helsingborg	611	20111023	296	6,6	4,3	10,1	82	66	90	0	645,4	4	150

Helsingborg	611	20111024	297	7	5,6	9,3	84	75	88	0	645,4	4	130
Helsingborg	611	20111025	298	8,9	7,9	12	77	63	83	0	645,4	5	110
Helsingborg	611	20111026	299	8,5	7,4	9	88	84	93	0,6	646	5	130
Helsingborg	611	20111027	300	8,4	6,7	9,3	94	89	95	0	646	2	90
Helsingborg	611	20111028	301	9,5	7,3	10,4	91	89	94	0	646	3	10
Helsingborg	611	20111029	302	6,7	5,4	8,5	95	94	96	0	646	2	100
Helsingborg	611	20111030	303	10,6	9,8	12,2	94	91	96	1	647	4	290
Helsingborg	611	20111031	304	11,3	10,1	12,5	94	91	95	0,1	647,1	2	260

Väderstation	NR	DATUM	DAGNR	XTEMP	LTEMP	HTEMP	XHUM	LHUM	HHUM	NED	NEDA	XVH	XVR
Hörby	623	20110401	91	6,1	3,8	7,5	92	80	98	12,7	140,5	4	310
Hörby	623	20110402	92	9,2	6,2	13,2	96	84	99	0,2	140,7	2	110
Hörby	623	20110403	93	9,6	7,3	12,1	95	88	99	0,6	141,3	3	40
Hörby	623	20110404	94	7,3	3,7	12,5	85	61	99	0	141,3	2	310
Hörby	623	20110405	95	6,1	3,3	9,1	90	82	99	3	144,3	4	250
Hörby	623	20110406	96	9	7	10,7	97	93	99	0,8	145,1	4	250
Hörby	623	20110407	97	8,4	5,9	10	78	58	99	1,2	146,3	7	280
Hörby	623	20110408	98	7,3	5,2	10,8	77	63	91	0,1	146,4	7	300
Hörby	623	20110409	99	7,6	2,9	12,2	51	36	73	0	146,4	3	320
Hörby	623	20110410	100	9,2	-0,1	17,3	60	44	80	0	146,4	2	310
Hörby	623	20110411	101	10,1	6,3	15,2	70	51	83	0	146,4	2	300
Hörby	623	20110412	102	4,8	2	7,1	92	84	97	9	155,4	2	340
Hörby	623	20110413	103	5,8	4,1	8,3	86	67	99	0,5	155,9	2	20
Hörby	623	20110414	104	6,7	2,8	10,9	81	63	95	0	155,9	2	330
Hörby	623	20110415	105	6,3	-1,6	12,7	78	52	98	0	155,9	2	310
Hörby	623	20110416	106	7,5	3,5	9,2	83	67	90	0	155,9	2	270
Hörby	623	20110417	107	8,9	6,8	12,3	80	61	96	0	155,9	3	280
Hörby	623	20110418	108	10,5	4,4	17,2	74	53	95	0	155,9	2	290
Hörby	623	20110419	109	9,7	5	15,6	63	37	89	0	155,9	3	120
Hörby	623	20110420	110	11,6	7,7	17,3	52	48	57	0	155,9	2	100
Hörby	623	20110421	111	12,8	6	19,4	49	35	67	0	155,9	1	60
Hörby	623	20110422	112	12,8	4,8	18,8	53	35	75	0	155,9	3	90
Hörby	623	20110423	113	11,4	7,1	17,9	62	41	79	0	155,9	4	90
Hörby	623	20110424	114	12,4	6,3	18,8	60	39	82	0	155,9	3	80

Hörby	623	20110425	115	13,1	3,8	20,8	57	30	89	0	155,9	1	40
Hörby	623	20110426	116	14,1	5,2	21,6	54	30	81	0	155,9	2	30
Hörby	623	20110427	117	12,5	6,4	18,4	59	38	77	0	155,9	3	80
Hörby	623	20110428	118	11,8	6,7	16,5	47	32	75	0	155,9	5	80
Hörby	623	20110429	119	10,6	5,7	16,8	44	32	61	0	155,9	4	70
Hörby	623	20110430	120	10	4,2	15,5	48	28	67	0	155,9	3	70
Hörby	623	20110501	121	7	2,7	11,2	61	39	94	0,7	156,6	3	60
Hörby	623	20110502	122	3,5	-0,5	7,7	70	41	97	2,6	159,2	3	60
Hörby	623	20110503	123	2,7	-0,6	7,7	81	43	98	3,2	162,4	1	0
Hörby	623	20110504	124	3,1	-1,4	8,1	78	53	98	0,1	162,5	2	340
Hörby	623	20110505	125	7,2	0,2	11	75	59	96	0	162,5	2	300
Hörby	623	20110506	126	10,4	1	17	59	31	95	0	162,5	2	340
Hörby	623	20110507	127	11,3	4,4	17,5	46	28	82	0	162,5	3	110
Hörby	623	20110508	128	11,5	5,1	17,5	51	25	69	0	162,5	5	100
Hörby	623	20110509	129	13,7	7,3	19,5	65	39	96	0	162,5	3	100
Hörby	623	20110510	130	15,9	8,2	22,8	60	32	92	0	162,5	3	120
Hörby	623	20110511	131	16,6	9,8	23,7	68	42	95	0,9	163,4	3	60
Hörby	623	20110512	132	13,3	9,5	17,9	76	48	99	0,2	163,6	1	300
Hörby	623	20110513	133	11,7	8	14,3	76	60	97	1	164,6	2	290
Hörby	623	20110514	134	10,5	5,8	15,5	77	52	95	7	171,6	2	340
Hörby	623	20110515	135	9,5	5,3	12,5	81	60	98	2,3	173,9	1	290
Hörby	623	20110516	136	9,8	7,9	11,6	85	71	97	3,1	177	3	280
Hörby	623	20110517	137	11,5	10,3	13,6	88	70	98	11	188	3	260
Hörby	623	20110518	138	12,1	7,8	14,7	78	62	84	0	188	3	320
Hörby	623	20110519	139	13,2	8,1	16,2	76	52	90	0	188	2	310
Hörby	623	20110520	140	12,1	3,9	16,9	72	53	97	0	188	2	310
Hörby	623	20110521	141	12,8	5,3	18,1	70	43	97	0	188	2	320
Hörby	623	20110522	142	14,4	8,5	20,1	69	50	94	9	197	3	110
Hörby	623	20110523	143	13,3	9,7	16,6	73	56	93	3	200	3	280
Hörby	623	20110524	144	11,4	8,5	13,9	75	59	87	3	203	3	320
Hörby	623	20110525	145	10,4	7,3	13,4	70	56	86	0,4	203,4	4	280
Hörby	623	20110526	146	11,9	4,4	18,1	69	44	92	0	203,4	3	100
Hörby	623	20110527	147	11,9	9,3	13,8	82	68	92	3	206,4	4	220
Hörby	623	20110528	148	11	8,6	13,9	76	56	94	1	207,4	3	230
Hörby	623	20110529	149	11,9	10,4	14,4	83	59	96	6,5	213,9	3	230

Hörby	623	20110530	150	16,4	12,7	20,5	74	56	96	1	214,9	3	340
Hörby	623	20110531	151	18,5	13,6	24,1	72	61	89	0	214,9	3	60
Hörby	623	20110601	152	12,7	8,7	15,9	68	49	95	1	215,9	3	300
Hörby	623	20110602	153	13,7	5,1	18,7	75	59	95	0	215,9	2	310
Hörby	623	20110603	154	17,3	9,6	23,9	71	40	98	0	215,9	2	310
Hörby	623	20110604	155	18,4	12,3	23,4	66	46	90	0	215,9	1	20
Hörby	623	20110605	156	17,4	9,6	23	69	48	94	0	215,9	3	80
Hörby	623	20110606	157	21	14,4	27	68	49	87	0	215,9	4	100
Hörby	623	20110607	158	19,6	16,1	24,5	82	61	95	0,2	216,1	1	290
Hörby	623	20110608	159	19,2	16,1	23,3	80	63	97	0	216,1	2	80
Hörby	623	20110609	160	14,9	12,9	16,8	92	80	99	4	220,1	3	320
Hörby	623	20110610	161	14	10,7	16,4	72	55	90	0	220,1	3	300
Hörby	623	20110611	162	15	9,2	20	65	38	93	0	220,1	2	300
Hörby	623	20110612	163	14,5	9,7	17,9	70	49	90	0	220,1	2	300
Hörby	623	20110613	164	14,9	6,1	20,3	62	42	94	0	220,1	2	20
Hörby	623	20110614	165	15,4	11,9	18,2	79	56	97	2,4	222,5	3	310
Hörby	623	20110615	166	13,7	10,3	18,1	67	48	82	0	222,5	3	300
Hörby	623	20110616	167	15	7,9	20,4	68	45	95	0	222,5	2	60
Hörby	623	20110617	168	15,2	13,2	17	79	58	97	7,3	229,8	3	270
Hörby	623	20110618	169	14,1	10,3	17,6	82	60	95	0,1	229,9	3	80
Hörby	623	20110619	170	13,7	11,7	16,3	82	67	93	2,2	232,1	2	250
Hörby	623	20110620	171	12,9	9,8	15,1	89	74	98	11	243,1	3	300
Hörby	623	20110621	172	14,2	11,7	16,9	77	63	95	0,5	243,6	3	250
Hörby	623	20110622	173	17	13,3	21,1	76	52	93	0	243,6	2	300
Hörby	623	20110623	174	14,6	11,1	17,6	84	69	98	27,1	270,7	4	250
Hörby	623	20110624	175	13,8	11,5	16,1	71	54	94	0,1	270,8	3	260
Hörby	623	20110625	176	12,3	9,2	14,9	71	58	88	0	270,8	3	290
Hörby	623	20110626	177	13,9	6	19,4	73	53	97	0	270,8	2	320
Hörby	623	20110627	178	16,8	8,6	23,9	76	55	97	0	270,8	1	20
Hörby	623	20110628	179	19,1	11,7	24,5	59	33	95	0	270,8	2	110
Hörby	623	20110629	180	19,7	13,9	24,8	57	42	82	0	270,8	3	100
Hörby	623	20110630	181	18,1	12,6	24,6	75	48	93	0	270,8	3	350
Hörby	623	20110701	182	15,4	13	19	78	59	90	0,4	271,2	3	290
Hörby	623	20110702	183	17,8	13,1	24,1	93	77	99	30	301,2	2	330
Hörby	623	20110703	184	20,8	18,4	23,1	82	69	94	0,1	301,3	3	40

Hörby	623	20110704	185	18,8	16,6	22,1	87	72	97	0,4	301,7	1	40
Hörby	623	20110705	186	17,2	12,1	22,1	75	55	97	0	301,7	2	30
Hörby	623	20110706	187	17,6	10,8	22,6	76	52	96	0	301,7	2	70
Hörby	623	20110707	188	17,6	11,7	21,7	82	64	97	0	301,7	1	330
Hörby	623	20110708	189	16	12,8	17,8	93	85	98	3	304,7	2	130
Hörby	623	20110709	190	18,7	11	23,8	72	49	99	0	304,7	2	110
Hörby	623	20110710	191	17,8	12,7	21,6	74	55	96	0,1	304,8	2	310
Hörby	623	20110711	192	16,6	13,2	20	79	61	92	0,4	305,2	1	20
Hörby	623	20110712	193	15,6	11,1	20	74	51	97	0	305,2	2	310
Hörby	623	20110713	194	14,2	11,9	16,7	81	67	93	5	310,2	3	70
Hörby	623	20110714	195	15	13,1	16,2	91	81	96	15	325,2	4	350
Hörby	623	20110715	196	14	12,5	15,2	90	80	94	0,5	325,7	2	320
Hörby	623	20110716	197	16,2	13	20,6	76	54	96	0,4	326,1	2	280
Hörby	623	20110717	198	17,5	14,6	19,5	77	66	94	0,3	326,4	3	140
Hörby	623	20110718	199	16,6	14,1	19,6	81	63	97	19	345,4	3	0
Hörby	623	20110719	200	17,9	12,6	21,6	70	52	92	0	345,4	3	110
Hörby	623	20110720	201	16,2	11,2	20,3	82	59	94	0	345,4	2	20
Hörby	623	20110721	202	16,2	15	17,4	90	78	97	5	350,4	3	350
Hörby	623	20110722	203	18	15,5	20,1	93	86	98	30	380,4	3	60
Hörby	623	20110723	204	16,7	12,9	20,6	91	76	97	17	397,4	3	350
Hörby	623	20110724	205	13,1	12,1	14,3	85	75	89	1,2	398,6	4	90
Hörby	623	20110725	206	14	12,9	15	90	86	97	0,4	399	3	160
Hörby	623	20110726	207	16,2	12,4	21,2	84	60	99	0	399	1	330
Hörby	623	20110727	208	17	10,1	23,6	78	51	98	0	399	1	340
Hörby	623	20110728	209	16,1	15,2	16,7	93	85	97	9	408	2	310
Hörby	623	20110729	210	18,5	16,2	20,8	94	87	98	6,3	414,3	2	330
Hörby	623	20110730	211	18	16,6	20,1	87	80	97	2,2	416,5	2	20
Hörby	623	20110731	212	19,2	15,4	23,9	85	62	99	1,1	417,6	2	50
Hörby	623	20110801	213	18,8	13,3	23,3	79	52	99	7	424,6	1	40
Hörby	623	20110802	214	19,4	12,5	24,4	73	53	97	0	424,6	1	330
Hörby	623	20110803	215	18,7	14,6	23,6	66	38	90	0	424,6	2	110
Hörby	623	20110804	216	18,8	14,1	23,7	71	51	93	0	424,6	4	110
Hörby	623	20110805	217	18,9	17,4	21,6	84	76	91	0,5	425,1	3	80
Hörby	623	20110806	218	18,1	13,5	21,3	77	55	96	0	425,1	2	300
Hörby	623	20110807	219	17,7	14,5	19,8	84	60	98	26	451,1	3	330

Hörby	623	20110808	220	15,3	11,6	19,9	80	54	96	5	456,1	2	340
Hörby	623	20110809	221	14,3	11,9	16,2	89	79	97	5	461,1	2	240
Hörby	623	20110810	222	13,4	11,5	15,2	79	60	90	2,2	463,3	4	270
Hörby	623	20110811	223	11,6	10,6	13	94	91	96	7,3	470,6	2	10
Hörby	623	20110812	224	14,2	11	16,8	84	74	96	5	475,6	3	70
Hörby	623	20110813	225	14,7	11,5	17,1	83	71	93	0	475,6	3	70
Hörby	623	20110814	226	16,3	12,6	20,6	88	71	97	0	475,6	3	90
Hörby	623	20110815	227	16,8	13,6	18,8	89	72	98	12,2	487,8	3	340
Hörby	623	20110816	228	15,2	12,3	18,5	77	56	97	0,1	487,9	2	290
Hörby	623	20110817	229	16,4	13,3	20,4	80	60	91	1	488,9	2	10
Hörby	623	20110818	230	14,8	9,8	19,3	83	60	98	0	488,9	1	330
Hörby	623	20110819	231	14,1	12,7	16,7	93	88	95	3,1	492	4	360
Hörby	623	20110820	232	15,8	13,6	19	75	60	88	0,9	492,9	4	290
Hörby	623	20110821	233	17	11,4	22	75	48	97	0	492,9	2	90
Hörby	623	20110822	234	16,3	12,5	19,6	85	60	98	2	494,9	2	320
Hörby	623	20110823	235	15,2	8,9	20,4	79	55	98	0	494,9	2	30
Hörby	623	20110824	236	17	14,4	19,8	85	79	97	0,1	495	3	100
Hörby	623	20110825	237	16,8	14,1	19,2	95	88	98	6,6	501,6	2	70
Hörby	623	20110826	238	17,7	14,9	19,9	93	85	99	0	501,6	4	110
Hörby	623	20110827	239	17,9	14,5	21,1	93	86	97	2	503,6	3	0
Hörby	623	20110828	240	14	12,4	16	85	71	97	17	520,6	3	290
Hörby	623	20110829	241	12,9	11,4	15	87	73	94	2,3	522,9	3	260
Hörby	623	20110830	242	13,1	12,2	15,2	86	65	96	7	529,9	3	260
Hörby	623	20110831	243	13	10,1	14,8	85	70	96	7,3	537,2	2	240
Hörby	623	20110901	244	14,1	12,1	17,2	83	64	96	0	537,2	2	290
Hörby	623	20110902	245	13,8	9,7	17,6	81	60	95	0	537,2	2	300
Hörby	623	20110903	246	13,6	6,8	19,4	79	59	97	0	537,2	2	100
Hörby	623	20110904	247	19,1	14,8	24,5	73	52	89	0	537,2	3	120
Hörby	623	20110905	248	16,7	14,7	18,8	86	68	98	2	539,2	2	10
Hörby	623	20110906	249	14,3	12	17,6	82	63	92	0,1	539,3	3	250
Hörby	623	20110907	250	13,4	11,3	15	86	76	96	14	553,3	4	230
Hörby	623	20110908	251	11,6	9,5	14,1	89	77	97	2	555,3	2	270
Hörby	623	20110909	252	12,2	9,7	16,2	84	62	97	0,3	555,6	2	300
Hörby	623	20110910	253	14,5	8,5	18,6	88	74	97	0	555,6	1	350
Hörby	623	20110911	254	18,1	15,7	22,3	87	77	98	0	555,6	2	10

Hörby	623	20110912	255	15,8	14,5	17,7	89	73	98	6	561,6	3	230
Hörby	623	20110913	256	15,1	12,7	16,5	73	63	88	3	564,6	5	250
Hörby	623	20110914	257	13,1	11,6	15,5	83	78	87	1	565,6	4	250
Hörby	623	20110915	258	11,7	9,6	13,7	81	72	92	2,1	567,7	4	270
Hörby	623	20110916	259	12	6,7	17	77	50	96	0	567,7	2	300
Hörby	623	20110917	260	10,5	6,6	13,2	83	68	97	0	567,7	3	110
Hörby	623	20110918	261	13,2	11	15,4	95	87	98	2	569,7	3	70
Hörby	623	20110919	262	12,6	10,3	14,7	87	70	98	6	575,7	2	250
Hörby	623	20110920	263	13,5	11,2	16	88	73	95	0,2	575,9	3	230
Hörby	623	20110921	264	14,4	13,4	15,8	90	80	93	0	575,9	3	210
Hörby	623	20110922	265	13,4	10,8	15,6	79	57	94	0,7	576,6	3	240
Hörby	623	20110923	266	11,1	9,5	14,5	88	73	93	4	580,6	2	260
Hörby	623	20110924	267	12,5	10,3	16,3	89	71	97	0	580,6	1	290
Hörby	623	20110925	268	13,3	9,2	18,8	83	61	99	0	580,6	2	120
Hörby	623	20110926	269	15,2	10,3	19,8	81	62	98	0	580,6	2	320
Hörby	623	20110927	270	11,9	7,8	15,5	85	62	96	0,1	580,7	2	310
Hörby	623	20110928	271	12,6	8,1	16,4	89	71	99	0	580,7	2	300
Hörby	623	20110929	272	14,8	10,4	20	88	65	99	0	580,7	2	300
Hörby	623	20110930	273	13,9	8,7	21	89	68	99	0	580,7	1	320
Hörby	623	20111001	274	13,7	8,4	22,1	89	60	99	0	580,7	1	340
Hörby	623	20111002	275	12,6	9,9	18,1	94	78	99	0	580,7	1	90
Hörby	623	20111003	276	15,5	11,9	19	90	75	99	0,5	581,2	2	280
Hörby	623	20111004	277	14,5	12,1	16,2	78	60	93	0	581,2	3	300
Hörby	623	20111005	278	13,1	11,2	14,7	82	73	88	0,1	581,3	4	250
Hörby	623	20111006	279	12,4	7,9	14,8	90	86	96	11	592,3	4	230
Hörby	623	20111007	280	8,9	7,5	11,5	86	74	91	1	593,3	3	240
Hörby	623	20111008	281	8,3	4,7	11	83	70	92	0	593,3	2	330
Hörby	623	20111009	282	6,5	0,7	11,2	84	61	99	0	593,3	2	300
Hörby	623	20111010	283	10,4	8,4	12,2	96	91	99	17	610,3	3	260
Hörby	623	20111011	284	9,8	7,7	12	81	70	93	4	614,3	3	270
Hörby	623	20111012	285	7,5	-0,1	12,7	76	56	96	0	614,3	4	300
Hörby	623	20111013	286	4,7	0	9,6	78	47	98	0	614,3	2	350
Hörby	623	20111014	287	2,6	-2	8,9	81	51	96	0	614,3	1	10
Hörby	623	20111015	288	3,5	-1,4	10,8	85	59	97	0	614,3	1	0
Hörby	623	20111016	289	5,7	1,1	11	84	59	99	0	614,3	2	110

Hörby	623	20111017	290	7,2	4,1	11,5	89	73	97	0	614,3	2	40
Hörby	623	20111018	291	7,7	5,7	8,9	92	87	96	9	623,3	4	10
Hörby	623	20111019	292	8,1	6,7	10,6	81	71	89	0,1	623,4	5	230
Hörby	623	20111020	293	5,8	3,9	7,8	82	73	91	0,9	624,3	3	260
Hörby	623	20111021	294	6,9	4,2	8,6	86	71	95	0,9	625,2	2	240
Hörby	623	20111022	295	7,5	4,7	11,1	82	62	95	0	625,2	2	290
Hörby	623	20111023	296	6,3	4,1	9,6	85	67	95	0	625,2	3	150
Hörby	623	20111024	297	6,7	5,5	8,2	87	81	93	0	625,2	4	120
Hörby	623	20111025	298	8,5	7,8	10,2	81	75	85	0	625,2	5	100
Hörby	623	20111026	299	8,2	7,5	8,8	92	84	98	7	632,2	4	120
Hörby	623	20111027	300	7,7	5,1	9,2	99	97	100	0,8	633	1	120
Hörby	623	20111028	301	9,2	8,2	9,9	95	90	99	0	633	2	10
Hörby	623	20111029	302	7,4	6,1	9,1	98	94	100	0	633	1	0
Hörby	623	20111030	303	10,7	9,4	12,4	97	87	100	0,2	633,2	2	340
Hörby	623	20111031	304	11	9,8	12,2	96	93	99	0,1	633,3	2	290