

# **ARC-Small Grain False Armyworm moth numbers**

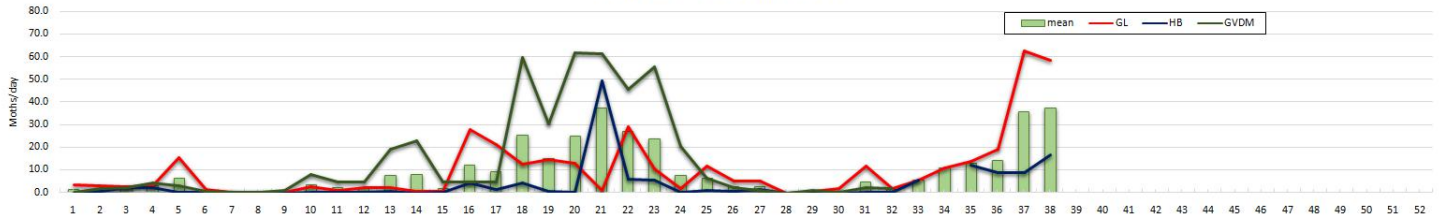
Skuinsdrift, Koedoeskop and Beestekraal  
Week 38



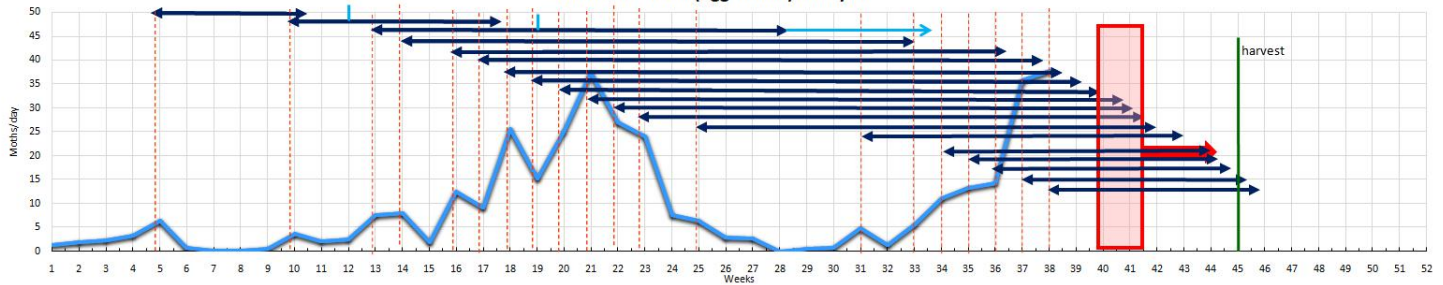
**Skuinsdrift moth traps**

- First graph indicates the original data recieved from the farmers.
- The second graph indicates the total life cycle length according to the model calculations. The dark blue arrows indicate the life cycles as forecasted. A huge peak is rising at the moment a bit earlier than forecasted because the earlier moth cycles developed longer than predicted because to cold conditions. These moths together with newly emerging moths will give rise to larvae in the last weeks before harvest and into harvest time, which is potentially dangerous - **SO BE CAREFULL AND WATCH OUT.**
- Light blue arrows indicate cycle length according to current temperatures.
- Table indicate larvae to be present until mid-October

**Skuinsdrift moth numbers 2020**



**Skuinsdrift: Total (egg - moth) life cycle**



Skuinsdrift 2020 Larvae										
Week	Mean temperature				Real temperature				Difference	
	Start	Week	Larvae en	Days	Week	Start	Week	Larvae en		Days
5	27-Jan	8	20-Feb	25	5	27-Jan	8	21-Feb	26	1
10	01-Mar	13	26-Mar	26	10	01-Mar	14	30-Mar	30	4
13	23-Mar	17	24-Mar	33	13	23-Mar	18	26-Apr	35	2
14	30-Mar	19	06-May	38	14	30-Mar	19	08-May	40	2
16	12-Apr	22	28-May	47	16	12-Apr	23	06-Jun	56	9
17	19-Apr	25	15-Jun	58	17	19-Apr	28	08-Jul	81	23
18	26-Apr	28	09-Jul	75	18	26-Apr	32	04-Aug	101	26
19	03-May	31	28-Jul	77	19	03-May	33	13-Aug	103	26
20	10-May	32	08-Aug	91	20	10-May	35	26-Aug	109	18
21	17-May	33	15-Aug	91	21	17-May	36	31-Aug	107	16
22	24-May	34	22-Aug	91	22	24-May	36	05-Sep	105	14
23	31-May	35	27-Aug	89	23	31-May	37	08-Sep	101	12
25	14-Jun	36	04-Sep	83	25	14-Jun	38	13-Sep	92	9
31	26-Jul	38	17-Sep	54	31	26-Jul				-54
33	10-Aug	39	23-Sep	43	33	10-Aug				-43
34	17-Aug	40	28-Sep	43	34	17-Aug				-43
35	23-Aug	40	02-Oct	41	35	23-Aug				-41
36	31-Aug	41	07-Oct	38	36	31-Aug				-38
37	09-Sep	42	12-Oct	34	37	09-Sep				-34
38	13-Sep	42	15-Oct	33	38	13-Sep				-33

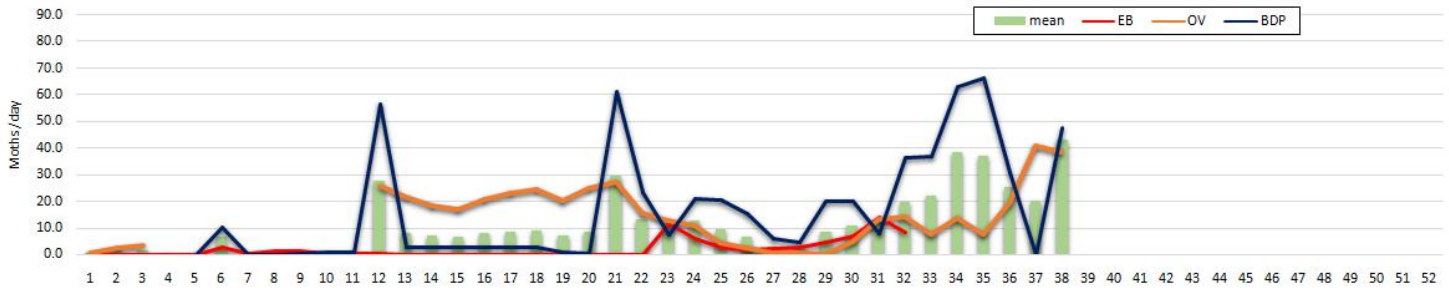
  

Skuinsdrift 2020 New moth peaks										
Week	Mean temperature				Real temperature				Difference	
	Start	Week	New moth	Days	Week	Start	Week	New moth		Days
5	27-Jan	11	12-Mar	48	5	27-Jan	12	16-Mar	50	2
10	01-Mar	17	24-Apr	55	10	01-Mar	19	04-May	65	10
13	23-Mar	28	09-Jul	109	13	23-Mar	33	12-Aug	143	34
14	30-Mar	33	09-Aug	133	14	30-Mar	36	30-Aug	154	21
16	12-Apr	36	02-Sep	144	16	12-Apr				-144
17	19-Apr	37	11-Sep	146	17	19-Apr				-146
18	26-Apr	38	17-Sep	145	18	26-Apr				-145
19	03-May	39	22-Sep	143	19	03-May				-143
20	10-May	40	27-Sep	141	20	10-May				-141
21	17-May	40	02-Oct	139	21	17-May				-139
22	24-May	41	05-Oct	135	22	24-May				-135
23	31-May	41	08-Oct	131	23	31-May				-131
25	14-Jun	42	11-Oct	120	25	14-Jun				-120
31	26-Jul	42	18-Oct	84	31	26-Jul				-84
33	10-Aug	43	21-Oct	73	33	10-Aug				-73
34	17-Aug	43	24-Oct	69	34	17-Aug				-69
35	23-Aug	44	26-Oct	65	35	23-Aug				-65
36	31-Aug	44	30-Oct	61	36	31-Aug				-61
37	09-Sep	45	03-Nov	56	37	09-Sep				-56
38	13-Sep	45	06-Nov	55	38	13-Sep				-55

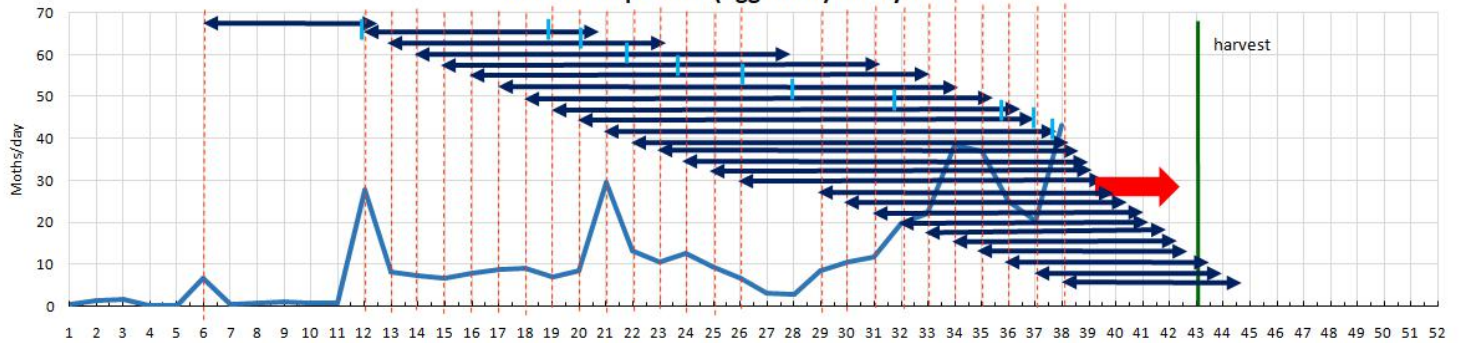
### Koedoeskop Moth traps

- First graph indicates the original data recieved from the farmers.
- The second graph indicates the total life cycle length according to the model calculations. The dark blue arrows indicate forecasted cycles. Many moth cycles forecasted for mid September which will give rise to larvae between week 37 (mid September) and week 42 (mid October) just before harvest starting in week 43 - **SO BE CAREFUL AND WATCH OUT**
- Table shows that larvae are present till the begining of October

Koedoeskop moth numbers 2019



Koedoeskop: Total (egg-adult) life cycle

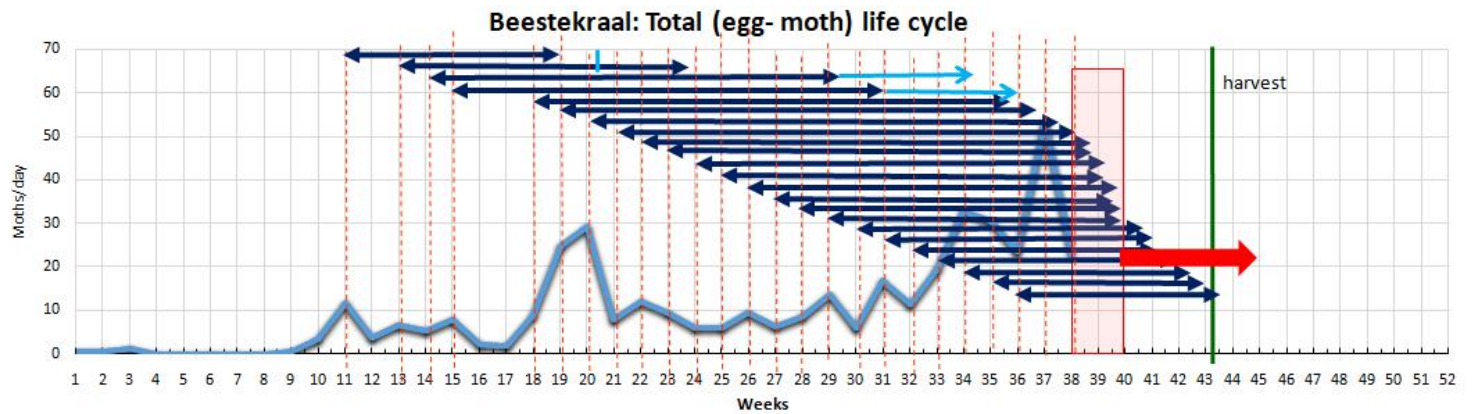
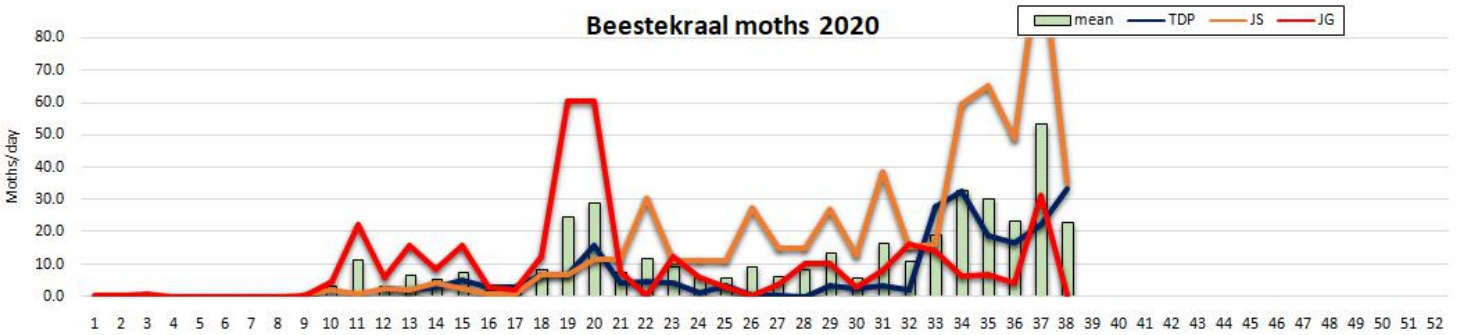


Koedoeskop 2020 Larvae										
Week	Mean temperature				Real temperature				Difference	
	Start	Week	Larvae e	Days	Week	Start	Week	Larvae		Days
6	03-Feb	9	26-Feb	24	6	03-Feb	9	23-Feb	21	-3
12	16-Mar	15	11-Apr	27	12	16-Mar	15	07-Mar	23	-4
13	23-Mar	17	21-Apr	30	13	23-Mar	16	15-Apr	24	-6
14	30-Mar	18	01-May	33	14	30-Mar	17	23-Apr	25	-8
15	06-Apr	20	12-May	37	15	06-Apr	19	03-May	28	-9
16	13-Apr	21	22-May	40	16	13-Apr	20	11-May	29	-11
17	20-Apr	23	04-Jun	46	17	20-Apr	21	22-May	33	-13
18	27-Apr	26	22-Jun	57	18	27-Apr	23	02-Jun	37	-20
19	05-May	29	12-Jul	69	19	05-May	24	12-Jun	39	-30
20	11-May	30	23-Jul	74	20	11-May	26	24-Jun	45	-29
21	18-May	31	01-Aug	76	21	18-May	27	03-Jul	47	-29
22	25-May	32	07-Aug	75	22	25-May	28	11-Jul	48	-27
23	01-Jun	33	12-Aug	73	23	01-Jun	31	01-Aug	96	23
24	08-Jun	33	15-Aug	69	24	08-Jun	34	17-Aug	71	2
25	15-Jun	34	19-Aug	66	25	15-Jun	35	25-Aug	72	6
26	22-Jun	34	21-Aug	61	26	22-Jun	36	29-Aug	70	9
29	13-Jul	36	30-Aug	49	29	13-Jul				-49
30	20-Jul	36	02-Sep	45	30	20-Jul				-45
31	29-Jul	37	07-Sep	41	31	29-Jul				-41
32	03-Aug	37	10-Sep	39	32	03-Aug				-39
33	12-Aug	38	16-Sep	36	33	12-Aug				-36
34	17-Aug	39	20-Sep	33	34	17-Aug				-33
35	24-Aug	39	24-Sep	32	35	24-Aug				-32
36	31-Aug	40	30-Sep	31	36	31-Aug				-31
37	07-Sep	41	05-Oct	29	37	07-Sep				-29
38	14-Sep	41	10-Oct	27	38	14-Sep				-27

Koedoeskop 2020 New moth peaks										
Week	Mean temperature				Real temperature				Difference	
	Start	Week	New moth	Days	Week	Start	Week	New moth		Days
6	03-Feb	12	17-Mar	44	6	03-Feb	11	13-Mar	40	-4
12	16-Mar	20	15-May	61	12	16-Mar	18	30-Apr	46	-15
13	23-Mar	23	01-Jun	71	13	23-Mar	20	10-May	49	-22
14	30-Mar	27	04-Jul	98	14	30-Mar	21	22-May	54	-44
15	06-Apr	31	28-Jul	114	15	06-Apr	23	04-Jun	60	-54
16	13-Apr	32	08-Aug	118	16	13-Apr	25	20-Jun	69	-49
17	20-Apr	34	16-Aug	119	17	20-Apr	28	05-Jul	77	-42
18	27-Apr	35	24-Aug	120	18	27-Apr	32	02-Aug	97	-23
19	05-May	36	01-Sep	120	19	05-May	35	26-Aug	114	-6
20	11-May	37	06-Sep	119	20	11-May	36	04-Sep	117	-2
21	18-May	37	11-Sep	117	21	18-May	37	10-Sep	116	-1
22	25-May	38	15-Sep	114	22	25-May				-114
23	01-Jun	38	17-Sep	109	23	01-Jun				-109
24	08-Jun	39	20-Sep	105	24	08-Jun				-105
25	15-Jun	39	21-Sep	99	25	15-Jun				-99
26	22-Jun	39	23-Sep	94	26	22-Jun				-94
29	13-Jul	40	27-Sep	77	29	13-Jul				-77
30	20-Jul	40	29-Sep	72	30	20-Jul				-72
31	29-Jul	40	03-Oct	67	31	29-Jul				-67
32	03-Aug	41	05-Oct	64	32	03-Aug				-64
33	12-Aug	41	10-Oct	60	33	12-Aug				-60
34	17-Aug	42	13-Oct	56	34	17-Aug				-56
35	24-Aug	42	16-Oct	54	35	24-Aug				-54
36	31-Aug	43	21-Oct	52	36	31-Aug				-52
37	07-Sep				37	07-Sep				0
38	14-Sep				38	14-Sep				0

### Beestekraal Moth traps

- First graph indicates the original data received from the farmers.
- The second graph indicates the total life cycle length according to the model calculations. The dark blue arrows indicate the life cycles as forecasted. Many moth cycle forecasted for September and October. They will give rise to larvae feeding until week 45 while harvesting will start around week 43 - **SO BE CAREFUL AND WATCH OUT**. New moth flights forecasted for period just before harvest.
- Light blue arrows indicate real temperature times
- The table shows that larvae from the current cycle will be present until 10 October.



Beestekraal 2020 Larvae										
Week	Mean temperature				Real temperature				Difference	
	Start	Week	Larvae end	Days	Week	Start	Week	Larvae end		Days
11	10-Mar	14	03-Apr	25	11	10-Mar	15	07-Apr	29	4
13	24-Mar	17	22-Apr	30	13	24-Mar	17	24-Apr	32	2
14	01-Apr	19	04-May	36	14	01-Apr	19	08-May	38	2
15	08-Apr	20	15-May	38	15	08-Apr	21	19-May	42	4
18	29-Apr	26	27-Jun	60	18	29-Apr	31	28-Jul	91	31
19	06-May	29	14-Jul	70	19	06-May	33	09-Aug	96	26
20	12-May	30	25-Jul	75	20	12-May	34	16-Aug	97	22
21	19-May	32	02-Aug	75	21	19-May	35	25-Aug	99	24
22	27-May	33	09-Aug	75	22	27-May	36	30-Aug	96	21
23	03-Jun	33	13-Aug	72	23	03-Jun	37	06-Sep	96	24
24	10-Jun	34	16-Aug	68	24	10-Jun	37	08-Sep	91	23
25	15-Jun	34	19-Aug	66	25	15-Jun	37	09-Sep	87	21
26	22-Jun	34	21-Aug	61	26	22-Jun	37	10-Sep	81	20
27	30-Jun	35	25-Aug	57	27	30-Jun	37	11-Sep	74	17
28	06-Jul	35	27-Aug	53	28	06-Jul	38	13-Sep	70	17
29	13-Jul	36	30-Aug	49	29	13-Jul				-49
30	21-Jul	36	02-Sep	44	30	21-Jul				-44
31	27-Jul	37	06-Sep	42	31	27-Jul				-42
32	03-Aug	37	10-Sep	39	32	03-Aug				-39
33	10-Aug	38	15-Sep	37	33	10-Aug				-37
34	17-Aug	39	20-Sep	35	34	17-Aug				-35
35	24-Aug	39	24-Sep	32	35	24-Aug				-32
36	01-Sep	40	01-Oct	31	36	01-Sep				-31
37	07-Sep	41	05-Oct	29	37	07-Sep				-29
38	14-Sep	41	10-Oct	27	38	14-Sep				-27

Beestekraal 2020 New moth peaks										
Week	Mean temperature				Real temperature				Difference	
	Start	Week	New moths	Days	Week	Start	Week	New moths		Days
11	10-Mar	19	04-May	56	11	10-Mar	20	11-May	63	7
13	24-Mar	23	04-Jun	73	13	24-Mar	28	08-Jul	108	35
14	01-Apr	29	14-Jul	105	14	01-Apr	34	17-Aug	138	33
15	08-Apr	31	01-Aug	116	15	08-Apr	35	29-Aug	144	28
18	29-Apr	35	27-Aug	121	18	29-Apr				-121
19	06-May	36	02-Sep	120	19	06-May				-120
20	12-May	37	07-Sep	119	20	12-May				-119
21	19-May	37	12-Sep	117	21	19-May				-117
22	27-May	38	16-Sep	113	22	27-May				-113
23	03-Jun	38	18-Sep	108	23	03-Jun				-108
24	10-Jun	39	20-Sep	103	24	10-Jun				-103
25	15-Jun	39	21-Sep	99	25	15-Jun				-99
26	22-Jun	39	23-Sep	94	26	22-Jun				-94
27	30-Jun	39	24-Sep	87	27	30-Jun				-87
28	06-Jul	39	26-Sep	83	28	06-Jul				-83
29	13-Jul	40	27-Sep	77	29	13-Jul				-77
30	21-Jul	40	30-Sep	72	30	21-Jul				-72
31	27-Jul	40	02-Oct	68	31	27-Jul				-68
32	03-Aug	41	05-Oct	64	32	03-Aug				-64
33	10-Aug	41	09-Oct	61	33	10-Aug				-61
34	17-Aug	42	13-Oct	58	34	17-Aug				-58
35	24-Aug	42	16-Oct	54	35	24-Aug				-54
36	01-Sep	43	21-Oct	51	36	01-Sep				-51
37	07-Sep	44	25-Oct	49	37	07-Sep				-49
38	14-Sep	44	29-Oct	46	38	14-Sep				-46