

Certificate

MPS-ECAS awards this certificate in accordance with the certification scheme MPS ABC version 15 080217, to:

Feldborg Growers A/S
Ny Vestergade 74
5672 BROBY
Denmark
MPS-number: 801067

Applicable to environmental clusters:
POT PLANTS 4; POT PLANTS 5; POT PLANTS 8

Validity: **10-8-2020 until 1-11-2020**
Total points: **90,0**
Qualification: **A**

Kind regards,
MPS-ECAS

Signature:

Date of issue:
27-7-2020



Ing. C. Maas

N.B.: This certificate is only valid for the period specified above.

MPS-ECAS
Certification



QUALIFICATION AND PERIOD GRAPHS

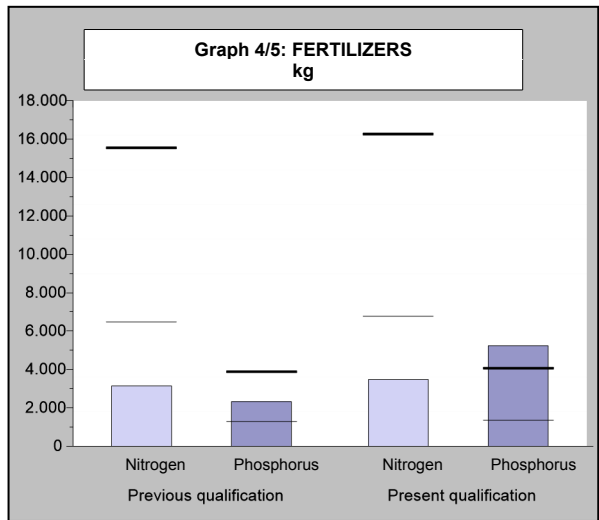
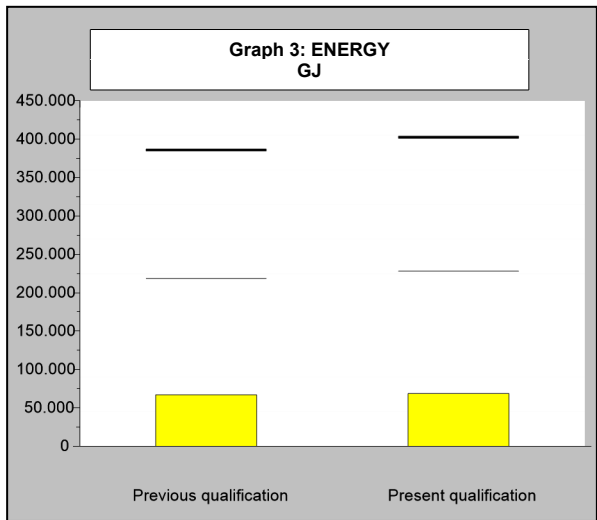
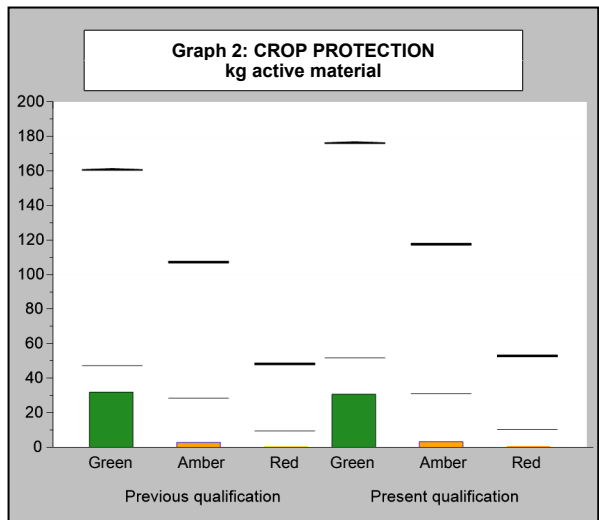
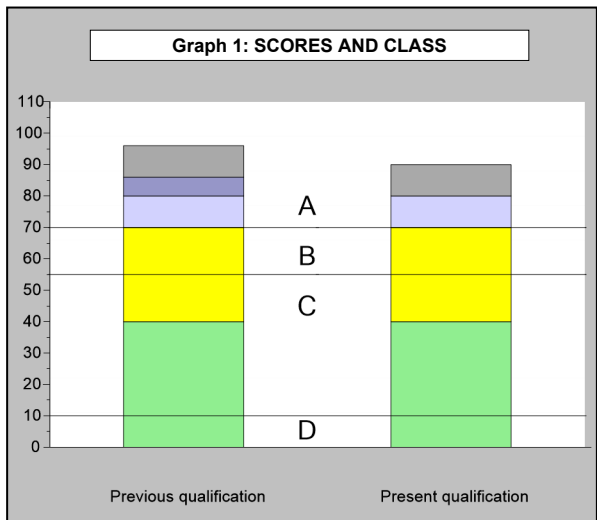
MPS company number: **801067/01**
 Company name: **Feldborg Growers A/S (total)**

Valid: Period 8-2019 until Period 7-2020
 Version: 27-7-2020

Table 1: DATA QUALIFICATIONS

SUBJECT	Uw Company standard		Uw use	Uw points	max. points	A+ standard	A+ score	Obtained
	Lower	Upper limit						
Crop protection	Green	51,8-176,4 kg	30,7	12	12			
	Amber	31,1-117,6 kg	3,3	16	16			
	Red	10,4-52,9 kg	0,5	12	12			
total				40	40	85 %	100 %	yes
Energy total		228249,2-402641,2 GJ	68663,9	30	30	75 %	100 %	yes
Fertilizers	Nitrogen	6779,7-16271,3 kg	3479,8	10	10			
	Phosphorus	1355,9-4067,8 kg	5239,9	0	10			
total				10	20	75 %	50 %	no
Waste		0-130	130	10	10			
Water								
Certified parental material				0	10			
Total score (points)				90	110	90	90	no
COMPANY QUALIFICATION				A				

COMPANY USAGE PER 13 PERIODS
 <-----> = Upper limit <.....> = Lower limit

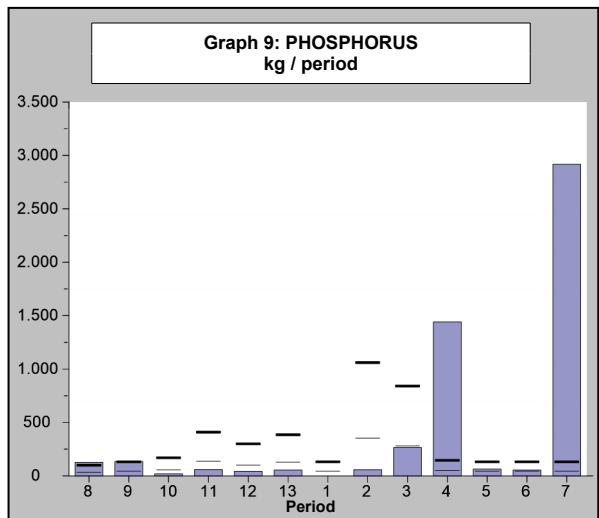
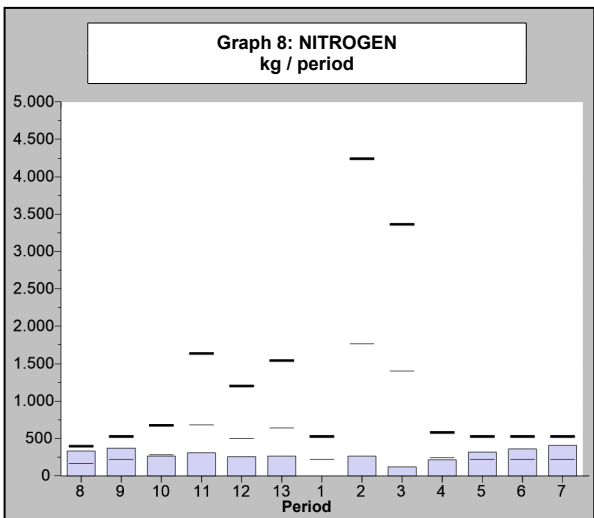
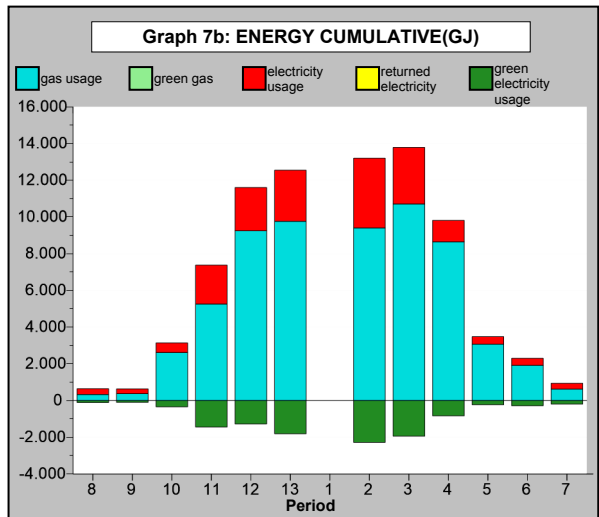
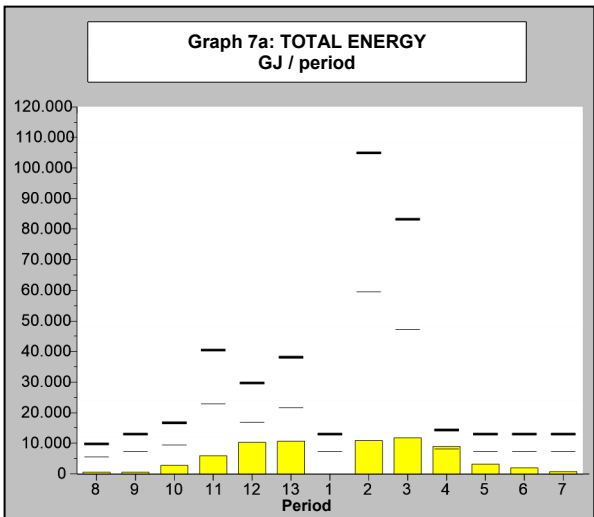
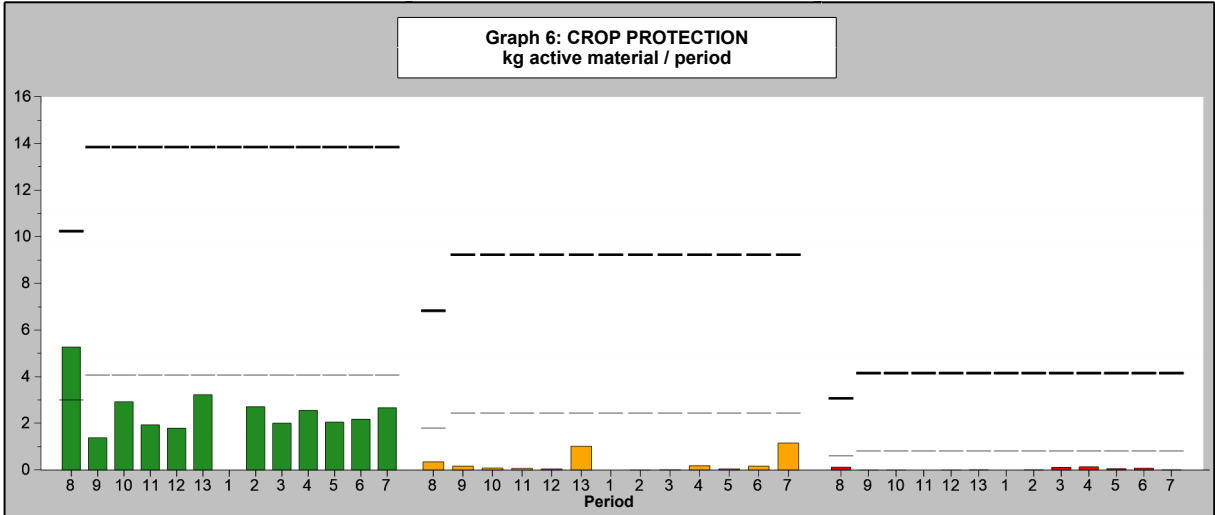


QUALIFICATION AND PERIOD GRAPHS

MPS company number: **801067/01**
 Company name: **Feldborg Growers A/S (total)**

Valid: Period 8-2019 until Period 7-2020
 Version: 27-7-2020

<-----> = Upperlimit <-----> = Lowerlimit



MPS-Overview Composition of Qualification

MPS company number: **801067/01**
 Company name: **Feldborg Growers A/S (total)**

Valid: Period 8-2019 until Period 7-2020
 Version: 27-7-2020

Composition of company standards MPS-OEX (Area Efficiency index)

THEMA		Basic standard		% OEX	Companystandard	
		lower-limit	upper-limit		lower-limit	upper-limit
Crop protection	Green				51,8-176,4 kg	30,7 kg
	Amber				31,1-117,6 kg	3,3 kg
	Red				10,4-52,9 kg	0,5 kg
Energy		94136,2-166060 GJ		142,5 %	228249,2-402641,2 GJ	68663,9 GJ
Nitrogen (N)		2796,2-6710,8 kg		142,5 %	6779,7-16271,3 kg	3479,8 kg
Phosphorus (P)		559,2-1677,7 kg		142,5 %	1355,9-4067,8 kg	5239,9 kg

Composition of points MPS environmentally certified parental material

Certified parental material	(Average) area	Your Points	Max points
Total cultivated area 1)	55923,1 m2		
Area certified parental material MPS-ABC	0 m2	0	10
Area certified parental material GLOBALGAP	0 m2	0	5
Total points for Certified parental material		0	10

1) Total means: the total area covered and uncovered cultivation and the second crop layer. Not included is the uncultivated area.

Overview Environmental zones

Period	8	9	10	11	12	13	1	2	3	4	5	6	7
Environmental	Zone 4	Zone 4	Zone 4	Zone 4	Zone 4	Zone 4	Zone 4	Zone 4	Zone 4	Zone 4	Zone 4	Zone 4	Zone 4

Company usage of MPS-MIND

Pesticide	Indicator color	active ingredient	Annual company use of active substance		
			Green	Amber	Red
Alar 85 SG	●	daminozide	0,850		
Attracker	○	sugar			
Azatin EC	●	azadirachtin	0,288		
BioGlans	○	leaf shine			
Biscaya	●	thiacloprid	3,751		
Bonzi	○	paclobutrazol		0,011	
BotaniGard ES	○	beauveria bassiana			
Cerone	●	ethephon	0,144		
Conserve	●	spinosad	5,308		
Deosan flora	○	acetic acid			
	○	hydrogen peroxide			
	○	peroxyacetic acid			
Dipel	○	bacillus thuringiensis			
Floramite	●	bifenazate	2,538		
Geoxe 50 WG	●	fludioxonil	1,238		
Glyphogan	○	glyphosate		0,144	
Hasten	○	rapeseed oil			
Huwa-San TR-50	○	hydrogen peroxide			
Karate (51-32)	●	lambda-cyhalothrin			0,050
Kibril Bladglans	○	leaf shine			
Medax Top	●	mepiquat chloride	0,477		
	●	prohexadione-calcium	0,080		
Milbeknock	●	milbemectin			0,035
Mospilan SG	○	acetamiprid		1,040	

MPS-Overview Composition of Qualification

MPS company number: **801067/01**
 Company name: Feldborg Growers A/S (total)

Valid: Period 8-2019 until Period 7-2020
 Version: 27-7-2020

Company usage of MPS-MIND

Pesticide	Indicator color	active ingredient	Annual company use of active substance		
			Green	Amber	Red
Movento SC 100	●	spirotetramat	0,612		
Multi-Cide F	●	acetic acid		1,200	
Naturalis	○	beauveria bassiana			
NeemAzal T/S	●	azadirachtin	1,404		
Nissorun (solid) (18-299)	●	hexythiazox	2,139		
Previcur (6-6)	●	propamocarb hydrochloride	1,646		
Previcur Energy	●	fosetyl-aluminium	1,628		
	●	propamocarb	2,783		
Roundup Bio (48-16)	●	glyphosate		0,150	
Signum WG	●	boscalid	1,226		
	●	pyraclostrobin	0,308		
SiiTAC SF	○	wetting/sticker agents other			
Smartgrass	●	gibberelline zuur a3	0,008		
Steward	●	indoxacarb	1,481		
Teppeki	●	flonicamid	2,785		
Tilt 250 EC	●	propiconazole			0,043
Turex WP	○	bacillus thuringiensis			
Vertimec	●	abamectin		0,725	
Warrant 70 WG	●	imidacloprid			0,399
Annual company use of active substance			30,693	3,270	0,526

OVERVIEW RECORDED DATA

MPS company number: **801067/01**

Company name: **Feldborg Growers A/S (total)**

Valid: Period 8-2019 until Period 7-2020

Version: 27-7-2020

Code	Description	Unit	Period 1	Period 2	Period 3	Period 4	Period 5	Period 6	Period 7	Subtotal	Year total
FORM RECEIVED			yes	yes	yes	yes	yes	yes	yes		
CROP PROTECTION AGENTS											
3023	Alar 85 SG	gram				970				970	1000
3334	Attracker	ml					600	3400	5000	9000	42600
3847	Azatin EC	ml		2865		2400			300	5565	10680
3364	BioGlans	ml		8000	6800	5050	7475	24550	19375	71250	146250
3274	Biscaya	ml		250		400		450	150	1250	15355
3025	Bonzi	ml			625			2200		2825	2825
3185	BotaniGard ES	gram									750
3028	Cerone	ml									300
3205	Conserve	ml		1075	710	3440	3595	3505	8423	20748	44235
3111	Deosan flora	ml		14000		6100	350	2000		22450	290350
3113	Dipel	ml									500
3279	Floramite	ml		1240	2890	325	990	1640	1210	8295	10575
3798	Geoxe 50 WG	gram			500		75	300		875	2475
3166	Glyphogan	ml				400				400	400
3782	Hasten	ml		13250	11000	15100	8650	6900	13000	67900	131730
3822	Huwa-San TR-50	ml		20		40000				40020	41820
3058	Karate (51-32)	ml				2000				2000	2000
3313	Kibril Bladglans	ml		36000						36000	101000
3345	Medax Top	ml						300		300	1590
990474	Metarhizium anisopliae	number									1800
3289	Milbeknock	ml		1350	120				1005	2475	3770
3277	Mospilan SG	gram					175	400	4100	4675	5200
3315	Movento SC 100	ml			150			370	200	720	6119
3269	Multi-Cide F	ml							4000	4000	24000
3775	Naturalis	ml		2800	1400	6500	1800	2350	1900	16750	31150
3785	NeemAzal T/S	ml		5000	3400	7400	14250	17800	12250	60100	140375
3062	Nissorun (solid) (18-299)	gram		1865	4130	1625	1760	2610	2190	14180	21387
3012	Previcur (6-6)	ml					300		500	800	2800
3321	Previcur Energy	ml		1650						1650	5250
3044	Roundup Bio (48-16)	ml									500
3270	Signum WG	gram		500	440	1200	100	200	400	2840	4590
3834	SiiTAC SF	ml		1300	1000		1450	2965	750	7465	23140
3840	Smartgrass	gram		11						11	21
990706	Steinernema carpocapsae	number		16000	6500	13000	7250	8000	11000	61750	126250
990515	Steinernema feltiae	number		4000	3250	6000	4000	3500	4000	24750	56250
3312	Steward	gram		531	117	796	1050	869	390	3753	4938
3293	Teppeki	gram		390	670	400	1000	388	827	3675	5570

OVERVIEW RECORDED DATA (Continued)

MPS company number: **801067/01**

Company name: **Feldborg Growers A/S (total)**

Valid: **Period 8-2019 until Period 7-2020**

Version: **27-7-2020**

Code	Description	Unit	Period 1	Period 2	Period 3	Period 4	Period 5	Period 6	Period 7	Subtotal	Year total
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CROP PROTECTION AGENTS (Continued)

3152	Tilt 250 EC	ml			170					170	170
3368	Turex WP	gram		1250	1050	1640	300	400	800	5440	16865
3251	Vertimec	ml		100	650	2050	500	3900	7150	14350	40300
3255	Warrant 70 WG	gram			105	120	70	100		395	570

WATER

21	Total irrigation	m3		26	14	14	69	69	210	402	4686
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ENERGY

1	Gas consumption	m3		267980	305072	246372	87642	54601	17764	979431	1765688
2	Conversion factor		1	1	1	1	1	1	1		
3	Caloric value		1	1	1	1	1	1	1		
4	Electricity usage (Total)	kWh		690466	560565	213100	73931	69700	58223	1665985	3186193
6	Green Electricity Usage	kWh		414280	353156	151819	42141	51578	34934	1047908	1970168

LIGHTING

550001	HP-Hg 400W Conv.	Hour		300	300	30	1	1	30		
		Number									
		kWatt		585754	470062	125316	418	10	1321		

FERTILIZERS

514	Ammonia sulphate	kg		225		75	25	125	150	600	1325
519	Calcium chloride 80%/85%	kg		50		50	100	150	100	450	900
545	Calcium nitrate (nitrate o	kg		1100	625	975	1500	1525	1675	7400	15300
375	Ferrous chelate DTPA 6%	litre		25	25					50	50
561	Ferrous chelate EDDHA 6%	kg		25		25	5		5	60	130
383	Maganese chelate 6%	litre		40	20					60	200
516	Magnesium sulphate	kg		375	400	450	825	825	750	3625	7725
925	MicoDux 0+26+17	litre		5	25	10000			20000	30030	30060
580	Mono-ammonium phosphate	kg									25
581	Mono-potassium phosphate	kg		200	50	75	250	225	300	1100	2425
648	Peters 20+20+20 (20% P2O5 en 20% K2O)	kg		45	100	90	75		30	340	665
457	Pioner Mikro Plus med Jern (1.92%)	litre		220	160	240	400	360	400	1780	3665
428	Pioner NPK Makro 10+4+25+Mg (Gul)	kg							250	250	250
537	Potassium nitrate (13+0+45)	kg		275	25	225	500	750	575	2350	4950

OVERVIEW RECORDED DATA (Continued)

MPS company number: **801067/01**

Company name: **Feldborg Growers A/S (total)**

Valid: Period 8-2019 until Period 7-2020

Version: 27-7-2020

Code	Description	Unit	Period 1	Period 2	Period 3	Period 4	Period 5	Period 6	Period 7	Subtotal	Year total
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FERTILIZERS (Continued)

539	Potassium sulphate	kg		50	50	75	200	175	175	725	1300
630	Resistim 0+6+11	litre		100	3100			40	40	3280	4530
939	Saltpoletter	kg			250					250	450
603	Urea	kg							25	25	50
631	Wuxal Ca Suspension	litre		30	10		30	10	20	100	230

ENVIRONMENTAL CLUSTERS

Indoor crops									
4064	POT PLANTS 4	m2	30000	30000	30000	30000	30000	30000	30000
4065	POT PLANTS 5	m2	11000	11000	11000	11000	11000	11000	11000
4068	POT PLANTS 8	m2	16000	16000	16000	16000	16000	16000	16000
Subtotal			57000	57000	57000	57000	57000	57000	57000

GENERAL INFORMATION FORM

MPS-Mind

Surface water

3900 What is the minimum distance of these fields to the nearest surface water? 250 - 2500 metres / 820 - 8200 feet

Cover

3910 Does the surface of covered crops exceed 95% of this location? Yes

Slope

3902 What is the maximum slope of a field on this location? flat

Leaching to groundwater

3903 Do you grow more than 95% of your crops in a closed (recirculation) system, achieving less than 3% loss of drainwater? No

3904 What is the minimum depth of the groundwater, taken over all your fields? >= 15 metres / >= 49,2 feet

3905 What is the lowest percentage of organic matter of your soil, taken over all your fields of this location? < 1,5%

MPS-OEX

CO2

3953 Do you apply CO2? No

Substrate

3957 Do you cultivate cutflowers on substrate? No

OVERVIEW RECORDED DATA (Continued)

MPS company number: **801067/01**
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GENERAL INFORMATION FORM

MPS-OEX

Diffuse light

- 3961 Do you have diffuse glass on your greenhouse?
- 3963 Do you have diffuse foil on your foil-greenhouse?
- 3965 Do you have a diffuse screens in your greenhouse?
- 3967 Do you use a diffuse coating on your greenhouse?

Waste management

- 41 Do you process organic waste in a responsible way? Yes
- 42 Do you process paper waste in a responsible way? Yes
- 43 Do you process plastic waste in a responsible way? Yes

OVERVIEW RECORDED DATA

MPS company number: **801067/01**

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Code	Description	Unit	Period 8	Period 9	Period 10	Period 11	Period 12	Period 13	Subtotal
FORM RECEIVED			yes	yes	yes	yes	yes	yes	
CROP PROTECTION AGENTS									
3023	Alar 85 SG	gram						30	30
3334	Attracker	ml	16900	11700	1200	3800			33600
3847	Azatin EC	ml			300	655	4160		5115
3364	BioGlans	ml	25000					50000	75000
3274	Biscaya	ml	6000	280	3000	2600	2225		14105
3025	Bonzi	ml							
3185	BotaniGard ES	gram	750						750
3028	Cerone	ml	300						300
3205	Conserve	ml	8055	5560	3475	1675	3873	850	23488
3111	Deosan flora	ml	48000	60000	48150	51750	60000		267900
3113	Dipel	ml				500			500
3279	Floramite	ml	40	40	80	180	800	1140	2280
3798	Geoxe 50 WG	gram	225	600	250	300	225		1600
3166	Glyphogan	ml							
3782	Hasten	ml	19450	10500	11155	6750	7725	8250	63830
3822	Huwa-San TR-50	ml		1800					1800
3058	Karate (51-32)	ml							
3313	Kibril Bladglans	ml		35000		10000	20000		65000
3345	Medax Top	ml				750		540	1290
990474	Metarhizium anisopliae	number			1800				1800
3289	Milbeknock	ml		75	150		250	820	1295
3277	Mospilan SG	gram		225	75	225			525
3315	Movento SC 100	ml	2674	800	965	600	360		5399
3269	Multi-Cide F	ml						20000	20000
3775	Naturalis	ml			3500	5800	1500	3600	14400
3785	NeemAzal T/S	ml	21650	13050	14775	11400		19400	80275
3062	Nissorun (solid) (18-299)	gram	970	470	892	1670	830	2375	7207
3012	Previcur (6-6)	ml			2000				2000
3321	Previcur Energy	ml	1850					1750	3600
3044	Roundup Bio (48-16)	ml	500						500
3270	Signum WG	gram						1750	1750
3834	SiiTAC SF	ml	5150	2150	3450	4225	700		15675
3840	Smartgrass	gram						10	10
990706	Steinernema carpocapsae	number	10000	8000	8000	15000	13000	10500	64500
990515	Steinernema feltiae	number	4500	4000	4000	6000	4000	9000	31500
3312	Steward	gram	25	93		741	208	118	1185
3293	Teppeki	gram	855	100	230	120	370	220	1895

OVERVIEW RECORDED DATA (Continued)

MPS company number: **801067/01**

Company name: **Feldborg Growers A/S (total)**

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CROP PROTECTION AGENTS (Continued)

3152	Tilt 250 EC	ml							
3368	Turex WP	gram	400	300	800	6250	1100	2575	11425
3251	Vertimec	ml	11100	6650	3450	1350	2500	900	25950
3255	Warrant 70 WG	gram	175						175

WATER

21	Total irrigation	m3	251	220	100	1367	1378	968	4284
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ENERGY

1	Gas consumption	m3	9482	10722	74471	149876	263450	278256	786257
2	Conversion factor		1	1	1	1	1	1	
3	Caloric value		1	1	1	1	1	1	
4	Electricity usage (Total)	kWh	56900	47532	95845	385084	428999	505848	1520208
6	Green Electricity Usage	kWh	19192	18451	62299	261857	231660	328801	922260

LIGHTING

550001	HP-Hg 400W Conv.	Hour	1	1	200	200	300	300	
		Number							
		kWatt	11	15	22838	296487	116930	163114	

FERTILIZERS

514	Ammonia sulphate	kg	150	125	50	200	75	125	725
519	Calcium chloride 80%/85%	kg	100		100		75	175	450
545	Calcium nitrate (nitrate o	kg	1475	1725	1150	1450	900	1200	7900
375	Ferrous chelate DTPA 6%	litre							
561	Ferrous chelate EDDHA 6%	kg	10	10	10	15		25	70
383	Maganese chelate 6%	litre		60		20	40	20	140
516	Magnesium sulphate	kg	900	900	600	675	450	575	4100
925	MicoDux 0+26+17	litre			20			10	30
580	Mono-ammonium phosphate	kg	25						25
581	Mono-potassium phosphate	kg	500	225	25	250	100	225	1325
648	Peters 20+20+20 (20% P2O5 en 20% K2O)	kg			100		225		325
457	Pioner Mikro Plus med Jern (1.92%)	litre	440	280	320	360	180	305	1885
428	Pioner NPK Makro 10+4+25+Mg (Gul)	kg							
537	Potassium nitrate (13+0+45)	kg	525	600	425	225	425	400	2600

OVERVIEW RECORDED DATA (Continued)

MPS company number: **801067/01**

Company name: **Feldborg Growers A/S (total)**

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Code	Description	Unit	Period 8	Period 9	Period 10	Period 11	Period 12	Period 13	Subtotal
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FERTILIZERS (Continued)

539	Potassium sulphate	kg	75	50	125	125	50	150	575
630	Resistim 0+6+11	litre	90	1070	30	30		30	1250
939	Saltpoletter	kg			200				200
603	Urea	kg				25			25
631	Wuxal Ca Suspension	litre	40	20	20		40	10	130

ENVIRONMENTAL CLUSTERS

		Indoor crops							
4064	POT PLANTS 4	m2	25000	30000	30000	30000	30000	30000	
4065	POT PLANTS 5	m2	6000	11000	11000	11000	11000	11000	
4068	POT PLANTS 8	m2	12000	16000	16000	16000	16000	16000	
		Subtotal	43000	57000	57000	57000	57000	57000	

CO2 Indicator

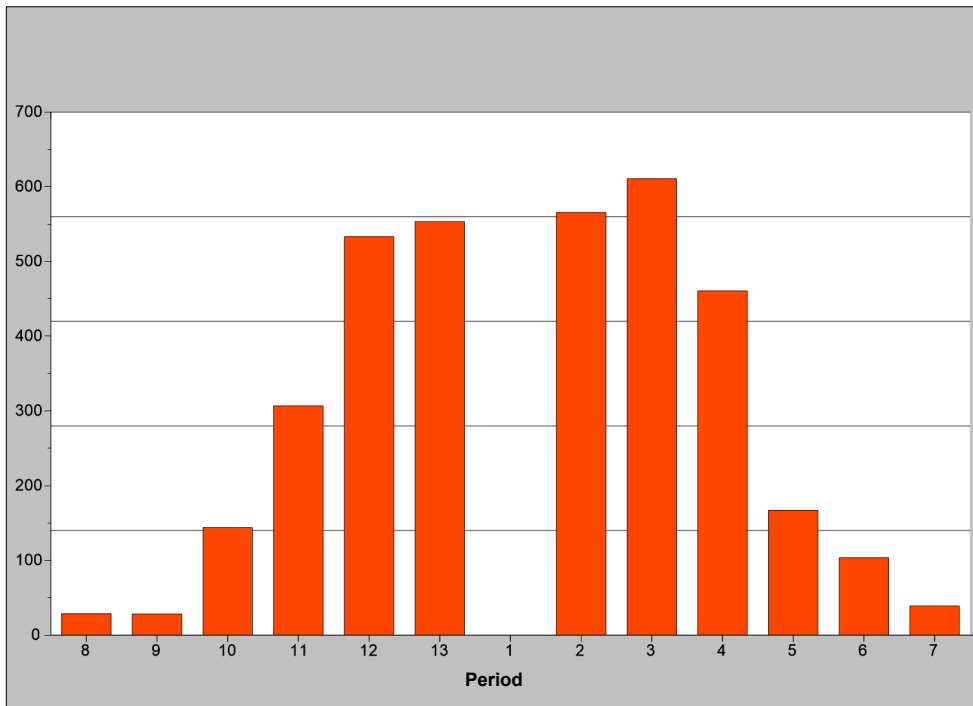
MPS company number: **801067/01**
 Company name: **Feldborg Growers A/S**

Valid: Period 8-2019 until Period 7-2020
 Version: 27-7-2020

Review CO2-emission per energy source per year (x 1000 kg)

Code		CO2 production (x 1000)
1	Gas consumption	3167
4	Electricity usage (Total)	981
6	Green Electricity Usage	-607
Total		3541

Review CO2-emission per period (x 1000 kg)



Disclaimer: the purpose of the above mentioned table and graphics is to give an insight in the CO2-emission on company level. The CO2 emission has been based on the energy consumption in GJ and the internationally accepted arithmetic rules. The calculation of the quantity in GJ is based on the calculation system of MPS for the fuel used by the company and the electricity and heating that has been bought and sold. The review serves only as a management tool. No rights can be derived. It is not allowed to use this review for other purposes. In cooperation with (inter)national stakeholders and research organizations MPS is working on further developments concerning CO2. We mainly focus on CO2 emission in the transport chain and the CO2 emission per physical production.