

Optifeed Drain/Slab water Check
Nutrient solution
1106-2020-000

Your client number is: 8696497

Eurofins Agro Testing UK Ltd i54
 Business Park
 Valiant Way
 WV9 5GB WOLVERHAMPTON Groot
 Brittannie

Modified

| | | | | |
|---------------|--|-------------------------------|-------------------------------------|-------------------------|
| Sample | Research-/ordernumber: 577045/005258036 | Date sampling: 26-11-2020 | Date report: 08-12-2020 | Code of object: GUPN |
| | Test code: 510 | Receiving date: 03-12-2020 | Sample was taken by: Third party | Contactperson sampling: |

| Results | analysis | at EC 2,70 | target | low | normal | high | basic scheme | correc- tion | water+ drain | A+B tank | total dose |
|-------------------------------|------------------|---------------|--------|-------|--------|------|-----------------|-----------------|-----------------|-------------|---------------|
| | | | | | | | | | | | |
| | pH | 6,6 | 6,6 | 5,5 | | ■ | | | | | |
| mS/cm 25°C | EC | 1,7 | 1,7 | 3,0 | ■ | ■ | | 2,4 | | 2,3 | 2,3 |
| Cations mmol/l | NH ₄ | 0,1 | 0,1 | < 0,5 | | | | 1,3 | | 1,3 | 1,3 |
| | K | 4,3 | 7,3 | 7,0 | | ■ | | 6,8 | | 6,5 | 6,5 |
| | Na | 1,2 | 1,2 | | | | | | | | |
| | Ca | 4,1 | 7,0 | 7,0 | | ■ | | 4,5 | 2,3 | 2,1 | 4,3 |
| | Mg | 0,9 | 1,5 | 2,5 | ■ | ■ | | 3,0 | 0,5 | 3,3 | 3,3 |
| Anions mmol/l | NO ₃ | 8,7 | 14,9 | 20,0 | | ■ | | 16,8 | | 17,1 | 17,1 |
| | Cl | 1,2 | 1,2 | | | | | | | | |
| | S | 1,2 | 2,1 | 3,5 | ■ | ■ | | 2,5 | 0,5 | 2,1 | 2,6 |
| | HCO ₃ | 2,2 | 2,2 | | | ■■■ | | | 3,5 | 3,5 | |
| | P | 1,13 | 1,93 | 0,80 | | ■■ | | 1,25 | -0,5 | 0,75 | 0,75 |
| Micro- nutrients μmol/l | Fe | 0,7 | 0,7 | 25 | ■■■■■ | | | 25 | 13 | 38 | 38 |
| | Mn | 10 | 10 | 5,0 | ■ | ■ | | 10 | | 10 | 10 |
| | Zn | 2,7 | 2,7 | 7,0 | ■ | ■ | | 5,0 | 1,3 | 6,3 | 6,3 |
| | B | 27 | 27 | 50 | ■ | ■ | | 35 | 8,8 | 0,6 | 44 |
| | Cu | 2,0 | 2,0 | 1,0 | ■ | ■ | | 1,0 | -0,3 | 0,8 | 0,8 |
| | Mo | 0,5 | 0,5 | 0,5 | | ■ | | 0,5 | | 0,5 | 0,5 |
| mmol/l | Si | 0,21 | 0,21 | | | | | | | | |
| | K/Ca | 1,0 | | 1,0 | | | | | | | |

The Total dose is the sum of what is present in the water and from the nutrients.
 Deviating results are shown in RED. The Ca/K-ration is calculated.



| Results | analysis | at EC | | low | normal | high | basic scheme | correc- | water+ drain | A+B tank | total dose |
|--------------------|------------------|-------|--------|-------|--------|------|--------------|---------|--------------|----------|------------|
| | | 2,70 | target | | | | | | | | |
| | pH | 6,6 | 6,6 | 5,5 | | ■ | | | | | |
| mS/cm 25°C | EC | 1,7 | 1,7 | 3,0 | ■ | | | 2,4 | | 2,3 | 2,3 |
| cations ppm (mg/l) | NH ₄ | 1,8 | 1,8 | < 9,1 | | | | 23 | | 23 | 23 |
| | K | 168 | 285 | 274 | | ■ | | 266 | | 254 | 254 |
| | Na | 28 | 28 | | | | | | | | |
| | Ca | 164 | 281 | 281 | | ■ | | 180 | 92 | 84 | 172 |
| | Mg | 22 | 36 | 61 | ■ | | | 73 | 12 | 80 | 80 |
| anions ppm (mg/l) | NO ₃ | 539 | 924 | 1240 | | ■ | | 1042 | | 1060 | 1060 |
| | Cl | 43 | 43 | | | | | | | | |
| | S | 38 | 67 | 112 | ■ | | | 80 | 16 | 67 | 83 |
| | HCO ₃ | 134 | 134 | | | ■ | | | 214 | 214 | |
| | P | 35 | 60 | 25 | | ■ | | 39 | -15 | 23 | 23 |
| ppm (mg/l) | Fe | 0,04 | 0,04 | 1,40 | ■ | | | 1,40 | 0,73 | 2,12 | 2,12 |
| | Mn | 0,55 | 0,55 | 0,28 | ■ | | | 0,55 | | 0,55 | 0,55 |
| | Zn | 0,18 | 0,18 | 0,46 | ■ | | | 0,33 | 0,09 | 0,41 | 0,41 |
| | B | 0,29 | 0,29 | 0,54 | ■ | | | 0,38 | 0,10 | 0,007 | 0,47 |
| | Cu | 0,13 | 0,13 | 0,06 | ■ | | | 0,06 | -0,02 | 0,05 | 0,05 |
| | Mo | 0,05 | 0,05 | 0,05 | | ■ | | 0,05 | | 0,05 | 0,05 |
| | Si | 5,9 | 5,9 | | | | | | | | |
| | K/Ca | 1,0 | | 1,0 | | | | | | | |

Recommend.

| | | |
|-------------------------|------|----|
| Calcium nitrate | 44,3 | kg |
| Ammonium nitrate liquid | 10,5 | l |
| Potassium nitrate | 57,7 | kg |
| Nitric acid 60% | 3,8 | l |
| Chelated iron DTPA 6% + | 1750 | g |
| Chelated iron EDDHA 6% | 1750 | g |

A

1000 liter

100 * concentrated

| | | |
|--------------------------|------|----|
| Nitric acid 60% | 23,0 | l |
| Mono potassium phosphate | 10,2 | kg |
| Magnesium sulphate | 50,7 | kg |
| Magnesium nitrate sol. | 30,9 | kg |
| Manganese sulphate 32% | 170 | g |
| Zinc sulphate 23% | 180 | g |
| Borax | 410 | g |
| Copper sulphate | 19 | g |
| Sodium molybdate | 12 | g |

B

1000 liter

100 * concentrated

Please maintain one A+B tank.

Fertilizer type:

solid

| | |
|--------------------|--|
| Explanation | DRIP EC : 2,4 / if the set DRIP EC shows a deviation of more than 10 % from this level, correction of the amount of acid is necessary. |
| | DRIP pH : Due to the high pH and bicarbonate (HCO ₃)-level, extra NH ₄ has been advised. Lower the DRIP pH (not below pH 5,0). |
| | Iron chelate : due to the rather high pH, we recommend 50% as Fe-EDDHA |

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| Crop data | | Crop Type of crop Growing stage | | Herbs | | DRIP EC System Base water | | | not indicated drainage 7.9.0.2.0.0. | | | | | | | | | | |
|-----------|------------|---------------------------------------|---------------------------|------------|------------|---------------------------------|------------|-----------------|---|------------|------------------|--------------|--------------|--------------|----------|------------|----------|------------|------------|
| History | pH | EC mS/cm | NH ₄ mmol/l | K | Na | Ca | Mg | NO ₃ | Cl | S | HCO ₃ | P | Si | Fe μmol/l | Mn | Zn | B | Cu | Mo |
| 03-12-20 | 6,6 6,6 | 1,7 2,4 | 0,1 0,2 | 7,3 6,1 | 1,2 1,2 | 7,0 5,9 | 1,5 1,2 | 14,9 12,5 | 1,2 1,2 | 2,1 1,8 | 2,2 2,2 | 1,93 1,58 | 0,21 0,20 | 0,7 1,1 | 10 14 | 2,7 3,9 | 27 36 | 2,0 3,2 | 0,5 0,8 |

| | | | | | | |
|--------|-----------------|-----|---------------------|--------------------|-----|----------------------|
| Method | pH | * | Em: PH-GTB | Cl | Q * | Em: FILTR en SFAHFD |
| | EC | Q * | Em: FILTR en EC1 | HCO ₃ | Q * | Em: FILTR en SFAHFD |
| | NH ₄ | Q * | Em: FILTR en SFAHFD | Remaining analyses | Q * | Em: FILTR en ICP-HSP |
| | NO ₃ | Q * | Em: FILTR en SFAHFD | | | |

Q Method accredited by RvA

Em: Method Eurofins Agro, Gw: Equivalent of, Cf: In conformity with

* For this procedure the maximum shelf life between sampling and analysis has been exceeded.

This may have affected the reliability of the result.

The reported results only refer to the processed material on 03-12-2020

MODIFIED REPORT

This report supersedes all earlier versions sent under the same number on the basis of "date report".

