

Woodgrow Oy



research certificate R-22-FV-014751-01

Sample number 504-2022-00114164

Research no. EUFIMI-00104290

Customer No FV0027282

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|--|--|
| <b>Research contact person:</b> Iina Haikarainen |  |
| Research no.                                     | 504-2022-00114164/ AR-22-FV-014751-01  |
| Sample details:                                  | 1. Carbon  |
| Arrival date :                                   | 14/09/2022   |
| Requested analyses:                              | FVSKA: Secondary dry matter<br>FVT13: Dry matter and moisture<br>FVT14: Volumetric weight<br>FVT16: Total Nitrogen, Kjeldahl, soil, manure, compost<br>FVT51: Potassium (K), total, with AR extraction<br>FVT57: Phosphorus (P), total, with AR extraction |
| Arrived on                                       | 14 September 2022  |
|  | Study started : 15/9/2022  |

| Physical properties |   | Result (MU)                     |
|---------------------|---|---------------------------------|
| FVT                 | 13 FV Dry matter and humidity method : SFS-EN 13040: 2008         |                                 |
|                     | Dry matter  | 36.6%                           |
|                     | Humidity  | 63.4%                           |
| FVT                 | 14 FV Volumetric Weight Method : Internal method                  |                                 |
|                     | Volume weight   | 360 kg/m <sup>3</sup>           |
| Nitrogen analyzes   |   | Result (MU)                     |
| FVT16               | FV Total nitrogen Method : SFS-EN 13342:2000; SFS-EN 13654-1:2002 |                                 |
| (a)                 | Nitrogen (N), total content                                       | 4.1 (± 0.82) g/kg ca            |
| (a)                 | Nitrogen (N)  | 1.5 (± 0.29) kg/ton             |
| (a)                 | Nitrogen (N)  | 0.53 (± 0.11) kg/m <sup>3</sup> |
| Nutrients           |   | Result (MU)                     |
| FVT57               | FV Phosphorus (P), total content Method : SFS-EN 13650:2002       |                                 |
| (a)                 | Phosphorus (P), total content                                     | 0.46 (± 0.12) g/kg ca           |
| (a)                 | Phosphorus (P)  | 0.17 (± 0.04) kg/ton            |
| (a)                 | Phosphorus (P)  | 0.06 (± 0.02) kg/m <sup>3</sup> |
| FVT51               | FV Potassium (K), total content Method : SFS-EN 13650:2002        |                                 |

|     |                |               |                                      |
|-----|----------------|---------------|--------------------------------------|
| (a) | Potassium (K), | total content | 3.9 ( $\pm$ 0.96) g/kg body weight   |
| (a) | Potassium (K)  |               | 1.4 ( $\pm$ 0.36) kg/ton             |
| (a) | Potassium (K)  |               | 0.51 ( $\pm$ 0.13) kg/m <sup>3</sup> |

|           |   |
|-----------|---|
| SIGNATURE | Meeri Rantanen<br>Analysis Services Manager |
|-----------|---|

The research certificate has been electronically approved.

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Remarks

Partial copying of documents is prohibited. The test result applies only to the sample tested. Accredited methods have been assessed by the national accreditation body of the laboratory that performed the study. This test certificate has been generated electronically and has been reviewed and approved. For measurement uncertainties, further information is available on request and measurement uncertainties are not taken into account in limit value calculations.

# = Result deviates from the limit value.

[ ] = Possible limit values are given in square brackets after the result.

FV = Analyzing laboratory is Eurofins Fertility Services (Mikkeli).

(a) = The analyses have been performed by an accredited method (SFS EN ISO/IEC 17025:2017 FINAS T096).

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|                                 |  |                           |  |
|---------------------------------|--|---------------------------|--|
| <b>Research contact person:</b> | Iina Haikarainen   |                           |  |
| Research no.                    | 504-2022-00114165/ AR-22-FV-014751-01  |                           |  |
| Sample details:                 | 2. Carbon  |                           |  |
| Arrival date :                  | 14/09/2022   | Study started : 15/9/2022 |  |
| Requested analyses:             | FVSKA: Secondary dry matter<br>FVT13: Dry matter and moisture<br>FVT14: Volumetric weight<br>FVT16: Total Nitrogen, Kjeldahl, soil, manure, compost<br>FVT51: Potassium (K), total, with AR extraction<br>FVT57: Phosphorus (P), total, with AR extraction |                           |  |
| <b>Arrived on</b>               | 14 September 2022  |                           |  |

| <b>Physical properties</b> |                     | <b>Result (MU)</b>   |                                 |
|----------------------------|---------------------|--|---------------------------------|
| FVT13                      | FV                  | Dry matter and humidity method : SFS-EN 13040: 2008            |                                 |
|                            | Dry matter          | 33.7%  |                                 |
|                            | Humidity            | 66.3%  |                                 |
| FVT14                      | FV                  | Volumetric Weight Method : Internal method                     |                                 |
|                            | Volume weight       | 340 kg/m <sup>3</sup>  |                                 |
| <b>Nitrogen analyzes</b>   |                     | <b>Result (MU)</b>   |                                 |
| FVT16                      | FV                  | Total nitrogen Method : SFS-EN 13342:2000; SFS-EN 13654-1:2002 |                                 |
|                            | (a) Nitrogen (N),   | Total content  | 5.0 (± 1.0) g/kg ca             |
|                            | (a) Nitrogen (N)    |  | 1.7 (± 0.34) kg/ton             |
|                            | a) Nitrogen (N)     |  | 0.58 (± 0.12) kg/m <sup>3</sup> |
| <b>Nutrients</b>           |                     | <b>Result (MU)</b>   |                                 |
| FVT57                      | FV                  | Phosphorus (P), total content Method : SFS-EN 13650:2002       |                                 |
|                            | (a) Phosphorus (P), | Total content  | 0.91 (± 0.23) g/kg ca           |
|                            | (a) Phosphorus (P)  |  | 0.31 (± 0.08) kg/ton            |
|                            | (a) Phosphorus (P)  |  | 0.10 (± 0.03) kg/m <sup>3</sup> |
| FVT51                      | FV                  | Potassium (K), total content Method : SFS-EN 13650:2002        |                                 |
|                            | (a) Potassium (K),  | Total content  | 6,4 (± 1,6) g/kg ca             |
|                            | (a) Potassium (K)   |  | 2.2 (± 0.54) kg/ton             |
|                            | (a) Potassium (K)   |  | 0.74 (± 0.19) kg/m <sup>3</sup> |

SIGNATURE

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Analysis Services Manager

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