

Nutrient data monitoring to support decision making (DONUTSS)

Data on nutrients in recycled biowaste (compost and digestate products)

Wim Vanden Auweele

Vlaco, Flemish Compost and Digestate Quality Association

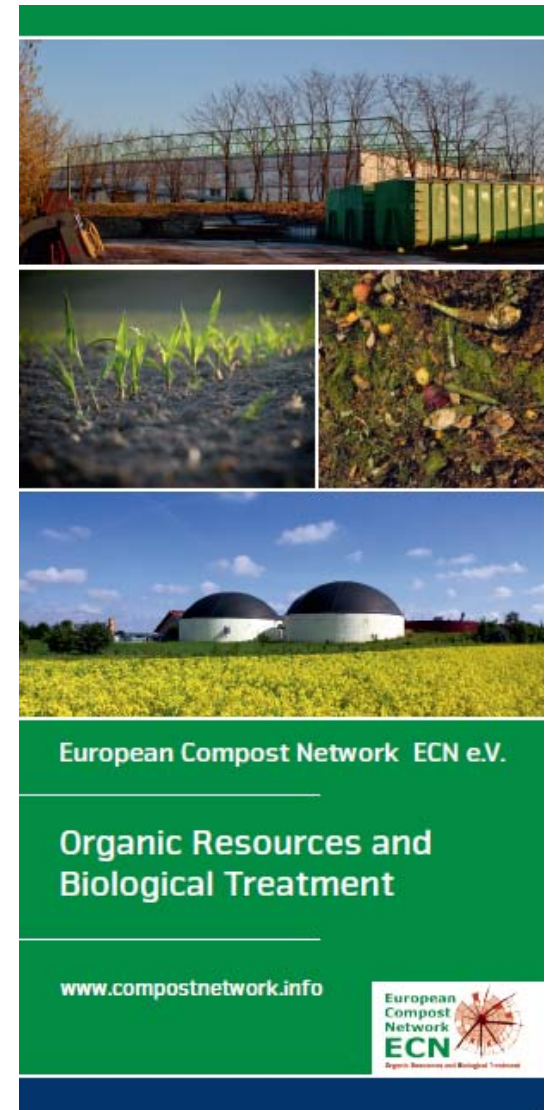
Chair of WG ,Quality Assurance for Compost and Digestate

European Compost Network ECN e.V.

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The European Compost Network

- Network for the organic waste recycling sector in Europe
- Promoting sustainable recycling practices in composting, anaerobic digestion and other biological treatment processes of organic resources
- Integrated organic waste recycling solutions generating **high quality products** for the benefit of consumers and the environment
- Members: 21 Biowaste Organisations of 14 European Countries
- ECN Quality Assurance Scheme for compost and digestate



Resource Potential of Bio-waste

Bio-waste as resource:

- EU COM(2010)235: 118-138 M tpa biowaste
- 88 M tpa is related to municipal waste
- Potential production of 60-70 M tpa compost/digestate
- Soil improver and organic fertiliser
 - Replacement of mineral fertilisers
 - C sequestration
 - Improvement of soil structure > more than just nutrients
- Mixing compound in growing media
 - Peat replacement
- Important source for bio-based products



ECN Quality Assurance Scheme (ECN-QAS)

Targets of ECN-QAS

- Harmonisation of the compost and digesate quality and requirements across Europe
- Harmonisation of quality assurance schemes across Europe
- Assurance and monitoring of high quality compost and digestate products in Europe
- Promotion of recycling of waste «from waste to product»

Whole chain is covered: input – process – output – use

Important aspect of ECN-QAS is independent sampling and analysis



Quality Criteria for Compost and Digestate

- Data available: level of member state or QAO and per product type
 - Organic matter, dry matter
 - Nutrients:
 - Total N
 - Mineral N
 - Total P_2O_5
 - Total K_2O
 - Total MgO
 - Total CaO
 - Bulk density
 - pH, EC, chlorine
 - Physical impurities and stones
 - Microbiology, heavy metals, organic pollutants



Variability:

between product types
between production plants
between member states

Key messages

- Need for clear End of Waste criteria for compost and digestate
- Quality compost and digestate through Quality Assurance:
 - Clean input materials through separate collection
 - Monitoring of the process (+ sanitisation)
 - End product quality criteria
 - Reasoned use: information and declaration of composition
- Quality Assurance delivers harmonised product information
- ECN supports harmonised model of data gathering (ECN-QAS annual report)
- More about ECN-QAS: <http://www.compostnetwork.info>