

ORGANIC FARMERS & GROWERS LTD

Certification Issues and use of Off-Farm Soil

Improvers in Organic Farming

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NUTRIENTS IN ORGANIC FARMING

- Organic farming aims at managing farms holistically
- Nutrients in organic farming should come from
 - Legumes and green manures
 - The farm's own livestock manures
 - Products from other organic farms
- Nutrients in organic farming can come from
 - Organic materials and mineral fertilisers listed in the standards
 - Bought-in non organic manures



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OFF FARM SOURCES

- Farm Yard Manures
- Composted or fermented household waste
- Clays
- Vermicompost
- Composted or fermented mixture of vegetable matter
- Seaweed
- Biodynamic preparations
- Minerals



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SOIL IMPROVERS: WHAT CAN REALLY BE USED

- Green waste compost - with a derogation
- Food waste compost - only if non GM and derogated
- AD Digestate - only if non GM and derogated
- Sewage sludge - currently not allowed



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BENEFITS OF COMPOST

- High organic matter
 - Improves soil structure and workability
 - Improves moisture retention
 - Increases soil biological activity
- Fertiliser Replacement Value
- Increases recycling



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BENEFITS OF ANAEROBIC DIGESTATE

- High N, P, K value
- Increases recycling
- Produces methane for heat and/or electricity
- Can produce a liquid fertiliser



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BENEFITS OF SEWAGE SLUDGE

- High levels of N, P and K
- High organic matter
- Improves moisture retention



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ISSUES OF COMPOST, DIGESTATE AND SEWAGE SLUDGE

- Genetic Modification (GM)
- Potential Toxic Elements
- Other contaminants
- Consumer perceptions
- Paperwork!!



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GENETIC MODIFICATION (GM)

- GM is not allowed in any product used on an organic farm
- Compost and digestate made from household waste cannot be guaranteed to be Non GM
- Restriction of compost to Green waste sources only



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SHOULD GM BE AN ISSUE

- Will any GM material be found in compost or digestate?
- What is the risk of contamination with GM in household food waste?
- Is composting or digesting food waste supporting the GM industry?
- Are we denying ourselves a good source of nutrients?



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POTENTIALLY TOXIC ELEMENTS

- High levels of PTEs in compost, digestate and sewage sludge
- Sewage sludge is banned from organics due to possible high levels



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SHOULD PTEs BE AN ISSUE?

- Should PTEs be an issue?
- Environment Agency and Quality Protocols control applications



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OTHER CONTAMINANTS

- Pesticides
- Physical contaminants (sharps, plastic, stones)
- Bacteria (E-coli, Salmonella etc.)



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CONSUMER PERCEPTION

- Sources of compost, digestate, sewage sludge
 - Human sewage
 - Animal byproducts
- Smell during application



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PAPERWORK

- Compost, digestate and sewage sludge all have regulations
- PAS 100, PAS110 and sewage sludge regulations
- Soil has to be tested for PTEs before it is applied and if a maximum level is reached then it cannot be used again
- Derogations required by Control Bodies



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CONCLUSIONS

- Phosphate shortage
- Closing the cycle of nutrients
- Are we restricting ourselves too much?



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