



PAS100 Certified Compost

Material Change has over seven composting sites in the Midlands and 15 years' experience in producing green and green/food composts sold into agriculture and horticultural growing media markets. Decoy Farm, Spalding Road, Crowland, Lincolnshire, PE6 0LX is Material Change's largest processing centre with a throughput of 45,000 tonnes of waste per year as well as a 2.8MW Anaerobic Digestion Plant located adjacent to the compost site also operated by Material Change.

Most of the waste received at the open windrow compost facility is green waste from local authorities and their contractors. The site also composts fruit and vegetable waste. After shredding, the waste is placed into windrows to start the composting process with sanitisation and stabilisation. The compost is then screened to produce a range of compost products.

The compost site is certified to BSI PAS 100:2011 and the Compost Quality Protocol and produces two grades of material (20mm) for agriculture and 10mm for landscaping/soil conditioning purposes which are supplied as products.

Value

Decoy compost is a soil improver and an excellent source of major nutrients such as phosphate, potash, magnesium, manganese, small amounts of nitrogen and trace elements. PAS100 0-20 mm Grade supplied to agriculture contains:

	Total Nitrogen (N)	NO ₃ -N & NH ₄ -N	Total phosphate (P ₂ O ₅)	Total Potash (K ₂ O)	Total Magnesium (MgO)	Total Sulphur (SO ₃)
Total Kg/t	7.5	0.29	3.9	5.1	2.6	2.2
33.3 t/ha	250	3	130	170	86	73

Estimated N:P:K fertiliser replacement value:

	Nitrogen (N)	Phosphate (P ₂ O ₅)	Potash (K ₂ O)
Market price of fertilisers £/kg*	0.67	0.59	0.44
Total nutrients Kg/t	7.5	3.9	5.1
Total Phosphate & Potash Value £/t		£2.30	£2.24
Estimated crop available Year 1	0%	50%	80%
Estimated crop available £/t	£0.00	£1.15	£1.79

*Fertiliser prices based on £230/t AN, £270/t TSP and £265/t MOP (Spring 2017)

Each tonne of Decoy Farm PAS100 compost is worth **£4.54/t** in crop available nitrogen, total phosphate, and total potash.

An application of 33.3 t/ha will supply around £151/ha of tangible value; but the true value to soils is gained from the 7.35t/ha of longer lasting organic matter added.

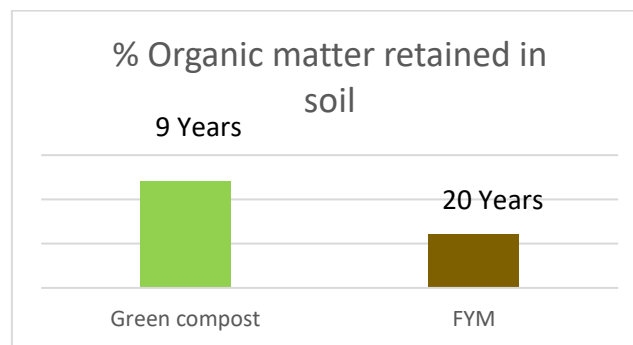


Organic Matter

Soil organic matter is the organic fraction of soil, consisting of three primary parts: small (fresh) plant residues and small living soil organisms, decomposing (active) organic matter, and stable organic matter (humus). Soil organic matter is important to soil fertility and crop productivity and building and maintaining it is vital for sustainable soil management. The amount of organic matter in soils depends on soil texture, climate, the inputs of organic materials and their rate of decomposition, the rate at which existing organic matter is mineralised, and the type of farming system used.

In the Defra/WRAP funded DC-Agri field experiments although 9 years of green compost applications applied only half the organic matter supplied by almost 20 years of FYM it produced a comparable increase in retained soil organic matter levels.

wrap



Source: Digestate & Compost in Agriculture, Bulletin 8

This suggests the green compost is more resistant to decomposition, which is further supported by the lignin content analysed within both materials where green compost contained c.70% lignin and FYM c.55%.

The true value of compost comes from increases in microbial biomass, earthworm numbers and nutrient supply (both the overall topsoil nutrient status of nitrogen, phosphorus, potassium, magnesium, and sulphur, as well as cation exchange capacity and potentially mineralisable N), and improvements in soil structure, moisture holding capacity and improved workability.

Safe and reliable to use – Decoy Farm compost is processed in carefully monitored open windrow systems. The material is produced under a Quality Management systems and HACCP, passing all the tests within BSI PAS100. Physical contaminants are well below the 0.25% PAS100 limit at 0.01% of total sample and well below the 0.12% w/w for plastics at 0.00-0.01%.

Order Now Please contact our Sales Department on 01449 722318, or email enquiries@material-change.com to organise a quotation and delivery.