Using green waste compost as a soil management tool swarm grower profile

Phil Thomas from Linscombe Farm, Bidwell Barton in Devon runs an organic 120 acre farm with his wife and sells the produce to the community, aiming to provide seasonal veg for as much of the year as possible. He keenly advocates the use of compost to boost the <u>soil structure</u> and help with water retention and uses it both on his fields and in his polytunnels.



We caught up with Phil as he was about to load and spread some green waste compost on a field that was part of a four year rotation, in its seventh year and sixth growing season. The field was in grass for 4 years and was previously a cereal field that had chicory and mixed grasses in it.

"I sell hundreds of tonnes a year of veg; the compost adds something the grass doesn't. The mow and mulch grass theory is only effective to an extent - it doesn't amount to the same as compost does in terms of changing the nature of the soil rather than adding nutrients...I struggle to see the real benefit from applying it to the top of grassland, it's best to put on bale land and plough it in."

He explains that the compost is mixed within 18 inches of the soil profile at a rate of around 30 tonnes per hectare (as advised by Devon Waste Management who supply the compost), using a rear discharge muck spreader. After the compost has been spread it will then be chisel ploughed.

To view a short clip showing Phil loading the compost up (after the screening process), and



spreading it on the field, click below...



"After the compost has been added, as soon as it has been mixed in you can then grass seed it. Get it right, and we get it in in June for 6 to 8 weeks of very dry weather. If we can't then ideally we will add a <u>green manure</u> <u>crop</u> and then add the compost in September."

He goes on to explain that the compost produces amazing substrate for the <u>soil</u> <u>biology</u> to live on...

"If you add compost at the end of the rotation, over the time it's in grass all the compost goes in to the ground and the soil ecology becomes more stable. When you come to plough it in four years later everything is in place."

He continues...

"You want biological activity - in order to have good soil biological activity you need the addition of organic matter. The compost bonds and binds when / where it's needed. It keeps the soil open so water can get in and out again - the compost is doing that."



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Phil explains the importance of looking at compost as part of your soil management and not your crop management and stresses that it is important to not use it as a crop management tool but instead to look at it as part of a long term rotation.

Click below to see Phil explaining the soil chemistry within the compost, what he perceives to be the difference between composted and non-composted organic matter and what happens when organic matter is added to different soil types...



In addition to using it on the fields Phil explains that is very much part of the soil management in the more artificial environment of the polytunnels where no wild species in the soil brings additional challenges such as the threat of pest and disease outbreaks. He refers to compost being a "win-win" saying that "as well as absorbing and holding nutrients in the soil and catalysing that chemical reaction which allows the nutrients to be available to the plants it also helps with the water management" though providing passages for the water (and air) to go down in to the soil.

Click below to see him explain how he manages the soil in the polytunnels and how the compost is incorporated within the cropping regime...



Phil says "It would be very interesting to work out the nature of what goes in to the green waste compost. With FYM you have grass, silage, wheat straw... With green waste compost you are adding material that comes from a very large area – lots of rock types and most importantly perennial hard wood waste – which produces long term lignin."

> If you are interested in finding out more about Linscombe Farm and their organic veg business have a look at their website http://www.linscombe.co.uk/

To view the analysis carried out by Devon Waste Management of the content of the compost Phil applied to the farm and what he could expect from applying it click here and here.





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