

# Compost tea as natural booster on the golf course



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A healthy plant starts with a healthy soil, and that also applies to grass. That is why more and more experiments are being done on the golf course with natural maintenance methods, sometimes supplemented with compost tea. Lee Lennox, Head Greenkeeper at de Enk Groen & Golf, is convinced that an organic approach to golf course maintenance is much better than the chemical one. At the Stippelberg golf course he uses compost tea to measure its effects.

"I used a lot of synthetic agents, because I thought that would keep me in control of the plant health. Until one year I decided to keep the grass growth as minimal as possible. This was very difficult to achieve with chemical agents. So I decided to switch to organic."

#### "The grass grew slower, but it was a healthier plant"

Lennox recounts his experiences as he walks across the green carpet. "I started to notice the benefits of organic fertilisers. Plants were taking longer to wilt. They were staying greener longer with lower moisture levels, so I thought, something good was happening here. I started cutting out more and more: sulphates, salt fertilisers. The grass grew slower, but it was a healthier plant and that was what I wanted."

The slower the growth rate of the grass, the less it needs to be mowed. And that has its advantages, because the less the surface is stressed, the less the grass is damaged and the less compaction of the soil occurs. The innovative greenkeeper has reduced his mowing times to twice a week instead of mowing every day - achieving the same quality!



Lee Lennox, Head Greenkeeper at de Enk Groen & Golf



## You don't have to spend thousands of dollars on fertilisers to maintain a healthy golf course

Lee walks into the field with a sampler and takes a soil sample. The column of soil he brings up is studied extensively: for the smell, the soil structure, the length of the roots and even the organisms he can see with the naked eye. But it's the invisible organisms that call the shots. The soil biology determines how healthy the soil is and how many nutrients the plant has access to. Compost tea has been specially developed to supplement and feed those organisms.







Lee had already been experimenting with compost tea as a supplement to his natural maintenance methods. Through William Bogaerts, innovation manager at de Enk Groen & Golf, he came into contact with Royal Eijkelkamp. De Enk is a progressive company for green management and had discovered Royal Eijkelkamp's compost tea in the search for alternatives to chemical green management. The large brewing machine that Royal Eijkelkamp supplies, with ready-to-use brewing kits and nutrient mixes that have been tested for composition, make the work a lot easier for Lee Lennox.

#### De Enk Groen & Golf

The green managers of de Enk call themselves 'The Innovators' and are working towards a greener Netherlands, with a focus on innovation and sustainability.



#### Soil biology helps prevent pathogenic fungi

"If you have soil biology on your side to combat pathogenic fungi and turf pests, for example, it actually does the work for you, and is much better at it! With good soil biology, you need fewer chemicals." And that is valuable, because those chemicals can also have negative environmental effects.

The challenge in his method is that you cannot directly establish a causal relationship. Lee gives an example: "The year I came here, in the winter the greens were covered in snow mold. Each year there has been a huge reduction, now this year I dare say that it has been reduced to 0. Not because I tackled it directly, but because of what happens underground. There is just no hard evidence that this is due to my treatment method."

#### **Green management as nature intended**

Yet it is perfectly logical to Lee that the natural approach keeps the grass healthier, because that is how nature intended it. The nature reserve he

passes every day, which remains green during dry periods and dry during heavy rainfall, inspired him to work with nature. He explains that a living soil and a healthy plant have a natural defense system, which work together in symbiosis and know best what is good for them than we do. So why should we interfere with this natural system so much?

To test the effects of his treatments, also in combination with the compost tea, Lee regularly takes soil samples and takes photos of the roots that he shares with his colleagues at de Enk. Root lengths of over 20 centimeters are no longer an exception. In addition, he measures, among other things, soil moisture, the Clegg, or how the ball bounces on the court, the amount of grass cuttings, and how quickly the green recovers, for example at the places where he takes his samples. The most important thing for the soil to recover quickly is its permeability. Lee: "There must be air in the soil. No compaction, there has to be space for the plant to grow; with sufficient moisture, but not too much."

Lee has been named Greenkeeper of the Year in 2023 and was given the opportunity to apply his organic method at the Stippelberg golf course. He combines organic fertilizers with compost tea on the greens and the results show that his method works. However, this method of organic green management is not yet widely accepted. "I want to change the way people think about this and show that it works, so that they'll use fewer and fewer chemicals. The natural way is also a lot cheaper; you really don't have to spend thousands of euros on fertiliser to maintain a healthy golf course."

#### Preparing for a chemical-free future

Many greenkeepers find it difficult to step out of the comfort of routine: they will continue to apply chemicals as long as the grass stays green and the laws don't change. "I spoke to people who have tried it, and use compost tea in combination with fertilizer. But then you are only working against yourself. Compost tea and fertilizer do not go together. The trick is to phase it out slowly and combine it with organics. It's all about building the soil first - otherwise the plant will starve if you suddenly stop giving it synthetics."

But one day those chemicals will be banned, and then Lee is the one who already knows how to keep the golf course in good condition in a different way. "My greens are already a step ahead because there is a lot going on underground. On courses using cocktails of chemicals the grass is completely dependent on them, because it has been way for years! After years of 'fast food' and 'antibiotics', you can't give the soil one 'apple' and think it will be healthy. That transition takes time, unlike the synthetic method that often show an immediate effect."

#### **Golf course Stippelberg**

Golf course Stippelberg is located in Bakel, Noord-Brabant, near the nature reserve de Stippelberg. The course is GEO certified as a sustainable golf course. By planting trees and placing birdhouses and insect hotels, nature is given plenty of space to develop. This is reflected in the biodiversity on the course.







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