Building confidence in soil-based rootzones and topdressings

If there's one overriding requirement for greenkeepers when selecting soil-based rootzone and topdressing products, it must surely be to have total confidence in those products. Confidence that they are free of chemical, biological (pathogens), and physical contaminants and so safe to use; confidence that the soil component is healthy and beneficial; and confidence that they are consistent and environmentally sustainable.

BIGGA Education Supporter British Sugar TOPSOIL believes that by giving greenkeepers and other grounds professionals as much independent scientific evidence as possible on its soil-based products, only then can those professionals make informed choices, with confidence.

Over the past 25 years TOPSOIL has developed soil-based products for the sports and amenity sector. Understanding that user confidence is critical for greenkeepers and other turf maintenance professionals, TOPSOIL first set about devising a comprehensive suite of tests with soil scientists that go much further than those required by the relevant British Standards. These tests are particularly crucial to evidence that the soil used in TOPSOIL products is free of potentially harmful chemical contaminants such as polyaromatic hydrocarbons, arsenic, etc., and free of physical contaminants such as 'sharps'. The tests also record the soil's physical structure, pH, nutrient-holding capacity, filtration rate, and other key aspects of relevance to turf care professionals.

Having developed the topsoil industry's most stringent regular testing and analysis, TOPSOIL instigated a series of scientific trials in conjunction with the Sports Turf Research Institute (STRI) to evidence its products' performance when compared with other materials used by greenkeepers. Under the auspices of the STRI's Dr Christian Spring the most recent trials, previously reported on in Greenkeeper International, provided evidence of TOPSOIL's products' growing properties and their ability to deliver a good supply of nutrients to sustain healthy turf, whilst also delivering the drainage rates required.

Always looking for information that will give his customers confidence, National TOPSOIL Manager Andy Spetch commissioned work with soil scientists Tim O'Hare Associates to measure and monitor the carbon content and carbon storage abilities of its *Landscape20* general purpose topsoil. This product is sampled every six months and the total carbon measured, providing important environmental information on its ability to sequester carbon.

Most recently, Dr Mark Pawlett, Senior Research Fellow of Soil Biology at Cranfield University, is overseeing a year-long study into the amount of soil microbiology in TOPSOIL products. Commencing in November 2021, samples of *Sports&Turf* topdressing, *Landscape20* general purpose topsoil, and *HortLoam* planting soil are taken at three-monthly intervals. Three sets of samples have already been analysed and the fourth and final samples will be taken and analysed in August 2022. By measuring the total microbial

biomass of TOPSOIL's products Andy Spetch hopes that the study will show that the processes critical for nutrient cycling and resilience are supported by active soil microorganisms. In other words, that the topsoil component in TOPSOIL products is a healthy, living organism making an entirely positive contribution to turf establishment and maintenance. The study findings will be published this coming autumn/winter.



Forming the bunker with Landscape 20.