



MAKING THE 'APPLIANCE OF SCIENCE' SIMPLE

Scott MacCallum visited Scotts' Levington Research Station and learned just how much goes into producing the products you use on the golf course.

We all like things to be straight forward and get irritated when they become even a little bit complicated. For example, we love it when we switch on our computer and everything boots up perfectly, but when there is a little glitch and it doesn't work instantaneously we turn into Mr Angry, particularly if we are left hanging on a premium rate helpline.

It's the same on the golf course. You want to put an application on the course as part of a turf management programme, or to counter a disease which may have developed, you want to know that everything is in place to enable you to do just that. You also want to know that the action you are taking is going to be effective.

The Scotts Company, a BIGGA Golden Key supporter, prides itself on using cutting-edge technology to produce effective products for use on the golf course, and making life as simple as possible for its customers.

"We only develop a product if we are sure it is going to improve on what is already available or if it's a new addition to the product portfolio, one that is going to make a real difference to the end-user" explained UK & Ireland Sales Manager, Nick Martin.

"Scotts is an extremely innovative company. We make a huge investment in research and development across the world and right here in the UK at Levington. The development of a new product can take many years, from the initial stage of identifying a need moving through the chemistry to testing and registration," he added.

Scotts was launched in 1868 when an American soldier, Orlando McLean Scott, left the Union Army and embarked on a new business venture with the mission statement, "Farmers need, and shall have, clean, weed-free fields". OM Scott made its name as one of the America's leading distributors of horse-drawn farm equipment before adding a farm seed business to its portfolio.

In 1907 Dwight Scott, his elder son, identified just how important the garden lawn would become in American culture and began offering grass seed by mail order and in 1916 the company received an order for 5,000 pounds of Kentucky Bluegrass from one of the first golf courses to open in the States – Brentwood-in-the-Pines, on Long Island, New York.

The UK business unit of Scotts Professional was formed in 1991 and is based in Ipswich. Its research station, unique to the UK, is located a few miles away in the village of Levington. It covers 7.1 hectares and boasts two 2,000 square

metre golf greens, one built to USGA guidelines and the other a traditional push up green, as well as other areas which replicate the various areas on a golf course.

"The greens aren't the best in Europe but they're not meant to be. We use them to test our plant protection products for example, to measure how effective they are at preventing and treating turf diseases. Our greens are managed and maintained in a way that enables us to test those products in natural conditions," explained Dave Steward, UK & Ireland Marketing Manager, as we strolled around the impressive facility.

"The greens are large because we split them into three and use them on a three year rotation to give the trial areas time to recover," he added.

There is also an area which has been overseeded with weeds – more expensive than high quality grass seed, would you believe – so prototype herbicides can be given a genuine challenge.

Among greenkeepers, Scotts is probably best known for its fertilisers such as Greenmaster and Sierrablen. The company is at the forefront of controlled-release fertiliser development and the key roles of its scientists is to produce coatings which react in certain ways to specific temperatures and soil conditions. The Levington soil is high quality which is great in normal circumstances,





but to ensure fertiliser trials are not distorted by a soil rich in nutrient the Trial team - there are 15 people who work at the Research Station - have stripped an area and replaced the soil with a sand mix which is virtually nutrient-free. A small garden shed to the side of one of the trial areas contains a £30,000 piece of reverse osmosis equipment which, aside from something you'd expect to find in a Tardis, lowers the electrical conductivity of the borehole water. That way, any improvements are purely down to what is being tested and not from any of the existing nutrients in the soil or water.

In addition to the turfed areas there are greenhouse areas and flowerbeds as the Station is used for the testing of Scotts' consumer and ornamental horticulture products as well as those for the turf market. Indeed, testing on plants like poinsettia and cyclamen can amplify any pros and cons of a test more than a test on a particular grass type, so there are cross over benefits to be had from trialling such an extensive portfolio at one site.

We visited the area being used to test the company's new seed range.

"We acquired the rights to the Tee to Green range and have also been developing our own varieties which originally came from Oregon. These contain salt and drought tolerant varieties. We're carrying out extensive testing in European and UK conditions and have been extremely pleased with what we have seen so far," said Nick, as he took another opportunity to study the test plots.

Scotts' product development always has the job of the end-user in mind. Greenkeepers who are under pressure to have their course looking perfect prior to a tournament and to maintain its health and appearance despite difficult winter weather conditions look to applications of iron as a useful tool. To highlight the benefits of the site, Trials Officer Roger Page, undertook a demonstration of Effect Iron, a product which was launched at Saltex the following week after four years in development. A two metre square patch

was sprayed with the promise that it would have noticeably greened up within three hours.

Not being able to resist a sneaky peek, we had a quick look 45 minutes later and there was a definite difference in the sprayed patch and the area around it. This was more pronounced when we did return after the full three hours.

Walking around the Station you can't fail to be blown away by the vivid colours and smells of some of the test plants but the experts are not distracted by this gardening explosion they are more concerned by objectively marking each plant to see how it measures up against its peers.

The investment in Levington is huge because product testing in the UK is tightly controlled by the PSD.

"All tests are carried out to the required regulatory standard so that products can be registered when required. Scotts regards compliance with legislation as a minimum requirement," explained Dave.

The trials, in addition to discovering whether Scotts is sitting on a new wonder product, also allow testing to see what application rates are optimum. Modern day pesticides, herbicides, fungicides and the like require much lower doses than their predecessors to produce the same, or significantly better results, because they used the latest, modern active ingredients in their formulation. That can only be beneficial for all.

All Scotts' development, production and operational processes are scrutinised to assess environmental impact and continually improve the company's environmental profile. Key to the structure of the process is ISO 14001, the international specification for environmental management systems which outlines the requirements for establishing an environmental policy. As well as its own corporate responsibility, Scotts is keen to promote environmental awareness among end-users and has been a key sponsor of BIGGA's Golf Environment Competition along with Ransomes Jacobsen, Syngenta and, as of this year, Golf Monthly.

"We see tremendous benefits in being involved. Looking at some of the past winners they are superb ambassadors for the game of golf in showing just how much expert conservation and environmental work goes on. There is an amazing amount of diverse wildlife on a golf course that you wouldn't get if the golf course wasn't there and managed in an environmentally-responsible manner," said Dave.

In addition to environmental impact, efficacy has been at the forefront of the minds of all leading chemical companies. With so much attention being drawn to the game of golf and European-wide restrictions on chemicals, much research goes on to provide the most effective products at the lowest application rates and often replacing older products which complied with older regulations but which have been overtaken by more advanced chemistry.

Keen to promote the responsible use of pesticides, Scotts has sponsored the Amenity Forum's 'Check Your Sprayer' campaign launched at Saltex.

"We promote integrated pest management solutions. Sometimes a chemical is not the best option. It is just one of the tools in the kit that should only be used when it's needed. That is the advice we give," explained Dave, who added that their entire sales force are BASIS and FACTS qualified to give advice.

"If you have a healthy plant it is much less susceptible to disease, so it doesn't need as much outside help."

Scotts has no doubt about the benefits of being a BIGGA Golden Key Supporter and contributing to the Learning and Development Fund.

"We've always supported education and training not just in the golf world but also in the sports and the growers side of our business. Just as our scientists are working hard to find solutions to everyday problems on the golf course, greenkeepers' learning must continue, so we're pleased to support BIGGA in its ongoing provision of training and education to the industry."