

**PRESS RELEASE**

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**Science of food and drink series draws scientific community centre stage**

Following a successful showcase at the Royal Highland Show which culminated with a celebration of the RHASS Presidential Initiative’s ‘The Science of food & drink’ series, the team have reflected on the ten brilliant case studies which have been uncovered over the last six months.

The series launched in January, highlighting a partnership between the Moredun Research Institute and Scottish Water, with actions taken to get on top of high levels of *Cryptosporidium spp.* which were detected in samples from Tomnavoulin’s drinking water supply in the Scottish Highlands. Farmers in the Glenlivet area were offered advice and support on disease control and guidance on better land management, such as fencing off watercourses and rebuilding riverbanks, to minimise the impact on drinking water quality.

Next up, scientists from the James Hutton Institute (JHI) were in the limelight and the critical role they are playing in helping farmers to develop more resilient and sustainable blackcurrant crops. Andrew Husband, of East Adamston, By Dundee, grows blackcurrants for Ribena and through working closely with the JHI, has been trialling new ways of breeding plants and varieties which can better withstand changing climate pressures.

Another multi-stakeholder collaboration was at the heart of our third case study, looking at a season-long project on Islay, working with farmers to reduce unnecessary flukicide treatment. Scientists from the Moredun Research Institute took part in a study, working alongside Elanco Animal Health, the RSPB, Liverpool University, Islay veterinary practice and farmers on the island, to come up with a plan to boost animal welfare, reduce flukicide resistance, improve soil health and help promote local wildlife populations.

Further in the series, we heard how farmer owned-cooperative, Scottish Agronomy, is collaborating with farmers, to develop alternative and more integrated pest management schemes with a key focus on Scotland’s seed potato industry.  Working alongside Jim Reid of Milton of Mathers Farm, near St Cyrus, they have been looking at the benefits and practicality of spreading straw mulch and applying mineral oils to the crop canopy and comparing this integrated approach with that of using a pyrethroid insecticide.

The hot topic of food safety was the focus of a project looking at minimising acrylamide in potato crisp production, started between Abertay University and Perthshire-based Taylors Snacks.  Abertay approached Taylors Snacks, who rebranded earlier this year from the famous Mackie’s of Scotland crisps, to suggest a collaboration to research and develop an online monitoring system to measure and manage levels of acrylamide in crisp production in real time which is a first for the industry.

Next up, we featured Waterside Farm in the north-east of Scotland, managed by Graeme Warren who has invested in a vertical farm tower with the view of growing alternative crops such as micro greens and vanilla, to secure year-round income. We explored how developments in vertical farming technology can co-benefit field-scale cropping to sustainably produce fresh food for a growing population.

Our seventh case study homed in on the world’s first climate-positive gin, developed at Arbikie Highland Estate in Angus. The Stirling brothers have been working closely with scientists at Abertay University and the JHI, exploring the distilling potential of less conventional crops such as peas and potatoes, resulting in pea-based gin Nàdar and driving the expansion of the global sustainable spirits’ market.

Automated weighing technology has proved a gamechanger for the Scottish beef finishing sector and formed the base of a study looking at the development and widespread adoption of the Ritchie Beef Monitor. Technology pioneers, Agri-EPI Centre, were an early adopter of the system, working with Robert Neill of Upper Nisbet Farm in the Scottish Borders, to trial the platform on the ground.

One of the biggest scientific breakthroughs to come out of Scotland in recent years was the development of the *Mannheimia (Pasteurella) haemolytica* vaccine, which is recognised worldwide as one of the most significant contributors to sheep and cattle health. Developed at the Moredun Institute by Professor Willie Donachie and his research team, they developed a new technique that significantly reduced the occurrence of pneumonia in lambs and calves.

Our final case study narrowed in on regenerative farming approaches at Balbirnie Home Farms, in Fife, who together with AHDB, have been involved in research to see how different practices manifested in the scale and natural environment of real farm situations. The focus has been on reducing chemical inputs and improving plant nutrition through biology, trialling different drilling dates, cover cropping and foliar nitrogen.

This year’s RHASS Presidential Team, hailing from Perth, comprised of president Ian Duncan Millar and vice presidents Linda Tinson, Ewan Pate, George Taylor, Ronnie Black and the very Reverend Angus Morrison serving as Honorary Chaplain.

President Ian Duncan Millar reflected: “In previous years, the President’s Initiative has focused on promoting the food and drink industry, so this year we wanted to do something a little different and delve into the science behind its success. The scientific community is so important to what we do in agriculture, and we need to make sure those links are strengthened and highlighted in any way we can. if we lose science, we lose progress that is necessary for agriculture for the future.”

Commenting on the showcase at the Royal Highland Show, he added: “We were delighted to pull everything together by means of a showcase and celebration, bringing together a lot of the people who helped with our initiative to both shine a light on their businesses and technologies and to hear from some brilliant speakers. We hope this series will leave a legacy for many years to come, with the materials being used as a long-term learning resource and that in the process, the scientific research community has now been drawn centre stage.”

Head of Rural Business, Lindon Tinson, at Burness Paull LLP, who were the headline sponsor of the Presidential Initiative, concluded: “This year’s PI has provided an incredible platform for some of Scotland’s exciting and innovative advancements in the science of food and drink, highlighting just some of what’s ahead for our agri rural sector!”

For more information on the different case studies featured as part of the series, you can access them here [**www.rhass.org.uk/presidential-initiative/**](http://www.rhass.org.uk/presidential-initiative/)

**Notes to Editors:**

**The RHASS Presidents Initiative**

The Presidential team serves for one year and is made up of representatives from the geographical ‘host’ area where the Royal Highland Show would traditionally have been held when it travelled annually before it moved to its permanent site at Ingliston, Edinburgh in 1960. This year it is Perth, Tayside and Angus. Ian Duncan Millar MBE is the 2023 RHASS President, alongside Vice Presidents Ronnie Black, Ewan Pate, George Taylor and Linda Tinson, with the Very Reverend Angus Morrison serving as Honorary Chaplain.