

Berry Scotland Newsletter

Number 3

October 2003

Thirty community groups funded for berry projects

Back in Spring 2003, the Scottish Community Diet Project (SCDP) and the Healthy Choices Award scheme (SHCAS) agreed to help us raise the profile of Scottish berries over the summer. They produced an excellent information leaflet which was sent out to community food groups and caterers along with their newsletters. The SCDP also invited food groups to apply for a small grant to enable them to use berries in some way. The response was very good and thirty berry projects are now underway all over Scotland, from children's cookery classes (Arbroath), berry picking and tasting (Kelso) to berry growing schemes (Islay). Bill Gray from the Scottish Community Diet Project said "the response was so great we ended up increasing the money available". Enthusiasm for eating berries appears to be gaining momentum and this is one of the main aims of the Berry Scotland Programme.

Angus schools berry success

Uptake of school meals increased by around 40% in Angus schools when the children were promised Scottish strawberries for dessert. On this special "berry day" Angus Council found that demand for school meals in 59 primary schools in the area increased by 37% on the same day the previous week and by 47% on the year before. Nutrition experts say this shows that children do like healthy food and that berries are a good example of an attractive fruit that is full of nutrients and which everybody likes. Next year, Angus Council are keen to repeat the berry day and other local authorities are also enthusiastic to make berries part of the school meal. In addition, work place canteens and the NHS are obvious venues for making local berries available as part of a healthy diet.

SCRI News

£1 million raspberry breeding deal for Scottish Crop Research Institute

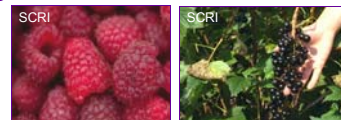
Back in July, a deal to ensure the continuation of raspberry breeding at SCRI was reached. The deal, worth almost £1 million is to run for six years and will see a dedicated plant breeder and an assistant working on producing new cultivars aimed mainly at the fresh market. A 13-strong consortium is behind the deal and involves most of the leading players in the industry including Berryworld, Meiosis, KG Fruits, Angus Soft fruit, Highland Fruit Stocks, Mylnefield Research Services, Saltire Fruits, Scottish Nuclear Stock Association, the Horticultural Development Council and the Scottish Executive Environment and Rural Affairs Department. In the last 30 years the raspberry breeding programme at SCRI has produced commercial varieties such as Glen Clova, Glen Moy, Glen Prosen and Glen Ample. In the

1990s, it was reckoned that varieties bred at the Invergowrie-based institute accounted for more than half of the commercial acreage of raspberries in the UK. The development of the efforts of the breeding programme will be part of the Fruit Product Innovation Centre, a new initiative also launched in the summer.

Fruit Product Innovation Centre

The Fruit PIC aims to provide a focus for SCRI's research efforts in soft fruit across a range of scientific disciplines. It is also intended to fully connect and align the Institute's research with the needs of the relevant end-user communities. Similar structures have been established for the potato and grains research at SCRI.

Dr Rex Brennan



berry scotland

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Our aims are to encourage an increase in consumption of Scottish berries for the benefits of population health and the Scottish berry industry. The Berry Scotland Programme Board brings together experts from a number of professions. They are: Professor Annie Anderson, Centre for Public Health Nutrition Research, University of Dundee; Professor Mike Lean, Human Nutrition

Department, University of Glasgow; Andrew Logan, Grower (Scotfruit); Hector MacLean, Expert in Rural Diversification; Ronnie McNicol, Breeder (Redeva); Ewan Pate, Grower (Saltire Fruits); Anne Thomson, Marketing Consultant (Gallagher Associates) and Processor (Ella Drinks Ltd).

Profile: Mike Lean



Professor of
Human Nutrition

Every issue we feature one of the Berry Scotland Programme board members.

Professor Lean is based at the University of Glasgow where he leads the Human Nutrition Department and also practices as a consultant physician at Glasgow Royal Infirmary. His research focuses on obesity, energy balance and diabetes, and also links in with other Glasgow based research on the health effects of phytochemicals from plant foods. He has become increasingly involved in public health and health promotion measures to prevent disease and promote good health through healthy eating.

A staunch supporter of Scottish produce, he became interested in berries because of their high antioxidant content. He actively pursues funding for research to find out how the antioxidants from berries work in the human body to maintain health and delay disease processes. He recently co-published a piece of work which demonstrated that frozen Scottish raspberries still contain all the goodness of fresh.

He encourages Scots to follow the Finns in eating more berries, and indeed is the proud owner of a second freezer especially for storing berries!

Highland Berry Growers

The Highland Berry Growers Group aims to establish native berry crops on sites throughout the Highlands and Islands, to monitor, evaluate and disseminate the results of the trial work to assist other growers and to market the crops and investigate the potential for adding value. There are now 5 sites of 1000m² established and another 9 sites being planted in September 2003. The fruits being grown on each site will depend upon the soil characteristics but will include blaeberry, lingonberry, cloudberry and cranberry. Last years plantings have established quite well but the cloudberrries haven't appreciated the dry spell in all places. On 2 sites there are plantations of grape kiwi (*Actinidia arguta*), the fruits of which taste similar to the ordinary kiwi but perhaps more refined. A reasonable quantity of fruit is not expected from the plantations for a year or so but from the small amounts produced this year it looks as though some form of bird control will be necessary. This year the plants are being imported from Norway (cloudberrries), Finland (blaeberrries) and the USA (lingonberries) while the cranberries have been propagated from SCRI stock.

An open day was held at Bonar Bridge in July which was attended by around 80 interested people from across Scotland and it is hoped to arrange this event annually at different sites across the Highlands.



Cloudberrries



Blaeberrries

For more information contact Colin Stirling on 01467 632982

Research news

How do fruit and vegetables help prevent cancer?

This is a question often asked by scientists. Cancer is a complex multistage process, and a number of studies have indicated that people who eat more fruit and vegetables are less likely to get the disease. A current theory states there are many substances present in fruits and vegetables that are likely to interfere with different stages of the cancer process e.g. vitamins, minerals and polyphenols. These compounds could potentially have many anti-cancer properties (including antioxidant, anti-inflammatory and an ability to alter enzyme activities) although their exact mechanisms of action remain to be elucidated. A recent study found that blackberry extracts were able to protect DNA from damage by inhibiting metabolic activation of a cancer causing chemical in the laboratory.

Temple & Gladwin (2003) *Nutrition* 19: 467-470
Tate et al (2003) *Nutrition Research* 23: 971-979

The rise in popularity of cranberry juice

North America's largest producer of cranberry juice drinks reported sales of over a billion dollars last year. The success of this bitter tasting juice can be attributed to it's associated, well marketed health benefits. It is claimed that cranberries can help prevent urinary tract infections (UTI) and may also be able to protect against certain types of ulcer and gum infection. These properties can be attributed to the fact that cranberries (and blueberries) contain compounds called *proanthocyanidins* which help prevent bacteria adhering to the lining of the urinary tract and stomach. This is an active area for research and there is some clinical evidence to support the claim that cranberry juice can help prevent recurrent UTI but less so that it can actually treat UTI. A clinical trial involving elderly patients is currently underway in Dundee.

Kiel et al (2003) *J Family Practice* 52(2): 154-155



Saltire Fruits Ltd

