

The

VEGETABLE

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Farmer



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DEMAND FOR HOME-GROWN BEANS EXPANDS

By Edward Long

bars, parties and wedding receptions.

"But as the business expanded and aggravation from traffic wardens increased I decided to move the business to a new factory unit at Soham in 1995," Sandra Hooper explains. "At our original site we employed a handful of part-time women but now we have a full time staff of 10. As well as moving into beans recently we have retained and expanded our core business."

The move into beans followed a meeting with international plant breeder Dr **Colin Leakey** of Girton-based **Peas and Beans Ltd.** He pointed out the nutritional value of beans in a vegetarian diet and the enormous scope for developing value-added markets with specialist types.

The initial interest centres on his small red kidney bean *Stop* and his non-flatulent 'social' bean *Prim*. Last year both were grown in a small EU-funded pilot scheme in East Anglia, and this year up to 50 acres will be drilled. It is hoped that UK production will help to offset the need for costly imports.

"I am keen to source my raw material locally wherever possible and want to avoid the waste of fossil fuels involved with shipping them in from halfway around the world. With a short supply chain from known producers I can be assured that we are getting a high quality product," says Sandra Hooper.

Currently red kidney beans are needed by Bean Thinking to make stir-in sauces, chille con carne and similar products as well as for inclusion in bean salad mixes which have to be shipped in from North America and Africa.

Each year over 30,000 tonnes worth over £30m to the UK imports bill, are shipped in through British ports. To meet domestic demand at least 8,000 acres of red kidney beans could be grown on farms in southern England and the Channel Islands.

Current North American varieties are large seeded and not adapted for north-western European climatic conditions. With only around 50 red seeds/100g they are too large and highly susceptible to harvesting damage. Plant architecture is also not right as plants are too short and their long low-slung pods trail on the ground making combining difficult.

Dr Leakey points out that many of the imported beans are

have to be cooked properly.

So he set out to develop a small seeded red type suitable for European processing markets. The result is his variety *Stop*. It is smaller than a conventional red kidney bean and larger than a baked bean. It is a major source of dietary fibre which reduces the risk of coronary heart disease and diabetes.

The cream seeded *Prim* is a new type that can be eaten without, Dr Leakey claims,

By the end of this year a Cambridgeshire specialist vegetarian food manufacturer will need around 2,000 tonnes of beans a year to satisfy growing demand for its vegetable-based frozen products. But with the steep rise in vegetarianism this could be the tip of the iceberg.

Despite its name Soham-based **Bean Thinking Ltd** has only been deeply involved with beans for the past 18 months. During this time a range of products made from several different types of beans has been developed.

The business started in Greenwich in 1985 when former biology teacher and self-employed caterer **Sandra Hooper** set up a small operation to make and supply the catering trade with interesting and high quality frozen vegetarian dishes. These included whole meals, meatless or 'shepherdless' pies, vegetable lasagne, flans as well as vegetable pates for sandwiches for theatres, wine

Dr Colin Leakey with his UK-bred beans.



Sandra Hooper with a sample of Dr Leakey's 'social' non-flatulent beans.

not colour-fast; the red is lost with the cooking water to leave drab kharki-coloured beans in the pot. In the early 1980s a friend in the processing industry told him that large seeded beans were not ideal as it was difficult to cook them thoroughly. But because in their raw state they contain toxins which can induce nausea and trigger a migraine attack they

causing the embarrassing side-effects often associated with bean consumption. This is why it is dubbed the 'social' or 'ozone-friendly' bean. A spin-off from the NASA space programme, it is said to be more easily digested by the human gut than most other



Chick peas – could they too, be produced in the UK?



Stop – The small seeded red kidney bean.

types.

Astronaut diets contain a lot of nutrient-rich beans. The human gut produces both methane and hydrogen, both explosive gases, which if not expelled could blow up a space suit like a balloon. Worried

what might happen in the confined space of a rocket capsule NASA commissioned research to find out what could be eaten safely, and how potential dangers could be avoided.

A vast amount of US dollars was spent on the research but no way to avoid the flatulence risk was found. But then in

1979 Dr Leakey made a chance discovery that was to lead to a breakthrough in bean breeding. Whilst on a trip to South America he visited an open market in southern Chile where he noticed that some beans on the stalls cost far more than others. He was told they were for 'the rich mans table.' When asked what this meant the Indian women smiled and turned away embarrassed. After Dr Leakey rubbed his stomach and raised his eyebrows heads nodded and he realised the beans were for socially aware consumers. This was later confirmed by well-to-do Chileans who were amused at his erudite interest in the subject.

The two types that cost more than the others were the yellow-white mottled Cosorron bean and the sulphur primrose coloured Manteca; neither of them were suited to north-western European conditions but by crossing them Dr Leakey has been able to develop Prim, the world's first wind-resistant 'social' bean for the northern hemisphere.

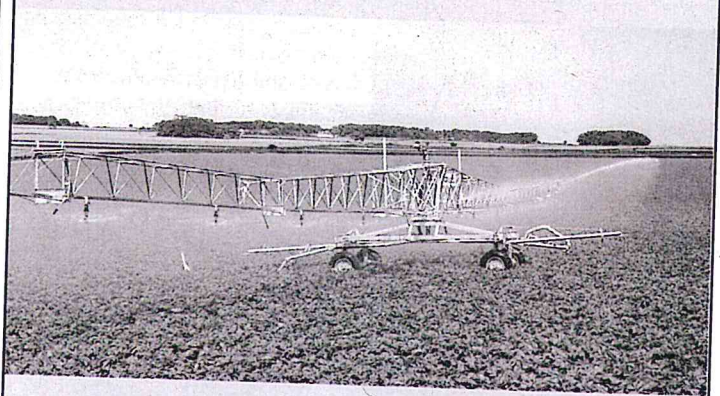
Sandra Hooper believes frozen food products containing Prim beans would interest hospitals, residential homes, colleges and other institutions as well as individual customers.

Since 1985 her company, which also supplies ingredients to other food manufacturers, has used a wide range of beans as raw material for its products. Apart from red kidney beans, others include mung, blackeye, cannelloni, haricot, pinto, butter beans, flageolet, lentils and chick peas. Currently around 30 tonnes of chickpeas a year are needed for airline meals and there is potential to take at least 100 tonnes. But the biggest scope seems to be with the small red kidney and 'social' beans.

"After the recent food scares and foot and mouth disaster interest in vegetarian foods is rocketing and we expect to see a sharp rise in demand for our frozen products. This could provide local farmers with another market outlet for their quality produce," Sandra Hooper concludes.

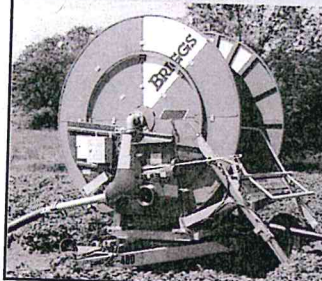
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