The export potential for Australian native food crops such as muntries (pictured) is yet to be realised because, to date, it has not been possible to guarantee regular supplies of high-quality produce. CSIRO has been working with Aboriginal communities and industry to learn more about native foods in a bid to boost product quantity and quality. A web site launched recently by CSIRO will help to promote the native foods industry with updates on industry developments, crop profiles and links to further information, associations and processors across Australia.

CSIRO researchers Dr Maarten Ryder and Yvonne Latham are trialling native food plants to establish the best ways to produce native foods on a sustainable basis.

A peak body for the rapidly-expanding Australian native foods industry will be established by mid-2005. CSIRO has launched a comprehensive on-line information service on the native foods industry. Extensive native food trials have provided valuable information on what to plant and where. With unique and diverse flavours, Australian native foods are ‘clean and green’ and their production incorporates indigenous knowledge and involvement.

CSIRO researchers Dr Maarten Ryder and Yvonne Latham are trialling native food plants to establish the best ways to produce native foods on a sustainable basis.

CSIRO

The export potential for Australian native food crops such as muntries (pictured) is yet to be realised because, to date, it has not been possible to guarantee regular supplies of high-quality produce. CSIRO has been working with Aboriginal communities and industry to learn more about native foods in a bid to boost product quantity and quality. A web site launched recently by CSIRO will help to promote the native foods industry with updates on industry developments, crop profiles and links to further information, associations and processors across Australia. Inset: CSIRO scientist Dr Maarten Ryder inspects newly planted hybrid native citrus in Moonta, South Australia.

On-line native foods directory

During September 2004, an on-line information directory was jointly launched by the CSIRO and the Rural Industries Research and Development Corporation (RIRDC) providing comprehensive information about the plants, enterprises, people and groups responsible for the native food industry.

CSIRO researchers have also carried out an extensive study on the cultivation of native food plants.

CSIRO researchers Dr Maarten Ryder and Yvonne Latham are trialling native food plants to establish the best ways to produce native foods on a sustainable basis.

The study found that while there were hundreds of growers of native foods around Australia, few were producing substantial amounts of product.

Even more significantly, the researchers discovered a ‘dearth of basic knowledge about the cultivation of most of the species currently considered as high priority for commercial development’.

Macadamia model

While the Australian native food industry is in its infancy — and subject to the challenges of education, production and marketing issues — it is worth looking at the success

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of the Macadamia industry as a possible future indicator.

Now with a mature horticultural industry worth $85–$120 million annually, Australia is the world’s largest producer of Macadamia. But 50 years ago, the industry barely existed.

The turnaround came only after Macadamia cultivation took off in the United States.

CSIRO researchers Dr Maarten Ryder and Yvonne Latham believe there is an opportunity to develop similar industries based on other native Australian plants while maintaining a competitive position internationally.

The development of the native food industry is also environmentally significant. Crops produced using less water — and other energy-rich resources — could minimise the detrimental impact of some farming practices.

But the CSIRO report advised that until production systems and markets were more fully developed, this only could be considered as a long-term goal.

Native foods or ‘bush tucker’ such as the quandong are in growing demand and the fledgling industry is worth an estimated $14 million annually.

**Plant diversity**

Working with a variety of industry and grower partners, researchers on the native foods project established a series of native foods trials across a range of environments in south-eastern Australia.

The species tested were quandong, *Acacia victoriae*, citrus, mountain pepper, lemon myrtle, lemon aspen, riberry, munthari (muntries) and bush tomato.

Bush tomatoes are a small, raisin-like fruit with a pungent, tomato flavour popularly...
used in chutney, relish and as a spice. While the fruit of the lemon aspen is used similarly, it has the ability to enhance both sweet and savoury menus with citrus, spicy flavours.

Also aromatically spicy is the small pear-shaped riberry, a versatile fruit that can be just as easily whipped into ice-cream or chocolate as it can be into a savoury sauce or relish.

High in vitamin C, the quandong is a small native peach that can be used in jams, preserves and liqueurs while its kernel can be eaten either raw or processed, while Munthari (muntries) are a berry-like fruit providing a spicy-apple flavour to many sweet and savoury dishes.

**CSIRO trials**

According to CSIRO trials, the top survivors across a range of environments have proven to be *Acacia victoriae*, citrus and lemon aspen, while plants with an intermediate range include lemon myrtle, riberry, munthari, quandong and bush tomato.

While the bush tomato has a restricted range if grown as a perennial (because it requires warmer, well-drained soil conditions), it survives well across a wider range of environments if grown as an annual. The only other plant with a restricted range is the shrubby mountain pepper which requires moist soil.

The researchers concluded that although many of the species have survived and grown well, it is still too early to determine whether yields of a reasonable quality can be produced.

More research is needed into plant improvement, horticultural production, pest and disease control along with harvest methods.

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