2003

Table & seed potatoes from Western Australia at a glance

Dr I McPharlin

Peter Dawson

Rachel Lancaster

Follow this and additional works at: http://researchlibrary.agric.wa.gov.au/bulletins

Part of the Agricultural Science Commons, Agriculture Commons, and the Food Science Commons

Recommended Citation

McPharlin, D, Dawson, P, and Lancaster, R. (2003), Table & seed potatoes from Western Australia at a glance. Department of Agriculture and Food, Western Australia, Perth. Bulletin 4586.
IMPORTANT DISCLAIMER

This document has been obtained from DAFWA's research library website (researchlibrary.agric.wa.gov.au) which hosts DAFWA's archival research publications. Although reasonable care was taken to make the information in the document accurate at the time it was first published, DAFWA does not make any representations or warranties about its accuracy, reliability, currency, completeness or suitability for any particular purpose. It may be out of date, inaccurate or misleading or conflict with current laws, polices or practices. DAFWA has not reviewed or revised the information before making the document available from its research library website. Before using the information, you should carefully evaluate its accuracy, currency, completeness and relevance for your purposes. We recommend you also search for more recent information on DAFWA's research library website, DAFWA's main website (https://www.agric.wa.gov.au) and other appropriate websites and sources.

Information in, or referred to in, documents on DAFWA's research library website is not tailored to the circumstances of individual farms, people or businesses, and does not constitute legal, business, scientific, agricultural or farm management advice. We recommend before making any significant decisions, you obtain advice from appropriate professionals who have taken into account your individual circumstances and objectives.

The Chief Executive Officer of the Department of Agriculture and Food and the State of Western Australia and their employees and agents (collectively and individually referred to below as DAFWA) accept no liability whatsoever, by reason of negligence or otherwise, arising from any use or release of information in, or referred to in, this document, or any error, inaccuracy or omission in the information.
On one of the most pest and disease-free agricultural production areas in the world. . .

In the south of WA, potatoes are produced under the most ideal climatic and phytosanitary conditions imaginable. In fact, Western Australia has much to offer as a seed potato supplier for the growing conditions there might be described as laboratory conditions, which is reflected in the yields close to what is believed to be the potential limit for producing potatoes on one hectare of land:

There is no bacterial wilt, no potato cyst nematode, no late blight and no potato virus Y found anywhere in the seed potato growing areas of WA. There is no other pest or disease growing areas in the world, because it is in WA where mild conditions are found:

Peter Schmiediche
Regional Representative
International Potato Centre (CIP)
Bogor, Indonesia (1992-97)

Certifying Seed Potatoes for World Markets

In the south of WA, potatoes are produced under the most ideal climatic and phytosanitary conditions imaginable. In fact, Western Australia has much to offer as a seed potato supplier for the growing conditions there might be described as laboratory conditions, which is reflected in the yields close to what is believed to be the potential limit for producing potatoes on one hectare of land:

There is no bacterial wilt, no potato cyst nematode, no late blight and no potato virus Y found anywhere in the seed potato growing areas of WA. There is no other pest or disease growing areas in the world, because it is in WA where mild conditions are found:

Peter Schmiediche
Regional Representative
International Potato Centre (CIP)
Bogor, Indonesia (1992-97)

Growing for the Future

Western Australia has much to offer as a seed potato supplier for the region including:

- A growing core of large scale professional growers
- One of the most pest and disease-free agricultural production areas in the world
- Aample land and water for future expansion
- Well established export infrastructure and experience
- Strong export vegetable industry base
- Research and development are supported by a national industry levy
- National collaboration between growers and associated service industries

Independent Inspection Services

The Western Australian Seed Potato Certification Scheme is an industry co-operative scheme. The Department of Agriculture, through its AGWEST Seed Quality business unit, administers the scheme and ensures production and marketing guidelines agreed to by industry. AGWEST Seed Quality inspectors undertake inspections of both the growing crop and harvested tubers, provide advice and Certify seed lots which meet the quality standard. Certified seed potatoes are produced over a maximum of five field generations from minitubers, micro-tubers or plantlets produced in accredited laboratories from pathogen-tested stocks maintained in tissue culture. The term “Certified” is not restricted to any one generation. Seed from each generation is Certified based on the standards set for the relevant generation. Any of the five generations (G1 to G5) may be sold as Certified seed, for example Certified G3 or Certified G4.

Acknowledgements

We are grateful for the cooperation of Western Australian potato exporters who contributed information and assistance to the project. Support for the project by Terry Hill is also acknowledged.

Disclaimer

The Western Australian Government is committed to quality service to its customers and makes every effort to ensure accuracy, currency and reliability of the data contained in this document. However, changes in circumstances after publication may affect the quality of this information.
By Peter Dawson, Ian McPharlin and Malcolm Howes
Department of Agriculture, Western Australia

Western Australia produces a range of horticultural commodities including fruit, vegetables, flowers, nursery products and wine as part of its fast growing $600 million horticultural industry. Natural advantages such as climate and clean environment, soils and water make Western Australia an ideal place to supply a variety of high-quality produce to domestic and international markets.

**Seed Potatoes - A Growing Industry**

Western Australia is a leading national exporter of table potatoes, accounting for almost 40 per cent of Australian exports. The high quality of Western Australian potatoes commands premium prices on both national and international markets.

Western Australia is a leading national exporter of table potatoes, accounting for almost 40 per cent of Australian exports. The high quality of Western Australian potatoes commands premium prices on both national and international markets.

Western Australia is a leading national exporter of table potatoes, accounting for almost 40 per cent of Australian exports. The high quality of Western Australian potatoes commands premium prices on both national and international markets.

**Storage Tip**

Potato storage involves keeping the tubers cool, dry and healthy. High humidity and temperatures above 15°C can cause the potatoes to blacken when eaten.

**Nutritional Value**

Potatoes are an excellent source of vitamin C and a moderate source of vitamin B6, thiamin, niacin, phosphorus and iron. They contain a valuable source of complex carbohydrates.

**Potato varieties**

- **Round Large White:** White, firm flesh, high quality, good storage, good cooking, high yield.
- **Round Medium White:** White, firm flesh, high quality, good storage, good cooking, high yield.
- **Round Medium Yellow:** Yellow, firm flesh, high quality, good storage, good cooking, high yield.
- **Oblong Medium Cream White:** Cream white, firm flesh, high quality, good storage, good cooking, high yield.
- **Oblong Medium Brown White:** Brown white, firm flesh, high quality, good storage, good cooking, high yield.
- **Oblong Med-Lrg Cream White:** Cream white, firm flesh, high quality, good storage, good cooking, high yield.
- **Oblong Med-Lrg L. yellow:** Yellow, firm flesh, high quality, good storage, good cooking, high yield.
- **Leonardo:** Chocolate, firm flesh, high quality, good storage, good cooking, high yield.
- **JF M A M J JASON D**

**Research and Development**

The Department of Agriculture, the State Government’s agricultural research and development agency, delivers support through research, extension and industry development services. The Department of Agriculture encourages the horticultural industry to work together with a view to developing long-term sustainable solutions to crop protection, post-harvest technologies, quality and productivity improvement.

**Development of Seed Trade with Vietnam - Research and Development in Action**

In the mid-1990s, the Western Australian potato industry was looking for new markets to expand its trade in premium seed potatoes. Large potential markets existed in neighboring Asia. Asia produces large amounts of potatoes. China is the world’s largest potato producer. These markets are hungry for high-quality seed because the lack of affordable supplies is recognised as their major constraint to potato production.

High quality seed is an expensive product and new markets cannot be established until suppliers demonstrate the benefits, and increased profits, that their seed will provide.

To do this in Vietnam, a partnership between the Western Australian potato industry and the Food Crops Research Institute of the Ministry of Rural Development (Vietnam) was established. Both partners had the same key interest: to develop a supply of good quality, affordable seed for Vietnamese farmers. The Vietnamese had superior varieties for their farmers but no seed; the WA industry was looking for new markets to supply. The Vietnamese provided varieties developed in Vietnam. These were introduced into Australia through tri-trials and then grown by Western Australian seed growers.

A test shipment to Vietnam produced outstanding results with the variety grown, gross margins were 349% higher ($1,753 per hectare) compared with normal grower practice. For the variety Mondial, gross margins were 84% higher ($1,046 per hectare) compared with normal grower practice. The Department of Agriculture established a project to supply seed potatoes to Vietnam.

**Seed Potatoes - A Growing Industry**

Western Australia is a leading national exporter of table potatoes, accounting for almost 40 per cent of Australian exports. The high quality of Western Australian potatoes commands premium prices on both national and international markets.

**Strong Industry Support**

Western Australia’s economy is based on exports and consequently it has well-developed infrastructure. The State is well serviced by an extensive network of sealed roads and highways and a network of modern ports, including the major port of Fremantle near Perth which is regarded as one of Australia’s most efficient. There are several Western Australian exporters of potatoes and several freight service providers.

**Future Prospects**

The success of the project to improve potato production in Vietnam means that the same methodology could be used to develop other markets for WA seed potatoes. The Department of Agriculture is developing projects in East and West Asia and in Sri Lanka.

Western Australia is ideally positioned to access significant markets in Asia, Australia, the Indian Ocean region and beyond. Western Australian table potatoes are exported to Honan, Fiji, Indonesia, Mauritius, Malaysia, Singapore, Thailand and the Middle East. Seed potatoes have been exported to Hong Kong, Malaysia, Mauritius, Sri Lanka and Thailand.

The industry, supported by the Department of Agriculture, is pursuing opportunities to increase export, quality assurance and marketing which will support consumer confidence in the product and address competition from other suppliers.