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Table & seed potatoes from Western Australia at a glance

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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
-ample load and room 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

Certifying Seed Potatoes for World Markets

Food safety and environmental sustainability

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 in vitro, 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.

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Acknowledgements

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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.

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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. Opportunities to export certified potato seed, particularly to south east Asian markets are growing and varieties suited to export markets are being developed by the State Government’s research and development agency, Agriculture, Western Australia.

Proximity to Asia, an export-oriented horticultural natural resource asset, includes the capability of supplying root crops, all combine to give Western Australian advantages when it comes to doing business. Potatoes are the most significant crop in the south temperate areas of Western Australia representing about 20 per cent of the total area under irrigation for table vegetable production. The area is free from winter frost and this is one of the most important potato diseases including late blight, bacterial wilt and potato cyst eelworms.

**Nutritional Value**

Potatoes are an excellent source of vitamin C and a moderate source of phosphorus, iron, thiamin, niacin, potassium and vitamin B6.

**Potato Growing Regions of Western Australia**

The major varieties grown for the table market are: Madrid, Delorenzo, Ruby Lou, Destiny and Mondal; Russet Bintje, Ranger Kuri and Shepody are grown for fresh fry potato industries and Aurora five sirep. Seed of Granola, Destiny and Atlantic, are sourced by South East Asian markets. Niche sired are being grown for specific seed markets, e.g. KT3 and Dene for Vietnam.

Seed potatoes are available year round either from root crop seed or from crop grown by arrangement with purchasers. Seed potatoes are harvested from March to May.

**Availability**

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 Java and in Sri Lanka.

**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 markets, while continuing traditional research and advisory services on crop protection, post harvest technologies, quality and productivity improvement.

**Development of Seed Trade with Vietnam**

In the late 1990’s the Western Australian potato industry was looking for new markets for expansion of 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 importers are satisfied that seed supplied is of high quality. To do this in Vietnam, a partnership between the Western Australian potato industry and the Food Crop Research Institute of the Ministry of Rural Development (Vietnam) was established. Both partners had the same key objective 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 a quarantine and then grown by Western Australian seed growers. Seed of these varieties was supplied to Vietnam. A delegation of farmers and scientists was brought to Western Australia to inspect methods of seed potato production and to meet with seed exporters. This resulted in the first steps to commercialisation of this research project.

**Future Prospects**

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**Best Management Practices**

Western Australia is free from many potato pests and diseases, giving producers the unique advantage of being able to produce quality table potatoes with minimal chemical use. The absence of major potato diseases also means that growers can be confident that seed potatoes from Western Australia are a low disease risk.

High quality seed will only perform well if it is grown under good management. Therefore the partners also investigated ways to improve potato production in Vietnam. In the first year of the project a survey was conducted to identify constraints to production. The survey indicated that changes to crop nutrition could improve yield in cabrid the seed variety was transferred and applied. This work was continued with agronomy experiments in the second season. The project culminated in a field session, with a demonstration of best management practices for high quality potato seed in the Red River Delta of Vietnam.