

The potato industry in New South Wales

Agnote DPI-410, second edition 2004 Stephen Wade, District Horticulturist (Vegetables) Division of Plant Industries, Bathurst



INTRODUCTION

Potatoes (*Solanum tuberosum* L.) are the largest vegetable crop in New South Wales. The NSW potato industry produced 165 381 tonnes of potatoes, worth \$74.3 million, on 7250 hectares in 2000–01. New South Wales grows 12 per cent of the Australian potato crop.

PRODUCTION

Potatoes require cool, frost-free growing conditions with regular rainfall or irrigation. Potato crops are planted in the coastal, tablelands and Riverina districts of New South Wales.

Coastal districts

The coastal potato growing districts are located between the Great Dividing Range and the Pacific Ocean. They produce a fifth of the NSW potato crop.

These districts have temperate or sub-tropical climates. Two crops a year are grown for the fresh and crisping potato markets. An early crop is planted in winter and harvested in spring and summer. A late crop is sown in summer for a winter harvest. Crops are grown in market gardens, irrigated cropping and mixed dryland farms. They are planted on the red or grey clay, silty loam or sandy soils. Windsor,

Table 1. Australian potato industry (2000–01)

State	Value (S)	Production (t)	Area (ha)	No. of growers
Vic	140 258 706	351 912	12 265	531
SA	128 398 470	335 500	9 751	221
Tas	78 792 122	355 512	8 276	651
NSW	74 303 568	165 381	7 250	232
Qld	47 748 686	11 <i>7 7</i> 10	5 329	295
WA	35 447 211	87 107	2 367	165
Australia	504 948 763	1 413 122	45 238	2095

Source: Australian Bureau of Statistics.

Table 2. NSW potato industry (2000–01)

District	Value (\$)	Production (t)	Area (ha)	No. of growers
Coast	14 328 311	31 883	1 525	105
Tablelands	8 793 977	19 664	850	92
Riverina	51 181 280	113 834	4875	35
NSW	74 303 568	165 381	7250	232

Source: Australian Bureau of Statistics.

Maitland, Kempsey, Bellingen and Grafton are the main potato growing centres along the New South Wales coast.

Tablelands

The tablelands growing districts are located along the Great Dividing Range. They grow a tenth of the NSW potato crop.

These districts have a cool, temperate climate. One crop a year is grown for the fresh, crisping and seed potato markets. In the lower elevation areas, a mid-season crop is planted in winter and spring for a summer and autumn harvest. In the higher altitude districts a late crop is sown in spring and early summer and harvested from late summer to early spring. Production occurs on mixed dryland

farms on the red or grey clay soils, which can require supplementary irrigation in dry seasons. Batlow, Crookwell, Robertson, Orange, Comboyne, Dorrigo and Guyra are the main potato growing areas in the tablelands districts.

Riverina

The Riverina district is situated between the Murrumbidgee and Murray Rivers in southern New South Wales. The area produces over two thirds of the NSW potato crop.

The district has a dry, temperate climate. Three crops a year are grown for the fresh, crisping and frozen chips potato markets. An early crop is sown in winter and harvested in spring and summer. The midseason crop is planted in spring and for an autumn

Table 3. NSW potato growing seasons.

Crop	Winter		Spring		Summer		Autumn		Winter							
	J	J	A	S	0	N	D	J	F	M	A	M	J	J	A	S
Early																
Coast																
Riverina																
Mid-season																
Tablelands																
Riverina																
Late																
Tablelands																
Coast																
Riverina																

Planting period Harvest period

Table 4. NSW potato varieties.

Variety	Tuber shape	Skin colour	Flesh colour
Atlantic	round	buff	white
Coliban	round	white	white
Desiree	oval	pink	pale yellow
Kennebec	pear	white	white
Pink Fir Apple	oval	pink	white
Red Pontiac	round	red	white
Sebago	oval	white	white
Shepody	oval	white	white

harvest. A late crop is sown in summer and autumn and harvested during winter and spring. Cropping is concentrated on large-scale irrigation farms located on the sandy and sandy loam soils. Berrigan, Oaklands, Coleambally, Narrandera and Hillston are the main potato growing centres in the Riverina.

CONSUMPTION

Potatoes are the most popular vegetable in Australia, with an annual consumption of 68 kilograms per person (Australian Bureau of Statistics, 1999). About 72 per cent of the NSW potato crop is sold fresh, 25 per cent is processed and 3 per cent is used for seed.

Fresh

Fresh potatoes are harvested all year round in New South Wales. Most of the NSW crop is sold at the Sydney Markets. The rest is sent to the Brisbane, Canberra, Melbourne and Adelaide markets. Coliban is the main white skinned fresh market variety, while Sebago is also produced in most districts. Red skinned fresh varieties include Desiree and Red Pontiac. Small areas of speciality varieties such as Pink Fir Apple are also planted.

Processing

Potatoes are processed for crisps, frozen chips, whole peel canning and salad mixes. Atlantic is the main crisping variety grown in New South Wales. NSW crisping potatoes are processed at the Arnott's Snackfoods and The Real McCoy Snack Food factories in Sydney, the Smiths Snackfood Company plants in Adelaide and Brisbane and the Arnott's Snackfoods facility at Shepparton in Victoria.

Shepody is the main frozen chips variety planted in New South Wales. It provides the early deliveries for

At a glance

- Potatoes are our most popular vegetable.
- The NSW potato industry produced 165 381 tonnes of potatoes, worth \$74.3 million, on 7250 hectares in 2000–01.
- Potatoes are planted in the coastal, tablelands and Riverina districts of NSW.
- About 72 per cent of the NSW potato crop is sold fresh, 25 per cent is processed and 3 per cent is used for seed.
- During the 1990s NSW potato production increased from 119 542 to 165 381 tonnes.

the McCain Foods factories at Ballarat in Victoria and Penola in South Australia. Whole peel potatoes are produced at the Windsor Farm Foods cannery in Cowra. Small processors in Newcastle, Port Macquarie, Sydney and Wagga Wagga also supply the catering trade with frozen chips, whole peeled potatoes and salad mixes.

Seed

The NSW seed potato industry produced 5288 tonnes of seed potatoes, worth \$2.3 million, on 398 hectares in 2000–01. Certified seed potatoes are grown in the tablelands districts around the towns of Crookwell, Orange and Guyra. These districts are protected by a NSW Government Quarantine Proclamation, which restricts the entry of potatoes into the seed growing areas. This ensures the seed growing districts remain free of pests and diseases such as potato cyst nematode and bacterial wilt.

Table 5. NSW potato industry trends (1990–2001)

	1990-91	2000-01	Change (%)
Value (\$)	79 000 000	74 303 568	- 6
Production (tonnes)	119 542	165 381	+ 38
Area (hectares)	6023	7250	+ 20
Growers	258	232	- 10
Price (\$/t)	661	449	- 32
Yield (t/ha)	19.8	22.8	+ 15
Productivity (t/grower)	463	713	+ 54
Returns (\$/grower)	306 202	320 069	+ 5

Source: Australian Bureau of Statistics.

Seed potato production is carried out under the NSW Certified Seed Potato Scheme. Virus-free tissue cultured plantlets are used to grow the potato seed. This seed is multiplied in the field for four years, with each crop being inspected for disease by NSW Department of Primary Industries regulatory officers. Coliban, Sebago, Desiree, Red Pontiac, Atlantic and Kennebec are the main varieties grown for seed. Seed potatoes are sold to NSW, Queensland and South Australian growers and exported to South-east Asia.

Over the last decade NSW potato production increased by 38 per cent from 119 542 to 165 381 tonnes. However the average prices paid to NSW growers dropped by 32 per cent from \$661 to \$449 a tonne during this period. To maintain their incomes NSW potato growers increased their crop yields by 15 per cent, crop areas by 20 per cent and grower productivity by 54 per cent. Despite these achievements there was only a small improvement in returns and 26 growers left the NSW potato industry during the 1990s.

FURTHER INFORMATION

For further information on the NSW potato industry consult your nearest NSW Department of Primary Industries District Horticulturist (Vegetables).

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DISCLAIMER

The information contained in this publication is based on knowledge and understanding at the time of writing in October 2004. However, because of advances in knowledge, users are reminded of the need to ensure that information upon which they rely is up-to-date and to check the currency of the information with the appropriate officer of NSW Department of Primary Industries or the user's independent adviser.