

Planted seed for round seed production – young or old?; round or cut?

Increasing yields of round (whole) potato seed will improve seed export opportunities. The effect on round seed yields of changing planted seed age and type was tested in Atlantic potatoes in the 1998/99 season.

Methods: Trials were conducted at Thorpdale and Smeaton, in Victoria, using:

- Two seed ages – young (removed from coolstore 4 weeks before planting) and old (8 weeks); and
- Two seed types – round (about 65g – Category 5) and cut (about 70g – Category 0 split into two).

Results:

- Total yield differences were mainly due to differences in the 35-110g and 110-200g size categories. Average yields for these categories at both sites are shown in Figure 1.
- Seed prices and seed input costs were applied to total yield data to compare net returns (Table 1).

Figure 1. Average yield (t/ha) of 35-110g and 110-200g tubers, Thorpdale and Smeaton.

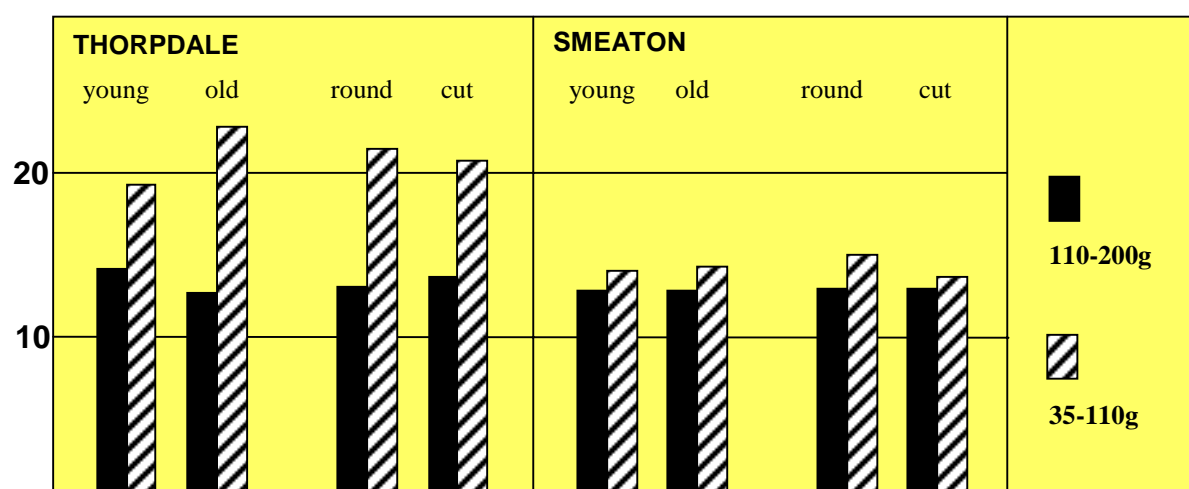


Table 1. Calculation of average net returns (\$/ha).

Site	Seed	Total yield (t/ha)	Gross income (\$/ha)	Seed cost (\$/ha)	NET RETURN (\$/ha)
Thorpdale	young	35.8	14,403	3,280	11,123
	old	38.6	15,333	3,280	12,053
	round	37.1	14,797	4,069	10,728
	cut	37.4	14,872	2,490	12,382
Smeaton	young	33.4	12,454	3,280	9,174
	old	33.4	12,461	3,280	9,181
	round	34.5	12,926	4,069	8,857
	cut	32.2	11,989	2,490	9,499

Old planted seed outyielded young seed at Thorpdale, but not at Smeaton. The extra seed costs in planting round seed outweighed any yield advantage over cut seed, resulting in lower net returns. No treatment produced an outstanding result at both trial sites.

[Source: Fact sheet by A.Henderson, K.Moorthy, P.Carr, B.Fry and P.Franz, 2000 (Agriculture Victoria)]