



Calculating requirements of potato seed

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Most established potato growers have good estimates of seed requirements for intended plantings. However, for the benefit of those growers just entering the industry or established growers who may be considering altering either their row spacing or set spacing, the following table may be useful. It can be used to estimate the amount of seed required to plant one hectare of crop at different row and seedpiece spacings using different average seedpiece masses.

To obtain an average mass of seedpiece, it is necessary to weigh 100 sets that have been selected at random. The gross mass divided by 100 gives a fairly accurate average seedpiece mass.

The table applies to each hectare actually planted. Allowance for area of headlands, irrigation bays, etc., should be deducted from the gross area of a paddock before working out seed requirements.

Some varieties "cut" better than others, thus producing lighter seedpieces. The purpose of a crop, whether it be intended for table or seed use, determines the "set" spacing and/or row spacing.

Where a raised bed is used it is the practice to have less space between rows across the top of the bed with a wider spacing between rows across the furrow. In this case to use the table it is necessary to halve the distance from the centre of one furrow to the centre of the next furrow; this measurement being the average spacing between rows for the planted area. For example, if from furrow-centre to furrow-centre measures 1600 mm, the average row spacing would be 800 mm.

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Table 1. Tonnes of potato seed required per hectare at different spacings and seedpiece masses

Distance between rows <i>mm</i>	Distance between sets <i>mm</i>	Metres of row per hectare	No. of sets per hectare	Average mass of seedpiece (set)													
				40 grams		45 grams		50 grams		55 grams		60 grams		65 grams		70 grams	
				Sets per tonne	Tonnes per ha	Sets per tonne	Tonnes per ha	Sets per tonne	Tonnes per ha	Sets per tonne	Tonnes per ha	Sets per tonne	Tonnes per ha	Sets per tonne	Tonnes per ha	Sets per tonne	Tonnes per ha
750	175	13 330	76 170	25 000	3.0	22 500	3.4	20 000	3.8	18 333	4.1	16 666	4.5	15 475	4.9	14 285	5.3
750	200	13 330	66 650	25 000	2.6	22 500	2.9	20 000	3.3	18 333	3.6	16 666	4.0	15 475	4.3	14 285	4.6
750	225	13 330	59 240	25 000	2.3	22 500	2.6	20 000	2.9	18 333	3.2	16 666	3.5	15 475	3.8	14 285	4.1
750	250	13 330	53 200	25 000	2.1	22 500	2.3	20 000	2.6	18 333	2.9	16 666	3.2	15 475	3.4	14 285	3.7
750	275	13 330	48 470	25 000	1.9	22 500	2.1	20 000	2.4	18 333	2.6	16 666	2.9	15 475	3.1	14 285	3.3
750	300	13 330	44 430	25 000	1.7	22 500	1.9	20 000	2.2	18 333	2.4	16 666	2.6	15 475	2.8	14 285	3.1
800	175	12 500	71 420	25 000	2.8	22 500	3.1	20 000	3.5	18 333	3.8	16 666	4.2	15 475	4.6	14 285	5.0
800	200	12 500	62 500	25 000	2.5	22 500	2.8	20 000	3.1	18 333	3.4	16 666	3.7	15 475	4.0	14 285	4.3
800	225	12 500	55 550	25 000	2.2	22 500	2.4	20 000	2.7	18 333	3.0	16 666	3.3	15 475	3.5	14 285	3.8
800	250	12 500	50 000	25 000	2.0	22 500	2.2	20 000	2.5	18 333	2.7	16 666	3.0	15 475	3.2	14 285	3.5
800	275	12 500	45 450	25 000	1.8	22 500	2.0	20 000	2.2	18 333	2.4	16 666	2.7	15 475	2.9	14 285	3.1
800	300	12 500	41 660	25 000	1.6	22 500	1.8	20 000	2.0	18 333	2.2	16 666	2.5	15 475	2.7	14 285	2.9
850	175	11 760	67 200	25 000	2.6	22 500	2.9	20 000	3.3	18 333	3.6	16 666	4.0	15 475	4.3	14 285	4.7
850	200	11 760	58 800	25 000	2.3	22 500	2.6	20 000	2.9	18 333	3.2	16 666	3.5	15 475	3.8	14 285	4.1
850	225	11 760	52 260	25 000	2.0	22 500	2.3	20 000	2.6	18 333	2.8	16 666	3.1	15 475	3.3	14 285	3.6
850	250	11 760	47 040	25 000	1.8	22 500	2.0	20 000	2.3	18 333	2.5	16 666	2.8	15 475	3.0	14 285	3.3
850	275	11 760	42 760	25 000	1.7	22 500	1.9	20 000	2.1	18 333	2.3	16 666	2.5	15 475	2.7	14 285	3.0
850	300	11 760	39 200	25 000	1.5	22 500	1.7	20 000	1.9	18 333	2.1	16 666	2.3	15 475	2.5	14 285	2.7
900	175	11 110	63 480	25 000	2.5	22 500	2.8	20 000	3.1	18 333	3.4	16 666	3.8	15 475	4.1	14 285	4.4
900	200	11 110	55 550	25 000	2.2	22 500	2.4	20 000	2.7	18 333	3.0	16 666	3.3	15 475	3.5	14 285	3.8
900	225	11 110	49 370	25 000	1.9	22 500	2.2	20 000	2.4	18 333	2.6	16 666	2.9	15 475	3.1	14 285	3.4
900	250	11 110	44 440	25 000	1.7	22 500	1.9	20 000	2.2	18 333	2.4	16 666	2.6	15 475	2.8	14 285	3.1
900	275	11 110	40 400	25 000	1.6	22 500	1.8	20 000	2.0	18 333	2.2	16 666	2.4	15 475	2.6	14 285	2.8
900	300	11 110	37 030	25 000	1.4	22 500	1.6	20 000	1.8	18 333	2.0	16 666	2.2	15 475	2.4	14 285	2.5

Note: 25 mm = 1 inch (approx.) 300 mm = 1 ft (approx.)

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