

EXPECTED YIELDS

There can be very marked differences between yields of different plantings of a vegetable crop, depending on the cultivar selected, and on the environmental conditions prevailing during the growth of the crop. Even larger differences in yield between crops can be ascribed to the cultural practices applied, and to the relative expertise of the individual growers. Certain farmers consistently achieve good yields of good quality, while others produce poor crops. This difference in the ability of growers is of particular importance with horticultural crops, which are grown intensively.

Whether the causes of yield differences are environmental or managerial, a grower inexperienced in a particular vegetable crop needs to have some indication of potential yield as an aid when making decisions about growing the crop.

Expected yields from commercial plantings of some vegetable crops can be listed under three headings:

The conservative yield

The "conservative" yield is that obtained from a relatively poor crop, and is frequently not economical to produce, unless particularly high prices are realised.

The likely yield

The "likely" yield is that achieved from the majority of plantings by the average grower.

The target yield

The "target" figures are those that a good grower could realistically achieve in practice. These are not considered to be the potential yields of the prospective crops. For example, the target figure for dwarf green beans is given as 10 to 15 tons per hectare. Yields of over 20 tons per hectare have been achieved by some growers, even from large plantings, and certain trial plots have yielded the equivalent of about 30 tons per hectare. Similarly, carrots could yield in excess of 70 tons per hectare, cabbage over 110 tons per hectare and tomatoes more than 100 tons per hectare, from specific commercial plantings. However, such yields are exceptional. Yields that a commercial grower may expect from the main vegetable crops grown, divided according to the above categories, are suggested in the following table.

Table 8.

Commercial yields of vegetable crops.

Crop	Yield in tons per hectare		
	Conservative	Likely	Target
Artichoke, globe	3	5	7 - 8
Asparagus	1,5	2,5	4
Bean, broad	3 - 4	5 - 6	7 - 8
Bean, dwarf, green	5	7 - 8	10 - 15
Bean, lima	5	7	10
Bean, runner, green	7	10	15 - 20

Crop	Yield in tons per hectare		
	Conservative	Likely	Target
Beetroot	14	18	25
Broccoli	5	8	12
Brussels sprouts	7	10	15
Butternut	12	15 - 18	25 - 30
Cabbage	30	50	80 - 90
Carrot, large	20	30	40
Carrot, baby	10	15	20
Cauliflower	7 - 8	10 - 12	15 - 20
Celery	15 - 20	25 - 30	40
Chilli, green	7	10	15
Chilli, dry	1,5	2,5	4
Cucumber	12	15 - 18	25 - 30
Egg-fruit	12 - 15	20	25
Garlic	6	10	15
Gem squash	12	15 - 18	25 - 30
Hubbard squash	12 - 15	18 - 20	30
Lettuce	12 - 15	20 - 25	30 - 40
Marrow, bush, large	12	15 - 18	25 - 30
Marrow, baby	7 - 8	12	15
Melon, musk	12	15 - 18	25
Melon, sweet	12	15 - 18	25
Melon, water	12 - 15	20	30
Onion, large	15 - 20	25 - 30	40
Paprika, dry	1,5	2,5	4 - 5
Parsley	2	3	4
Parsnip	10 - 12	15 - 18	20 - 25
Pea, green, in pods	4	6	8 - 10
Pea, edible podded	2 - 3	4 - 5	6 - 7
Pepper, sweet, bell	20	30	40

Crop	Yield in tons per hectare		
	Conservative	Likely	Target
Potato, dryland or hot areas	10	17	28
Potato, irrigation	17	28	45
Pumpkin, boer	12 - 15	18 - 20	30
Spinach, true	7 - 8	10 - 12	15 - 20
Sweet-corn	7 - 8	10	15
Sweet potato	15 - 20	25 - 30	40
Swiss chard	20	30	40
Tomato	30	45 - 50	60 - 80