## Backyard garden use

How to use the compost in home gardens:

- 1. The compost is equivalent to a 4-2-1.5 fertilizer (nitrogen-phosphate-potash, as-is basis). It is an excellent source of nutrients, especially nitrogen and phosphorus, and should be used as a fertilizer, not as a soil conditioner. The amount required to fertilize your plants is small relative to most other composts, for example yard and garden waste compost which is typically a 1-1-1 compost. The amounts to use per unit area to provide sufficient nutrients for your vegetable garden are shown in the table below for gardens of different sizes. The difference between this compost and chemical fertilizer is that most of the nutrients in the compost are in a slow-release form and so will provide nutrients to your plants all season long. Approximately 25% of the nitrogen and phosphorus, and 75% of the potassium will be available to feed your plants during the year of application. There will also be some nutrients released from the compost in the following 3 years after application.
- 2. The compost is still quite 'hot' (meaning it still contains quite a bit of ammonium-N). If you are going to broadcast-apply it to your garden, it should be applied to garden beds at least 2 weeks before planting, and it should be turned under right away by digging or raking in to avoid losing the ammonium to the air.
- 3. It can be used to top-dress the soil around existing plants, for example, tomato plants. For this use, it should be applied in a ring 6" or so away from the plant, and gently worked in using a hoe or hand fork to allow plant roots to find the nutrients. It should also be watered in following application.
- 4. For use on vegetable beds, refer to the table below and apply the amount indicated either at least 2 weeks before planting seeds and young plants, or as a topdressing around existing older plants.
- 5. For use on flower beds, use half of the amounts indicated in the table below. Flowers have a much lower nutrient demand, and excess nitrogen will promote green growth at the expense of flowers.

Vegetables - compost to apply per unit area	Weight		Volume	
	Metric	Imperial	Metric	Imperial
Per 1,000 m <sup>2</sup> (100m by 10m area)	2 tonnes	2 tons	3.5 m <sup>3</sup>	4 yds
Per 1,000 ft <sup>2</sup> (100 m <sup>2</sup> )	200 kg	430 lbs	0.3 m <sup>3</sup>	0.4 yd
Per 100 ft <sup>2</sup> or 10' by 10' area (10 m <sup>2</sup> )	20 kg	43 lbs	35 litres	7 gallons
Per 1 m <sup>2</sup> (1m by 1m or 3' by 3' area)	2 kg	4.5 lbs	3.5 litres	0.7 gallon
Per 1 ft <sup>2</sup> (1' by 1' area, for individual plants e.g.				
per tomato or pepper plant	200 g	.5 lb	0.5 litre	1.5 cups

## For fertilization of garlic

How to use the compost to fertilize garlic:

- 1. The table below contains application information for different size areas. The recommended application rates in the table are based on providing 225 kg per hectare (200 lbs per acre) of plant-available nitrogen in the year of application. The compost contains enough phosphorus, potassium and micronutrients to meet crop demand if applied at the recommended rates. If you are applying to rows (rather than broadcasting over the entire field), you should calculate the application rate based on row width. For example, for a 50 cm wide row, use the 1m² volume (5 litres) and spread it over a 50cm by 2m length in the row to calibrate your application.
- 2. Spring application of compost onto an existing stand of garlic is preferred to fall application to optimize nitrogen uptake by the crop. In spring, compost can be side-dressed along rows then shallowly tilled in. It should be applied as early in spring as possible to ensure nitrogen is available when plant roots need it. If applied in fall before planting, apply and turn under or rake in at least 2 weeks before planting.
- 3. The application rate recommended will be a layer approximately 0.50cm deep (approximately one quarter inch deep).
- 4. The compost has an approximate N-P-K value of 4-2-1.5 (nitrogen-phosphate-potash, as-is basis), and nutrient availability in the year of application is approximately 25% for nitrogen and phosphorus, and 75% for potassium. Compost has 5.8% nitrogen on dry basis, and 44% moisture. These values can be used to calculate your own application rate based on soil test results.

Garlic - compost to apply per unit area	Weight		Volume	
	Metric	Imperial	Metric	Imperial
Per hectare (10,000 m <sup>2</sup> )	29 tonnes	32 tons	50 m <sup>3</sup>	65 yds
Per acre	12 tonnes	13 tons	20 m <sup>3</sup>	25 yds
Per 1,000 m <sup>2</sup> (100m by 10m area)	3 tonnes	3.2 tons	5 m <sup>3</sup>	6.5 yds
Per 1,000 ft <sup>2</sup> (100 m <sup>2</sup> )	0.3 tonne	0.6 ton	0.5 m <sup>3</sup>	0.7 yds
Per 100 ft <sup>2</sup> or 10' by 10' area (10 m <sup>2</sup> )	30 kg	65 lbs	50 litres	11 gallons
Per 1 m <sup>2</sup> (1m by 1m or 3' by 3' area)	3 kg	7 lbs	5 litres	1 gallon

## Vineyards

How to use the compost to fertilize vineyards:

- 1. The table below contains application information for different size areas. The recommended application rates in the table are based on providing 100 kg per hectare (90 lbs per acre) of plant-available nitrogen in the year of application. The compost also contains enough phosphorus, potassium and micronutrients to meet crop demand if applied at the recommended rates. If you are applying to rows, you should calculate the application rate based on row width. For example, for a 50 cm wide row, use the 1m² volume (2 litres) and spread it over a 0.5m by 2m length in the row to calibrate your application.
- 2. If possible, it is recommended that the compost is tilled into the top 2-3" of soil to retain nitrogen and allow roots to access nutrients.
- 3. The compost contains a significant amount of nitrogen. Grapes have a relatively low requirement for nitrogen. If excess nitrogen is available to the vines, they will respond by producing lush leaf and shoot growth. It is not recommended that you exceed the recommended application rates from the table unless soil test results indicate a higher requirement for nitrogen.
- 4. The compost has an approximate N-P-K value of 4-2-1.5 (nitrogen-phosphate-potash, as-is basis), and nutrient availability in the year of application is approximately 25% for nitrogen and phosphorus, and 75% for potassium. Compost has 5.8% nitrogen on dry basis, and 44% moisture. These values can be used to calculate your own application rate based on soil test results.
- 5. Because the compost acts as a slow-release fertilizer, there will be a residual effect in the 3 years following application. At the recommended application rate, the compost will release an additional approximately 21 kg/ha of nitrogen in year 2, and smaller amounts in years 3 and 4. Therefore, compost should only be re-applied every 2 or 3 years, or when soil or leaf test results indicate a need for nitrogen.
- 6. The application rate recommended will result in a layer approximately 2mm deep (less than ¼" deep). If you apply a significantly deeper layer than this, you may oversupply the plants with nitrogen.

Vineyards - compost to apply per unit area	Weight		Volume	
	Metric	Imperial	Metric	Imperial
Per hectare (10,000 m <sup>2</sup> )	10.5 tonnes	11.5 tons	17.5 m <sup>3</sup>	23 yds
Per acre	4 tonnes	4.5 tons	7 m <sup>3</sup>	9 yds
Per 1,000 m <sup>2</sup> (100m by 10m area)	1 tonne	1 ton	1.5 m <sup>3</sup>	2.5 yds
Per 1,000 ft <sup>2</sup> (100 m <sup>2</sup> )	100 kg	230 lbs	0.2 m <sup>3</sup>	0.2 yd
Per 100 ft <sup>2</sup> or 10' by 10' area (10 m <sup>2</sup> )	10 kg	23 lbs	17 litres	4 gallons
Per 1 m <sup>2</sup> (1m by 1m or 3' by 3' area or per grape				
vine)	1 kg	2 lbs	2 litres	0.4 gallon