

FAQ's

Can I use compost to control pests and diseases?

International research has shown there can be major improvements in disease control in horticultural crops from using compost incorporated into soils. Research is underway in South Australia to assess the disease suppressive potential of various composts for our particular soil-disease combinations - so watch this space!

There is some evidence that compost can help with pest control in citrus crops by increasing the numbers of predatory mites in the soil. This potential is also being explored in lettuce crops.

In the future, it is hoped that improved management of pests, disease and crop health can be achieved with the appropriate use of compost and specially developed compost formulations.

I've heard that compost can cause "nitrogen draw-down" – is this true?

Nitrogen draw-down can occur when there is a lot of woody material in the compost. Microbes will draw nitrogen from the soil to break down this material. This could reduce the amount of essential nitrogen available to plants, resulting in less plant growth or even plant death. It is important that the compost you use for soil incorporation has a carbon to nitrogen ratio (C:N) below 20:1 to ensure that nitrogen draw-down doesn't occur. For sensitive crops, this ratio should be closer to 15:1.

How should I apply my compost and at what rate?

The application method and rate of compost you should apply will depend on what you are trying to achieve with your compost. The quickest

way to improve soil conditions is to broadcast compost. If you are looking to specifically supply nutrients and improve crop establishment, compost can be applied just to planting beds, placed in trenches or applied in a band to reduce costs.

The best time to apply compost is just before planting and the typical application range is between 15-30m³/ha. Compost can then be incorporated into the top 10-25 cm of soil. The maximum application rate should not exceed 60m³/ha/year applied either in a single application or split up over the year. To reduce crusting of surface soil, broadcast compost to a depth of 2-5mm on the planting bed surface just after seeding. To get best value from compost, you may consider targeting it to those areas of the field that tend to underperform, such as areas of lighter soil texture or rises that suffer more exposure.

Can compost provide nutrients to my crop – will I need to change my fertiliser program?

Compost can provide nutrients to your crop depending on a range of factors including the type of compost you use, your farm location, climate,

soil type and your type of irrigation. As a general rule you can expect your compost to deliver significant amounts of potassium initially, with a slower release of nutrients such as nitrogen and phosphorous over time.

It's a good idea to monitor your soil and plants so that you can adjust your fertiliser applications if necessary.

Fertiliser savings can cover at least one half to two thirds of the cost of applying compost.

Should I be applying compost every year?

Regular applications of compost will increase the level of soil carbon/organic matter in the soil which is essential for good vegetable production. The levels of soil organic carbon will decrease over time unless they are replenished and regular applications can achieve this. Regular applications of compost will also reduce bulk density, improving potential root growth, water drainage and infiltration. Compost can also supply nutrients to your crop and regular applications may decrease the need for fertiliser applications and irrigations.





To work out when and how often you should be applying compost it is essential that soil/plant testing is undertaken to get a picture of the needs of your farm and how you can maximise your production using an appropriate compost application.

Could compost bring in pests or diseases?

Good quality compost will not bring any pests or diseases into your farm. Compost used for soil incorporation should be fully matured and stabilised, pasteurised and microbially transformed for not less than 6 weeks. After this process the compost contains no weed seeds or pathogens and is a matured, stabilised product. You should check that your compost meets the Australian standards and your supplier should be able to provide you with a recent analysis of the material.

Can I use compost on saline soils?

Yes! Great results have been achieved by using compost on saline soils. Compost can increase the rate of water infiltration and reduces evaporation, which means that less salt accumulates at the surface and your topsoil is less saline. This provides a better environment for plant growth.

How do I know what's in my compost?

Your compost supplier should provide you with a recent analysis of the compost you are planning to purchase, indicating how it meets the Australian standards. It is also a good idea to visit the composting facilities to make sure you are satisfied with the quality of the materials they use and their processing standards.

Will using compost save water?

Using compost can save you water, but it can also put the water you do apply to your veggies to much better use! Some studies in Australian vegetable crops have shown water savings of 10 – 20% !

Saving water...

Incorporation of compost can increase the ability of the soil to hold water, which puts the water you apply to much better use, and can decrease the amount you need to apply. The water holding capacity of light sandy soils in particular, is greatly improved by the application of compost.

Why don't I just use chicken litter?

Chicken litter;

- Hasn't undergone the composting process and can be unstable and less predictable than composts
- High levels of salt applied can burn plants.
- Although it has high levels of Nitrogen, the chicken litter offers little chance to build up levels of Organic Carbon with repeated use, and contributes less to longer term soil improvement.



An initiative of Compost Australia

For more information and a list of quality suppliers, go to

www.compostforsoils.com.au

the resource for compost users