



RECYCLED ORGANICS COMPOST

FOR VEGETABLE GROWERS

DEFINITION

Recycled organics are compostable organic materials, including garden organics, food waste, residual wood and timber. Recycled organics compost is derived from shredding and stockpiling these green wastes for up to six months before being screened to remove contaminants and create a compost high in organic matter, essential nutrients and beneficial bacteria. This compost has a higher level of organic matter (60%) than conventional compost (45 – 50%), however, it often contains less nutrients such as nitrogen, phosphorus and potassium. Suppliers or end users can add supplementary nutrients if required.

With current NSW Government policies to reduce the amount of material going into landfill, recycled organics compost is in plentiful supply in NSW.

Recycled organics compost is a good value proposition for vegetable growers because it is a safe and rapid method of increasing soil organic matter which is often lost when the soil is cultivated.

BENEFITS OF RECYCLED ORGANIC COMPOST

1. Safe to use on vegetables – no withholding period
2. Does not contain animal manures
3. Increased soil water infiltration and soil water holding capacity
4. Increased soil nutrient-holding capacity
5. Sustainable – material diverted from materials that would otherwise go to landfill
6. Encourage increased bacterial and fungal biomass in soils
7. Little or no odour
8. Suppression of some soil-borne diseases (e.g. Phytophthora)¹
9. Supplies organic matter (SOC) without the high level of phosphorus present in poultry manure
10. Improves soil nutrient holding capacity (CEC).

¹ Noble, R. and Coventry, E., 2005. Suppression of soil-borne plant diseases with composts: a review. *Biocontrol Science and Technology*, 15(1), pp.3-20.

RISKS OF ORGANIC COMPOST

Properly composted material adhering to the Australian Standard for Composts, soil conditioners and mulches (AS4454) will be safe to use in vegetable production and will not contaminate your soil. However, inadequately prepared and screened compost could introduce weeds, foreign matter, pests or diseases – so, make sure to use a reputable supplier.

There is a risk of nitrogen drawdown when using organic compost, which occurs when woody material is being broken down in the soil. **Do not reduce nitrogen fertiliser** when applying recycled organics compost until you understand how the compost works in your production system.

HOW TO USE RECYCLED ORGANICS COMPOST

Recycled organics compost is being used successfully on vegetable farms in New South Wales and Australia. Compost is an efficient method of quickly reintroducing organic matter to a vegetable cropping system.

TYPICAL APPLICATION RATES, COST AND APPLICATION METHODS

Recycled organics compost costs around \$50 per cubic metre (not including delivery and spreading costs). Transport costs are a significant factor for regions in Western NSW. Typical application rates are about 5 tonnes (or 8 m³) per ha. Frequent applications (E.g. twice or more per year) are more effective for improving soil condition than less-frequent, high rate applications.

A spreader with a hopper is required to spread the compost over the soil. Beds can then be formed, and the compost incorporated into the soil. It is also possible to apply the compost in bands in the crop row. Strip till equipment is useful to incorporate the band of compost prior to planting.

TYPICAL NUTRIENT ANALYSIS

Recycled organic compost will generally contain up to 75% organic matter, 1–2% nitrogen, 0.2% phosphorus and 1% potassium.



Composted recycled organics ready to spread on a vegetable farm



Compost spreading equipment

WHERE TO PURCHASE

Recycled organics compost is available from a range of suppliers in New South Wales, listed on the Australian Organics Recycling Association website:

<http://www.aora.org.au/compost-for-soils/find-a-composter/#New-South-Wales>