



DROUGHT TOLERANCE
BENEFITS OF USING
COMPOST MADE FROM

RECYCLED ORGANICS

Compost made from recycled organics is an effective, long-term soil conditioner against drought. Recycled organics will improve the water use efficiency of a farm by capturing more water and holding it for longer.

Over time, an increase in organic matter will improve water holding capacity, soil structure, soil porosity and hydraulic conductivity. Recycled organics applied to the soil surface will also reduce soil crusting and improve water infiltration.

WATER INFILTRATION

The organic matter in compost made from recycled organics will improve soil structure and soil aggregate size. There will be less crusting of the soil surface and greater infiltration of water into the soil.

HYDROPHOBIC SOILS

Microorganisms in soil will help to break down waxy crop residues and reduce the water repellence of some soils. Compost will introduce and feed microorganisms in the soil. Sandy soils have the highest risk of becoming hydrophobic.

WATER HOLDING CAPACITY

Composted recycled organics have a high water holding capacity. Incorporating it into soil will increase water retention and reduce leaching or surface runoff.

INCREASED SOIL POROSITY (REDUCED BULK DENSITY)

Incorporation of recycled organics in the soil will reduce bulk density and increase soil porosity. There will be more space between soil particles to hold water or air.

HYDRAULIC CONDUCTIVITY

Hydraulic conductivity is the ease with which water can move through pore spaces or fractures in soil. There are studies to show that compost can improve hydraulic conductivity of soils. This is especially effective in loam and clay soils¹.

**HIGHER ORGANIC MATTER WILL
INCREASE PLANT AVAILABLE WATER**

¹ Whelan, A., Kechavarzi, C., Coulon, F., Sakrabani, R. and Lord, R., 2013. Influence of compost amendments on the hydraulic functioning of brownfield soils. *Soil Use and Management*, 29(2), pp.260-270.

