

EARTHWORM COUNT

WHAT



Earthworms are often referred to as 'ecosystem engineers' as they help to decompose plant material to increase plant available nutrients, aerate and create soil pores which in turn improves soil structure and aggregate stability. An earthworm has a long digestive tract with a gizzard that grinds both live and dead organic matter to produce finely ground and nutrient rich casts.

WHY



Higher numbers of earthworms indicate conditions that are favourable (soil moisture, organic matter, and low chemical residues) for soil health and plant growth.

HOW



Count the number of earthworms that are longer than 25mm in an intact spade full of soil (20cm wide x 20cm deep). Put the soil on a light-coloured sheet or board so you don't lose any of the earthworms. Take 3 to 5 samples from a representative area and average the result.

WHEN



Carry out earthworm counts at the same time each year, between **May and September**, when the ground has been moist for some time.



COMMONLY FOUND EARTHWORMS IN AUSTRALIA & THEIR DISTRIBUTION

red marsh worm, red wriggler, dung worm, *Lumbricus rubellus*



Photo: James Lindsey (CC BY-SA 3.0)



southern worm, *Aporrectodea trapezoides*



Photo: Mike Hedde (CC-BY-NC 4.0)



black-headed worm, large field worm, *Aporrectodea longa*



Photo: Malcolm Storey, 2009, www.biomimages.org.uk



pink worm, rosy tip worm, *Aporrectodea rosea*



Photo: nzwormdoctor (CC BY-NC)



grey worm, small field worm, *Aporrectodea caliginosa*



Photo: Chih-Han Chang (Wikipedia)



giant Mount Lofty earthworm, *Gemascolex stirlingi*



Photo: Emma Linsenmeier (CC-BY-NC 4.0 (Int))



orange-saddle worm, *Microscolex dubius*



Photo: Σάββας Ζαφειρίου (CC BY-SA 3.0)



blue-grey worm, *Octolasion cyaneum*



Photo: James K. Douch (CC BY-SA 3.0)



giant Gippsland earthworm, *Megascolides australis*

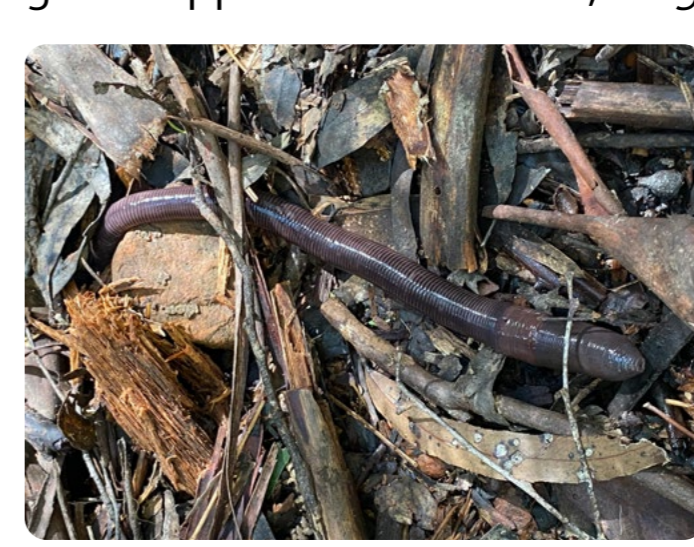


Photo: Isabelleabwood (CC BY-NC)



Distribution maps for each earthworm species [ALA (CC BY 3.0 AU)]

For more information about The great Aussie vineyard earthworm count and to download a copy of the **Soil health indicators for Australian Vineyards** booklet visit www.ecovineyards.com.au

The national EcoVineyards program is funded by Wine Australia with levies from Australia's grape growers and winemakers and matching funds from the Australian Government.

