

Earthworms

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Earthworms, like all other living creatures, need suitable quality food in large amounts, if they are to grow and multiply. Leaves, lawn clippings, weeds, vegetable scraps, compost and animal manures are all good foods. Some worms feed on surface litter at night but most species present in Australia prefer to eat while they chomp their way through the soil itself. This behaviour of below-surface feeding seems to be due to our climate. In much of Australia, our surface soils dry out for several months each year and it can be very hot. Temperatures above 25 degrees centigrade usually prove fatal for earthworms and death is more rapid in drier environments. To avoid getting roasted, earthworms burrow deep into the soil - up to 60 cm - and rest until conditions are more favourable near the surface. Even if garden soils are kept moist throughout the summer, worms tend to remain well down in the soil to keep cool. Organic mulches help keep the soil cool and increase earthworm activity during summer.

Earthworms don't like being chopped up by spades, speared by garden forks, squashed flat by plough shears or gobbled up by birds. Cultivation is definitely not good for them.

Earthworms prefer to live in a light, loamy soil and are not too fussy about soil pH (acidity or alkalinity).

Earthworms don't like being sprinkled with fertilizers or any dry materials. If left on them, these materials would in some cases, burn holes in them as well as dehydrate them.

Each earthworm eats its weight in organic matter every twenty four hours. Its intricate digestive tract makes it possible for the red worm to excrete highly nutritious fertilizer known as castings. These castings are the most perfect plant food known to man, and contain:

- 5 times the available nitrogen
 - 7 times the available phosphorus
 - 3 times the exchangeable magnesium
 - 11 times the available potash
 - 1.5 times more calcium
- than found in 150 mm of good topsoil.

The increases are attributable to the organic matter eaten by earthworms.

Castings are water soluble and immediately available to plant life. They do not heat and will not burn plants regardless of the quantity made available.

Sharp and Hovells PTY.LTD. test report analysis on worm castings (9-5-78).

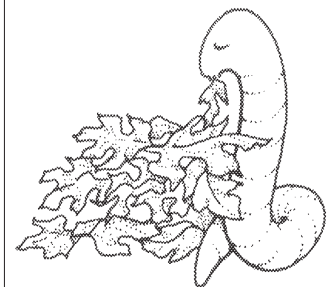
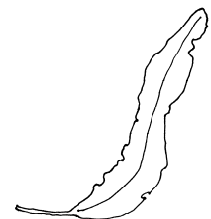
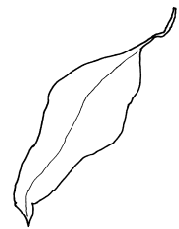
Total Nitrogen	1.49%
Potassium	0.50%
Phosphorus	0.76%

The ideal food for red worms is cow or horse manure. Soak the manure in a drum for several hours as it helps wash out the urine. Always keep the manure damp so it can be eaten by the worms. Add it in small piles to where the worms are located. The fresher the manure, the better it is for the worms.

When introducing worms into the garden, add them in small bunches. The most prolific way worms breed is when there are a lot of them in a small area. The closer contact they have, the easier it is for them to mate.

For more information about earthworms including their availability, contact the Horticultural section of the nearest State or Territory Department of Agriculture.

The above information has been sourced from a CSIRO publication, Sharp and Hovells and Centasales & Manufacturing in Alice Springs.



Earthworms are good for Soils

- * They break up organic material.
- * They mix these organic materials into the soil.
- * They break up root mats in pastures and thick layers of leaf litter.
- * They increase microbial activity in the soil.
- * They increase the availability to plants of nutrients in the soils and organic matter.
- * They improve the crumb structure of the soil, and so,
- * Increase the amount of water that can be held in the soil.
- * They allow better penetration of plant roots, oxygen and water into the soil.
- * They increase crop yields.
- * They help reclaim land (including mine dumps) by increasing soil fertility.

