

# Leaf Cutter Ants

## The Social Insects

Tarantula Millipede Scorpion Mantis Cockroaches

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## Keeping Leaf Cutter Ants

*Acromyrmex octospinosus*

Welcome to the Leaf Cutter Ants area.

### Introduction to Leaf Cutter Ants

The *Acromyrmex octospinosus* leaf cutter ant is from South America and is found in forest areas.

Although these ants are well known for stripping leaves from plants they don't actually eat the leaves. The leaf cutter ant makes a compost heap in the nest where it 'farms' a special type of fungus found nowhere else on earth. This fungus produces a mycelia (*fungus sort of root*) and is the staple diet of the ants.

Thankfully it is one of the easier species to keep in captivity due to their relatively small colony size of around 50,000 at maturity! The process of small colony to maturity can take around 18 months but the queen of *Acromyrmex octospinosus* colony lives for 10 to 12 years and lays around 600 eggs per day at her peak.

When buying an ant colony you will often see several colony sizes available. The size of the colony is really of little importance as a healthy colony will re-grow but the condition of the garden and health of the queen is vital.

If the garden is missing from the container then your ants will have no immediate food source and will probably die before adequate fungus can be grown.

Similarly, if the queen is missing from the colony there will be no more eggs and hence ants and again the colony will fail.



### Housing Leaf Cutter Ants

Leaf cutter ants will need an enclosure which is escape proof as they can climb glass. Here we are using an Easy Exotics leaf cutter tank. The size of the tank is 30 inches long x 15 inches wide x 18 inches tall, the tank also features built-in nest and food platforms plus a separate 12 inch glass cube for the nest and fungus garden.

The rim of the tank has a 4 inch wide moat that is 2.5 inches deep, this needs filling with either water or oil to prevent the escape of any that fall in the water and walk up the glass.



The complete kit includes just a few items

- Leaf Cutter Tank
- 12 inch nest cube
- 150w Aquarium Heater
- Thermometer/hygrometer
- Ant Colony
- A stick

[Ants are available HERE](#)

The first thing to do is to fill the nesting chamber with soil, a good mix would be John Innes compost number 1 mixed with sphagnum peat 50/50.

Make sure the compost you use does not contain any fungicides as this will prevent the right fungus growing.



Once the nesting tank is full you need to create a well in the centre, this should be about the size of an orange.

This depression is where you will be putting the existing fungus garden, you need not cover the garden as the ants will do that on their own.

You can now place the filled nesting tank on to one of the glass platforms in the tank, use the one furthest away from your electric socket.





Now is the time to fill the bottom of the main tank with warm water, this should be 30C and add water to just below the glass platforms.

The water is to prevent the ants walking down the glass nesting cube and up the tank walls..

## Temperature & Humidity for Leaf Cutter Ants

In nature the ants would dig a tunnel and keep the fungus garden at the right temperature by changing the depth of the nest or its position. In captivity the nest temperature needs to be 25 C (+ or - 2 C). This is for the benefit of the fungus and not for the ants, as the fungus needs this temp and the relative humidity to be able to thrive.

The easiest way to control this is to set the tank heater to 30C and this will translate to an air and therefor nest temperature of 25C.



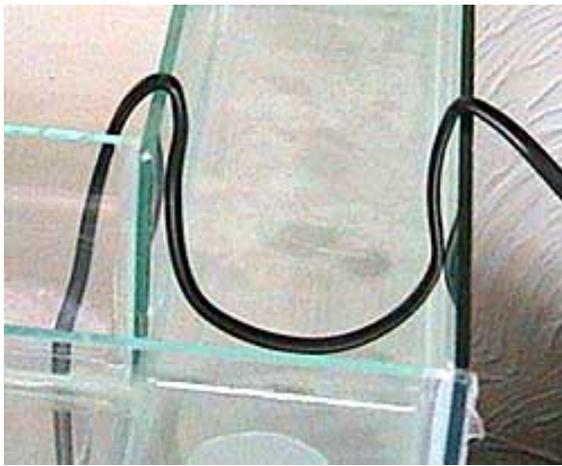
Set the thermometer on the aquarium heater to 30C and place is on the bottom using the suction cups included with it to fix firmly to the base.

Make sure you have the thermostat end pointing to the end nearest the electric socket.

Turn on the power to the heater only when is is firmly attached to the base and is underwater otherwise it will break.

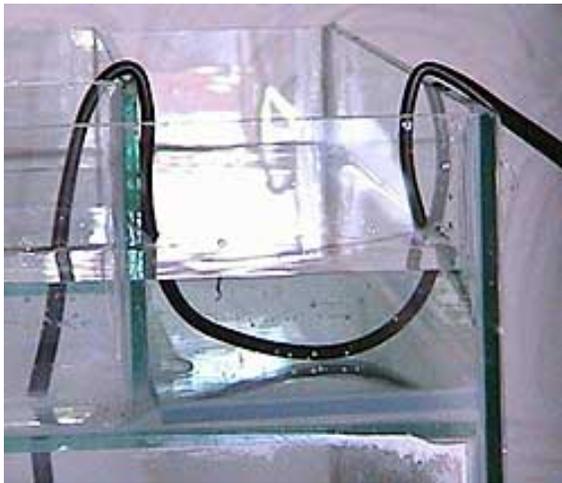
Here's how the tank set up should look one you've added the nesting cube, water and heater





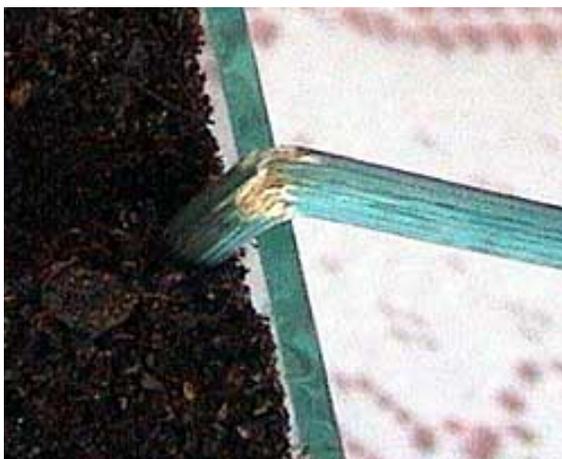
You will need to bend the heater wire to the shape of the moat at the top of the tank, this is very easy to do and prevents the ants walking up the wire and escaping.

You can now carefully add the ants and fungus garden to the well you created in the glass nesting cube.



The moat around the top of the tank should now be filled with water or cooking oil. This is the second escape prevention mechanism in place.

## Feeding Leaf Cutter Ants



Now that the water, nesting tank, heating and moat are in place you can now use a standard gardening cane to bridge the gap between the glass nesting cube and the other glass platform. This is the feeding platform.

You can easily break the end on the cane in such a way that it doesn't actually detach the broken part, this should be shoved in to the compost and the other end rested on the empty glass table.

All that is now required is to add some leaves to the feeding platform and the ants will walk down the garden cane and begin the cutting up of the leaves.

Leaves taken include: Rose leaves, Rose petals, privet, bramble, oak leaves, sycamore, beech, birch, hawthorn, raspberry leaves, sweet apple, sprouts, cabbage, dock leaves, grapes, cherries and even used tea bags. Be sure that none of the items given have been sprayed with pesticides or fungicides.



Leaf cutter ants will 'consume' a few leaves a day as the colony gets established, thereafter the amount of leaves needed to sustain the fungus garden for the growing colony will also grow.

This means that the waste from the fungus garden has to be removed from the chamber, the ants may take it down to the food platform but are more likely to simply throw it over the edge of the nesting cube. As a result the water will be littered with bits of old material and will need changing every two weeks, this is a five minute job but you **must** remember to switch off the heater before siphoning off the water or it will break.



The finished article. Once finished the tank should look like ours, it is a very simple and tidy set up which can sit almost anywhere other than total darkness or full sun.

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