

Homemade Natural Pesticides & Fertilizers

Welcome to a Greener Way to Grow!

In today's world, more gardeners, farmers and environmentally conscious individuals are turning to natural pesticides and fertilizers to cultivate healthy plants while protecting the planet. Unlike synthetic chemicals, natural alternatives nourish the soil, promote biodiversity, and safeguard pollinators and beneficial insects. They offer an effective, sustainable way to manage pests and enrich soil health – without the harmful side effects.

On this page you'll discover how easy and rewarding it can be to use natural solutions. Whether you're maintaining a backyard veggie patch, managing a large farm, or simply looking to make eco-friendly choices, we'll guide you through safe, proven methods for a healthier, greener future.

Please join us as we embrace nature's own methods for a healthier, greener future.

**Note – When discussing the addition of soap, we are strictly referring to Castile Liquid Soap as it is a versatile vegetable based soap. This means it is made free of animal fats and synthetic ingredients.*

Safety Warnings

First Aid Instructions

If ingested, seek medical advice immediately.

Avoid contact with eyes, skin and open wounds.

If irritation occurs, wash affected area with water.

Keep out of reach of Children and Pets.

Please contact emergency care if either do occur.

***Poison Hotline QLD 24/7 – 13 11 26 ***

Test on a small area of plant before full application

This is a homemade, natural product. No guarantees of effectiveness are made. Always exercise caution when using on sensitive plants or around animals

Tip: *Even if it's natural, it's a good idea to treat all pest sprays with the same respect you would a store-bought pesticide — especially if you're giving or selling it.*

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Pesticides

1. Garlic and Chilli Spray

What it is for: Aphids, Caterpillars, Whiteflies and general leaf eating insects.

- How to make:

Blend 1 bulb of Garlic 1 Chilli (or tsp of Chilli flakes) with 1 litre Water

Strain and add a few drops of dish soap

Spray onto leaves (test first).

Re-apply every few days or after rain.

Tip – After using this recipe for years we generally don't add dish soap and strain the garlic and chilli out, also found that using fresh homegrown chillies to be most beneficial.

2. Neem Oil Spray

What it is for: Aphids, Spider mites, Fungus Gnats and Mildew

- How to make: Mix 2 tsp Neem Oil + 1 tsp mild liquid soap in 1 litre warm water.

Spray onto plants in the early morning or late afternoon

*Use weekly for prevention.

3. Bicarbonate Spray (Anti-fungal)

What it's for: Powdery mildew (especially on Zucchini and Cucumbers).

- How to make: Mix 1 part milk (preferably raw or full cream) with 2 parts water.

Spray weekly during early infection.

4. Natural Weed Killer

What it's for: Drawing moisture out of weeds, causing them to wilt and die (***Spot treatment only**)

- How to make: 1 part White Vinegar, 2 drops of dish soap, mix, then spray directly on weeds on dry sunny days. Avoid spraying near your growing plants as this mix may harm them.

Note: Works best on young, shallow-rooted weeds like Dandelions and Clover.

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5. Fungal Disease Prevention Spray

What it's for: Avoids powdery mildew or fungal spots on leaves.

- How to make: 1 tbsp Apple Cider Vinegar, 1 litre water. Mix Place in spray bottle and spray leaves.

Note: Test on small amount of leaves first, if the mixture is too strong it may cause damage.

6. Fungal Disease Fighter Spray

What it's for: Preventing and treating powdery mildew, black spot and other fungal leaf concerns.

- How to make: 1 tbsp Bicarb, 1 tbsp vegetable oil, 2-3 drops dish soap, 1 litre water. Mix in spray bottle, spray on affected leaves once per week. For best results spray in the early morning or late afternoon to avoid sunburn.

Note: Bicarb can alter the soil PH levels, use in moderation. Avoid spraying on young or delicate leaves in the mornings. This mix is not a long term solution for ongoing fungal or pest infestations.

7. Backyard Mint Mist

What it's for: Natural protection from pests, such as Ants, Spider mites, Whiteflies, Caterpillars, Fleas, also repels Rodents and Possums.

- How to make: 10-12 drops peppermint essential oil, 3 drops of dish soap, 1 litre water. Combine all ingredients and shake well. Spray on plant leaves every few days and after rain.

Tip – Always test on a small part of the plant first to check for plant sensitivity, best to spray in the early morning and late afternoon to avoid leaf burn.

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Fertilizers

1. Compost Tea

What it's for: Overall plant boost (rich in microbes and nutrients).

- How to make: Fill a bucket 1/3 full with compost, top with water, stir daily for 3-5 days. Strain and use the liquid to water your plants.

2. Banana Peel Water

What it's for: Potassium-loving plants (Tomatoes, roses and Chillies).

- How to make: Soak banana peels in a jar of water for 2-3 days. Use the water to feed flowering or fruiting plants.

Tip – Using Banana peels in your gardens are beneficial providing a potassium-rich support, ensuring a healthier plant, healthier plants are more resilient to pests. It is known that chopped Banana peel in your garden will repel Aphids as they dislike the smell of the fruit during decomposition.

Extra Tip – Drying your Banana peel and turning it into a powder makes it easier to add to your potting mix

Note – Banana peels are rich in Potassium (essential for plant flowering and fruiting), Phosphorus (supports root development), Calcium and Magnesium (strengthens plant cell walls). Banana peels break down quickly in soil, enriching it and feeding beneficial microbes.

3. Eggshell Powder

What it's for: Calcium boost (helps prevent blossom-end rot in Tomatoes).

- How to use: Dry and crush eggshells into powder. Sprinkle directly into planting holes or around plant bases.

**Note: At the beginning of this process we place all of our eggshells into a container in the fridge or under the sink. You are then able to complete a dry process in a shelf in the oven on the low heat for approx. 15 mins. Place in a food processor and WAALLLAAA!*

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4. Seaweed Soak

What it's for: Trace minerals and plant resilience

- How to make: Soak washed seaweed in water for 1-2 weeks. Use diluted 1:5 with water on plants.

5. Compost Booster

What it's for: Boosting microbes and bacteria in our compost.

- How to make: Dissolve 1-2 tbsp brown sugar in 1 litre of water. Pour lightly over your compost pile (especially if it is dry or inactive).

6. Nutrient Booster

What it's for: Boosting crop production, premature leaf drop or stunted growth when your plants are lacking in magnesium.

How to make: Dissolve 1 tsp of Epsom Salt in 1 litre water. Place in a spray bottle. Spray onto leaves once per month.

Tip: *Simply add 1 tbsp Epsom Salt to soil at the base of plants upon planting.*

Extra Tip: *Sprinkling Epsom Salt around plants can deter slugs and snails (they dislike crawling over the crystals). Some gardeners report it discourages certain bugs, however scientific evidence is mixed.*

*Note: *Overuse of Epsom Salt may lead to nutrient imbalances. It is best to use Epsom Salt when there is a known magnesium deficiency.*

How to tell if your plant has a deficiency: The most noticeable symptom is yellowing between the veins, creating a marbled or mottled appearance. Important to remember, magnesium is a mobile nutrient meaning it can be moved from older leaves to new growth, this is why older leaves show symptoms before younger ones. Yellowing normally starts at the leaf tips and gradually progresses toward to base of the leaf as the deficiency worsens, in some cases it may cause brown or necrotic spots. This indicates that there is dead tissue. Be cautious – there may be other causes of yellowing to leaves, however; yellowing commencing in the older leaves first is a good indicator it is possibly a magnesium deficiency.

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7. Tea Tonic

What it's for: Beneficial addition for plant care, acting as a natural fertilizer, providing nutrients to soil, assists in deterring pests (rodents and some insects), may also assist in inhibiting weed growth. Teas like Chamomile and black tea may also help prevent fungus growth on plants.

How to make: Brew a weak tea (used tea bags or 1 bag per 1 litre of water). Allow water to cool completely. Water plants at the base once per week.

Tip: Place on Hydrangeas, azaleas, ferns, tomatoes and roses.

Extra Tip: Tea leaves can be a good food source for earthworms, which are beneficial for garden health. Furthermore; if you dry out tea leaves, you are able to place them around your acid loving plants, mix through potting mix to add moisture or simply add small amounts over your garden beds for conditioning purposes.

Note: Only use tea bags which have not been in contact with milk or sugar – this will in turn attract pests or mould. Remember if a tea bags does not smell good compost it instead.

8. Rice Water

What it's for: Nourishing plants and soil, contains nitrogen, potassium, phosphorus and beneficial microbes.

- How to make: You are able to use rinsed rice water, or water from cooked rice (please ensure it is cooled before use, and that it has no salt or oil added)

There are 3 different methods of Rice Water you are able to benefit from.

1st – You are able to use your rinsed rice water or water from your cooked rice to water your plants.

Excellent for leafy greens, herbs, seedings and house plants.

2nd – Use for Soil health – Leave rice water in a jar loosely covered for 2-3 days (may smell a tiny bit sour, which is normal), dilute 1:2 with fresh water then apply directly to soil. This quick solution assists by feeding your soil good bacteria and assists roots with absorbing nutrients better.

3rd – Use a 1:3 rice water ratio, apply via a spray bottle in the early morning or later afternoon (this stops leaf burn), a spray solution boost plant health, correcting nutrient deficiencies and overall appearance.

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Note: Don't use rice water if salt has been added – salt can harm plant roots. Avoid overuse 1-2 times weekly is plenty, last but not least use fresh or fermented – don't leave for a long period of time as the solution may go off.

9. Plant Tonic (for Beneficial Microbes = EM-style solution)

What it's for: Helps support microbial life, especially in depleted beds.

- How to make: 1 tbsp brown sugar, 1 tbsp milk (or molasses), 1 litre water. Mix together and let sit loosely covered for approx. 24hrs. Apply to soil and around plants – not the leaves.

10. Large Homemade EM Solution

What it's for: EM (Effective Microorganisms) Solution is a natural mix of beneficial bacteria, yeasts, and fungi that help improve soil health, boost plant growth, and speed up composting. When applied to gardens, farms, or compost, EM enhances the natural microbial life, creating healthier, more fertile soil and stronger, more resilient plants — without the need for chemicals.

How to make – Detailed steps below

Ingredients:

- 1 cup rice (white or brown)
- 2-3 cups non-chlorinated water
- 1 cup unsweetened milk (cow, goat or plant-based options)
- 1 tbsp molasses or raw sugar
- 1 clean glass jar or plastic bottle with a loose-fitting lid

Steps:

1st Step – Make Rice Wash Water

- Pour the rice water into a clean jar.
- Add water and gently massage the rice to release starches and microorganisms.
- Strain and keep the cloudy rice wash water. (You can now cook your rice separately 😊)

2nd Step – Ferment the Rice Water

- Pour the rice wash water into a clean jar.
- Cover loosely (use cloth and a rubber band or a lid placed lightly on top).
- Leave it in a shaded, warm place (around 20-30°C) for 3-5 days.
- It's ready when it smells slightly sour (similar to a mild vinegar) and when bubbles form.

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3rd Step Add Milk

- Strain the rice water to remove any solids
- Mix 1 part fermented rice water to 10 parts milk.
- Store in a clean jar or container, loosely covered again.
- Let the mix ferment for 5-7 days in a warm spot. You will begin to see layers form: a clear liquid at the bottom, and white curd layer at the top.

4th Step Harvest the EM Solution

- Remove and discard the layer of curd.
- Keep the clear yellowish coloured liquid – this is your EM stock.

5th Step Storage

- Store your EM stock in an airtight bottle in the fridge.
- Will last approx. 3months.

How to use: Dilute before use – mix 1 part solution to 20 parts waters for garden applications. Simply spray on soil, compost or plants to boost beneficial microbes. Assists with composting, soil conditioning, further helps controlling bad odours in gardens.

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Pest Deterrents

1. Natural Ant Deterrent Bicarb & Icing Sugar Trick

What it's for: Deterring Ants away from your house, clothes line and crops.

- How to make: 1 part Bicarbonate Soda, 1 part Icing Sugar
Mix together, place in a shallow lid, or on a piece of cardboard.
This mix is able to be placed anywhere you have seen a trail of ants – along window ledges, near entry point, even at the base of your clothesline.

**Note: Keep it dry and replace when required.*

Extra tip: Seal up entry points with other natural deterrents, such as: Cinnamon, Vinegar, or Peppermint Oil for added effect.

2. Coffee and Cinnamon Garden Mix

What it's for: Repel pests such as Ants, Snails and Slugs. Added bonus – this mix adds nitrogen to the soil! Cinnamon also acts as a natural anti-fungal as well as repels ants and fungus gnats.

- How to make: 3 parts used coffee grounds, 1 part cinnamon. Mix together sprinkle around plant bases, entry points for ants, or in pots with fungus gnat issues.
Re-apply every few weeks, especially after heavy rain. Please avoid over doing it as it can be acidic in large amounts.

3. Fruit Fly Trap

What it's for: Repels Fruit Flies or Fungus Gnats and other small flying pests.

- How to make: 1 cup of water, 2 tbsp brown sugar, 1 tbsp apple cider vinegar, small drop of dish soap. Mix well together, place in shallow dish or lid, then place near affected areas.

**Note: Dish soap is added to break surface tension in mix and make this delicious mis easier for our little friends to get too.....*

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4. Peppermint Deterrent

What it's for: Repels common pests, such as Aphids, Ants, Spider mites, Whiteflies, Caterpillars, Fleas, even Rodents and Possums dislike the strong scent.

- How to use: Cover Cotton Balls in peppermint oil, place them around your garden beds – away from pets. Then replace every few days or after rain.

5. Squeak – Away Spray

What it's for: Effective defence against Rodents and other creepy crawlies.

- How to make: 2 tbsp dried Rosemary, 1tbsp ground Cinnamon, 15-20 cloves, 300ml vinegar. Place all ingredients into an airtight container, mix and leave for up to 21 days (the longer it is left the stronger it will become), strain mixture and place into a spray bottle. Spray where you have noticed these creepy crawlies. Feel free to spray close to windows and doorways to deter them from your home. Spray around your garden beds to deter them from your fresh goodies too.

6. Hot Pepper Solution

What it's for: Repelling a variety of pests, such as: Aphids, Spider mites, Cabbage loopers and even some pesky mammals.

- How to make: 3.5 litres water, 3 tbsp peppers (fresh or dried – Jalapenos or cayenne), ½ cup White vinegar, 1/3 cup dish soap, ½ cup hot sauce . Combine together and allow time to ferment, recommend up to 24hrs. Strain the mixture and place in a spray bottle. Spray the mixture to affected plants and surrounding areas, focussing on the underneath of leaves where pests tend to congregate.

Tip – *Recommend use is afternoon when the sun is setting, avoid using in direct sunlight as you will harm your plants.*

Safety – *Do not spray eyes and use gloves throughout prep and spraying.*

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References

Natural Fertilizers & Pesticides

Australian Organic Gardening and Pest Control — Jerry Coleby-Williams.
Trusted guide on natural pest control methods for Australian gardens.

ABC Gardening Australia

<https://www.abc.net.au/gardening/>

Offers expert advice on natural garden solutions from leading Australian horticulturists.
NSW Department of Primary Industries – Home Garden Pest Control

<https://www.dpi.nsw.gov.au>

Provides guidelines on pest identification and low-toxic control methods for home gardens.

Sustainable Gardening Australia (SGA)

<https://www.sgaonline.org.au>

Resources on organic pest management, companion planting, and eco-friendly gardening practices.

Planet Natural Research Center – Natural Garden Pest Control

<https://www.planetnatural.com/pest-problem-solver/>

Comprehensive guide on homemade sprays and biological pest control (U.S.-based, globally useful).

Clean Up Australia – DIY Natural Cleaners & Garden Tips

<https://www.cleanup.org.au>

Eco-friendly advice on garden care using natural household ingredients.

Queensland Government – Composting and Garden Waste

<https://www.qld.gov.au/environment/pollution/management/waste/recovery/reduce/composting>

Information on composting, soil health, and sustainable gardening practices in Queensland.

Gardening Know How – Homemade Insecticide Sprays

<https://www.gardeningknowhow.com>

Recipes for natural insecticides using garlic, chili, neem oil, and other ingredients.

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Permaculture Research Institute (Australia)

<https://www.permaculturenews.org>

Articles and tutorials on sustainable living, organic farming, and natural pest control.

National Pesticide Information Center – Using Pesticides Safely Around Pets

<https://npic.orst.edu>

Rodale Institute – Organic Pest Control

<https://rodaleinstitute.org>

The Old Farmer’s Almanac – Natural Garden Pest Control & Homemade Fertilizers

<https://www.almanac.com>

University of California Agriculture & Natural Resources – Organic Pest Notes

<http://ipm.ucanr.edu>

North Carolina State Extension – Compost Tea and Natural Fertilizers

<https://content.ces.ncsu.edu>

Korean Natural Farming – Fermented Fertilizers & Lactic Acid Bacteria (LAB)

<https://naturalfarminghawaii.net>

Planet Natural Research Center – DIY Garden Solutions

<https://www.planetnatural.com>

Purdue University Extension – Organic Garden Pest Management

<https://extension.purdue.edu>

Mother Earth News – How to Make Your Own Organic Fertilizer

<https://www.motherearthnews.com>