

## 6

All about healthy plants,  
pests and diseases

Nobody wants to share their carefully grown harvest with mice and greenflies! So this chapter is about how we can turn our garden into a little paradise – with as few unwanted little visitors as possible!



The first step is to accept a small number of pests. They belong to nature and are part of the ecosystem. However, we need to deal with them in a clever way and ensure that their numbers never get too large to manage.

Diseases occur mostly in plants that have weak immune systems. Your plants might be planted in the wrong spot, with bad neighbors, or they might be kept too moist or too dry. All of these things weaken plants and make them more prone to diseases. So gaining knowledge about the individual needs of each specific plant is the best way to keep them healthy.



The best approach is to lay out your garden in such a way that it regulates itself. Plants that attract useful little creatures need to be grown close to plants that consider them as pests. So while one plant has the problem, the other can provide the solution. You remember we talked earlier about good and bad neighbors?



A single ladybug, for example, can eat up to 150 greenflies a day. And white cabbage butterfly, another pest, doesn't like geranium plants.

Having the right insects around can play a major role in keeping your plants healthy. We will leave bees out of our discussion for now, as the next chapter is dedicated to these fascinating little guys. But there are many other very useful creatures that you need to know about.

## Snails

Every lettuce is a magnet for snails, they just can't resist the flavor and scent. Snails can literally sense lettuce a mile away and come for them in numbers, so unless you take precautions your lettuce will usually be finished within a few hours! And even if there are some leaves left, nobody wants to eat them when a snail has been there first.



Snails can endanger whole harvests, especially when there is a lot of moisture around and winters are mild. Ducks are the best thing for stopping snails. They will hunt for snails the entire day and not a single one will escape their beaks. Another advantage of having ducks around is that they will fertilize the soil with their droppings. This means they can be very useful little co-workers in your garden patch. However, if you only have a roof garden or live in a big city, ducks might not be the right answer for you. But don't worry, there are plenty of other possibilities!



## Nettles

Nettles are good for attracting several useful creatures to your garden. For example, they supply food for butterflies and their caterpillars – who then leave your veggies alone as they prefer to snack on nettle instead.

Additionally, nettles provide the base for an effective snail remedy known as nettle water.



### How to make nettle water



It's easy to make: Just put a handful of nettles in a bucket of hot water and let them soak overnight. The next morning filter the mixture; an old pair of nylon tights is ideal for this task.

Water your lettuce with nettle water for 3 days. Not only will the snails disappear, the water will strengthen the roots and immune system of the lettuce.

## Sawdust

Take a bucket of sawdust and use it to mark out the edges of your entire patch with a 10-inch wide border. Any snails shouldn't be able to cross this.



Ultimately, in order to get rid of snails, you have to figure out what works best for you. But at least you now have some options. However, there are still some other pests and diseases that might challenge you.

For example, mole crickets can grow up to 2 and a half inches long. These live in the soil and look a bit like miniature brown aliens. They live in tunnel systems and are fond of the taste of fresh young greenery. They love to dig and are a major threat to young plants and seedlings. So what do we do? Let's build a trap!



## How to build a mole cricket trap

You will need: an old grave vase and a flowerpot whose diameter is about 1 and a half inches bigger than the grave vase. You will also need some half rotten cow manure for the bait.

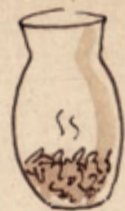
The mole cricket lives about 2 inches down in the soil, so the vase needs to be dug in a bit deeper than this. It's best if you take a spade to prepare the hole and then put the vase in there.

While filling the space around the vase with soil, make sure your hand covers the opening so that no soil can get into the vase. Then fill the bottom of the vase with manure.

Put the larger diameter flowerpot on top so that no rainwater can dilute the manure and soften its smell, because this is what will attract any crickets who are within 100 meters of your patch. And yes, you guessed right, crickets must have very sensitive noses!

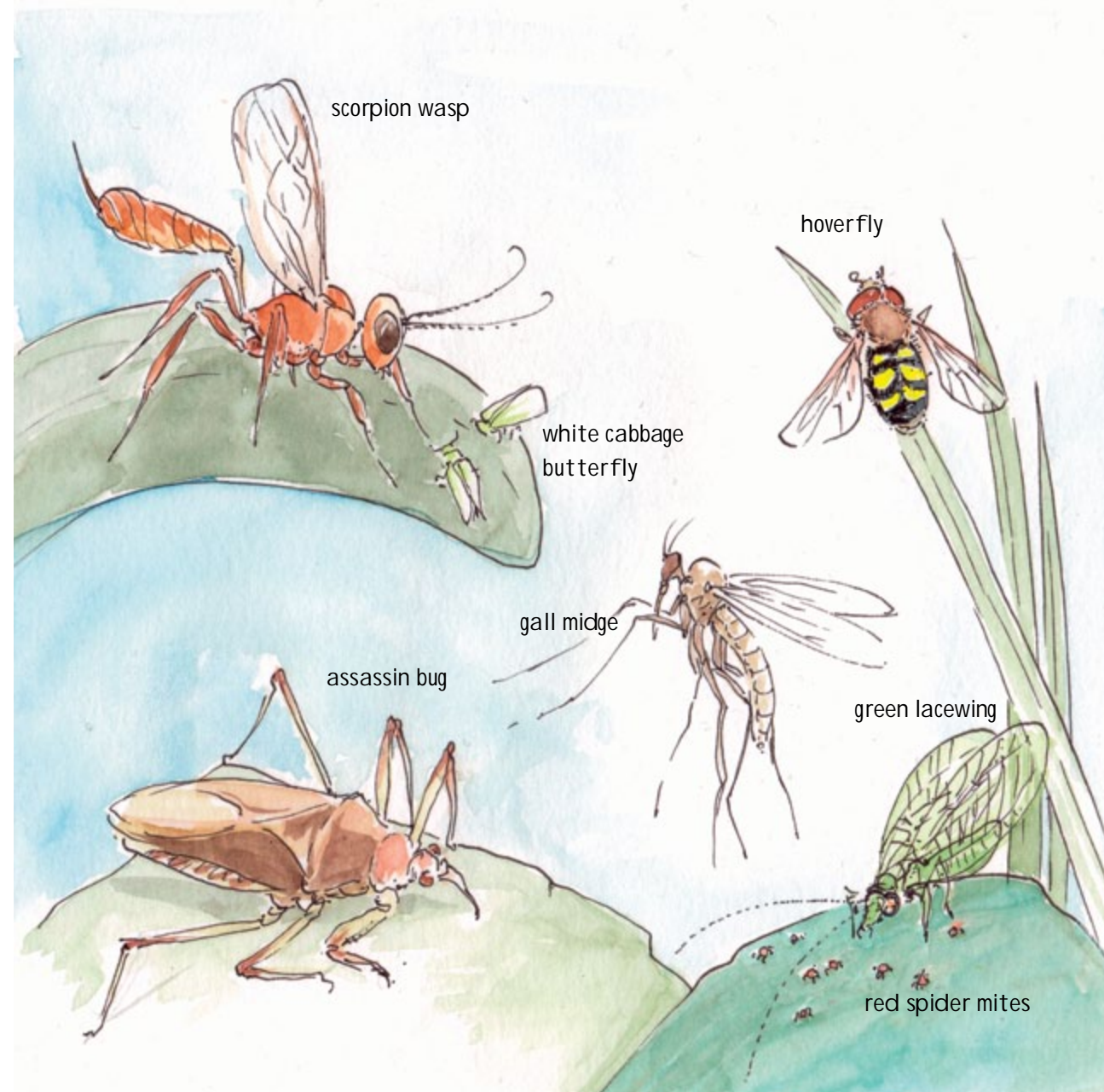
Leave your vase alone for a week.

When next look inside you will find a lot of mole crickets in it. They will survive in there because they've had lots of their favorite food. If you decide to free them, look for some far, far, far away spot.



## The right insects

Attracting the right insects, such as hoverflies, gall midges, green lacewings, assassin bugs, predator mites and scorpion wasps, will help you keep pests under control. White cabbage butterflies, for example, get eaten by scorpion wasps. Green lacewings, meanwhile, hunt red spider mites (a species that attacks fruit trees). To attract these insects it is important to plant flowers in between and around your patches.



## Flowers

Beautiful flower seeds are available all the year round. Examples include geranium, gladiola, aster, forget-me-not, amaranth, hollyhocks and daisies in all colors. These are usually very easy to grow, just sow them between your veggie patches and keep the soil moist. Some flowers, such as tulips and gladiolas, have bulbs and last for more than one year.



## A hideout for animals

It's best if you let some nettles grow next to your compost heap. And keep your nettle patch during winter, don't clean it! Small larvae and useful creatures will hide in there and will be protected against the cold, so they survive to the next spring.

Additionally, a large wood heap will offer insects and lizards (both of whom love to eat snails!) a shelter for winter. Small fitches and polecats get attracted by protected areas and will hunt the bulb-eating voles. Plant protection is animal protection. It all works hand in hand.



Here is a summary of common pests and plant diseases – and what you can do about them!

## Pests

### Colorado beetle

**Appearance:** Yellow-red with patches of black, around 1 cm in length.

**Attracted by:** Tomato, eggplant, potato.

**Likely damage:** Quick consumption of the entire plant.

**Cure:** Difficult. These critters are quite tough! Your best approach is to regularly collect beetles and eggs.



### Flea beetle

**Appearance:** Very lively black beetles, around 0.4 mm in length.

**Attracted by:** Radishes, cabbage.

**Likely damage:** Big round holes in leaves, kills young plants.

**Cure:** Keep the soil loose and moist, and plant with other water-loving plants as this beetle prefers things to be dry.

### White cabbage butterfly

**Appearance:** White fly with long wings, around 2 mm in length.

**Attracted by:** Kale, green peppers, cucumbers, tomato and basil.

**Likely damage:** Juice deprivation and poisonous excrements make leaves turn yellow.

**Cure:** Plant flower patches to attract insects such as scorpion wasps.





### Leek moth

**Appearance:** Larvae is yellow-green with black spots and brown head. Fully grown they reach around 12 mm in length.

**Attracted by:** Onions, leek, chives, garlic.

**Likely damage:** Burrows into leaves, resulting in withering of the entire plant.

**Cure:** Plant flowers to attract Ichneumon wasps

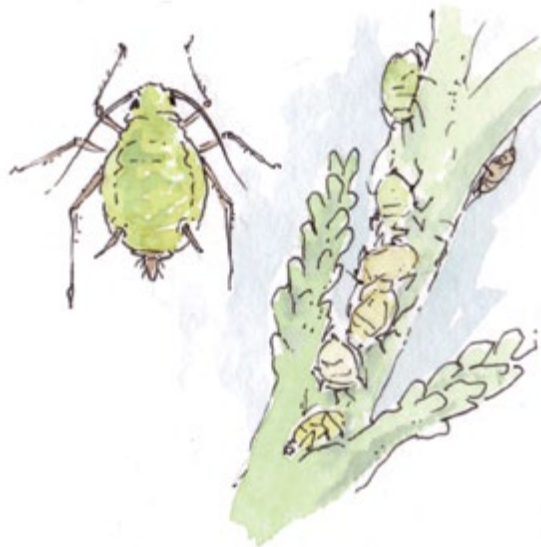
### Plant lice

**Appearance:** There are around 800 different species, mostly green, some with wings. They reach about 7 mm in length.

**Attracted by:** Lavender, savory, nasturtium.

**Likely damage:** They suck out the leaves of the plants, resulting in them dying.

**Cure:** Plant flowers to attract ladybugs and greenflies.



### Leaf mining moth

**Appearance:** Small brown black larvae and caterpillars.

**Attracted by:** Apple and cherry trees.

**Likely damage:** Damage to leaves.

**Cure:** You need to attract tachinids, scorpion wasps and bats. Flowers will provide a home for the tachinids and scorpion wasps, while bats love old rotten fruit or oak trees.



## Diseases

### Peach leaf curl

**Appearance:** Yellow curly leaves.

**Occurs on:** Peach, plum.

**Likely damage:** Entire leaves are destroyed.

**Cure:** Remove all leaves – and DON'T put them into your compost heap!



### Blight

**Appearance:** White fungus on top of the leaves.

**Occurs on:** Carrots, cucumber, apple, gooseberries, roses.

**Likely damage:** Nutrition is removed from the leaf.

**Cure:** Remove all afflicted leaves, apply nettle water to strengthen the plant's immune system.

### Pea rust

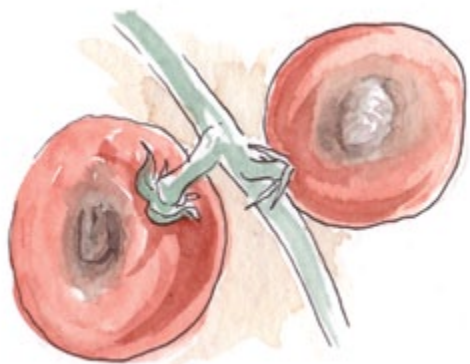
**Appearance:** Small brown pustules.

**Occurs on:** Radishes.

**Likely damage:** Leaves turn brown and die.

**Cure:** Remove all leaves – and DON'T put them into your compost heap!





### Brown rot

**Appearance:** Grey brown patches on leaves and fruit.

**Occurs on:** Tomatoes.

**Likely damage:** The entire plant can die.

**Cure:** Remove all affected leaves and keep the remaining leaves dry. Only apply water to the soil surrounding the plant, don't touch the plant itself.

### Septoria

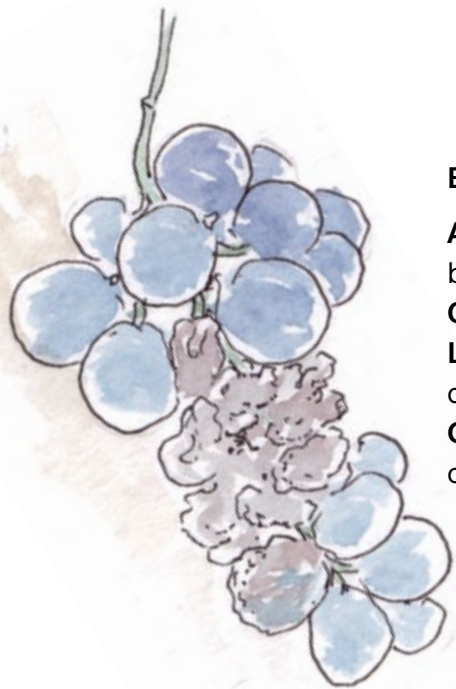
**Appearance:** Fungus, which sucks out the juice from the plant.

**Occurs on:** Celery, kale, spinach.

**Likely damage:** Necrosis of entire leaves.

**Cure:** Remove all leaves and burn them.

Septoria is highly infectious!



### Botrytis bunch rot

**Appearance:** Grey fungus on top and bottom of leaves.

**Occurs on:** Strawberry and grapes.

**Likely damage:** Leaves and fruit are destroyed.

**Cure:** Keep plants dry, plant strawberries on straw.

### Mycosis

**Appearance:** Wart-like patches on leaves and fruit, bacterial infection.

**Occurs on:** Apples, potatoes, carrots, radish.

**Likely damage:** Fruits don't mature. If the root is infected this results in the death of the entire plant.

**Cure:** Remove infected plants, increase the pH level of your soil with horn meal (you can get this from farmers or fellow gardeners, just ask around).



### Lettuce downy mildew

**Appearance:** Grey white fungus on the bottom of the leaves.

**Occurs on:** Lettuce, radish, spinach, cabbage.

**Likely damage:** Nutrition level of plant suffers, leaves rot.

**Cure:** Remove all leaves – and DON'T put them into your compost heap!

