

# Hello Trees Resource Sheet

## What to look for outdoors in Summer

### Lime Tree Flowers



Have a magnifying glass in your pocket.



*A common lime tree*

We are going to look at lime-tree flowers.



First, we are looking for a lime tree, a common lime, sometimes called a European lime.

Look for a tree that is taller than it is wide and covered with pale-green flecks and tiny bunches of flowers.

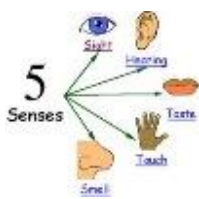


*Lime tree leaves and flowers*



Check the shape of its leaves.  
They should look like this.

For more about the pale green flecks, see '[Lime Bracts](#)'.



Use all your senses.

Have a good sniff.  
How would you describe the smell of lime flowers?

Some people say lime flowers smell of honey? Do you agree?



Can you hear buzzing?



Beware! Bees are attracted to lime flowers.

Don't get in their way: they are busy!



*Lime tree flowers and flower buds*

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But do find a way to look at the lime flowers safely.

Look for the yellow petals and count them. I count 5 petals. Do you?

Look for the very pale-green sepals outside the petals: 5 of them, too?

Look for the masses of white **filaments** sticking out of the flower.

Now look for the swollen filament tips, the **anthers** that hold the pollen.

Filament and anther together make up a **stamen**.



Feel how squashy the stamens are



Now look for the pale stalk coming out of the centre of the flower. This is the **style**.

At the tip of the style is a wider ring, the **stigma**, ready to catch pollen.



Pollen falling on the stigma will burrow down through the style to **ovules**.

Ovules are held in an **ovary** at the base of the style.



Can you make out the ovary at the base of the style? It is quite easy to see – it is a swelling at the bottom of the style.

Style, stigma and ovary together are called a **carpel**.



(Some flowers have more than one carpel. The carpels together are called a **pistil**.)



Feel how rigid the style is. It is not squashy in the way the stamens are.

It may be that the pollen needs a rigid tube to burrow through.

Or it may be something to do with pollination.



How do you think the flowers will be pollinated?



Clues: the flowers have a strong fragrance and bees can see yellow clearly.



That's right – bees and other insects pollinate lime flowers.

When a bee finds a lime flower it extends its tongue to collect nectar at the base of the flower.

The rigid style will make sure that the stigma reaches the bee's hairy tummy and collects the pollen there from the previous flower the bee visited.

Now our flower has been '**pollinated**'.



*A bee on lime flowers*



It is fun to make a note of what you saw and did today and what you think the coming fruits might look like.



For more about lime trees, what came before and what comes next, see Hello Trees book Lionel Lime, <http://hellotrees.co.uk/>