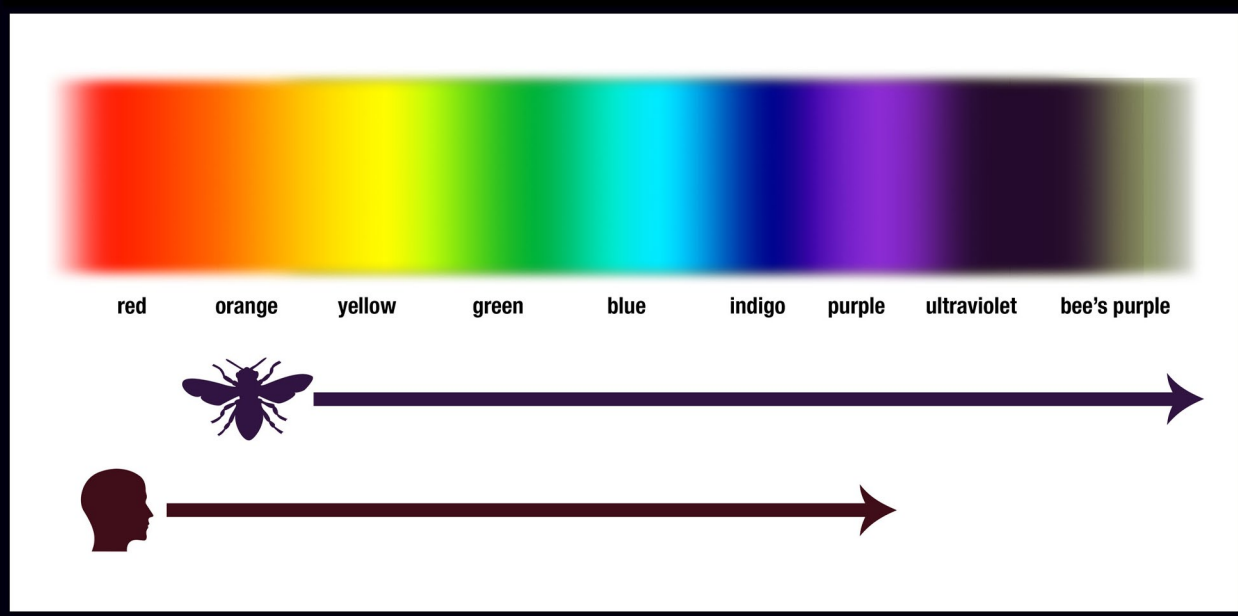




Did you know that bees have a different colour spectrum to us? Special cells called photoreceptors in their eyes respond to blue, green and ultraviolet (UV) light. So, bees can only see these colours and combinations of them. This means they can't see red but they can see blue, purple, violet, blue-green, orange and yellow. Bees can also see ultraviolet light and 'bee's purple' – a mixture of yellow and ultraviolet light.

We have red, blue and green photoreceptors and can't see ultraviolet light or 'bee's purple'.

Bee colour vision



Ultraviolet (UV) light has a very special role to play in how bees see flowers. It helps bees to find pollen and nectar in flowers through 'nectar guides'. Nectar guides are lines and patterns of UV light on flower petals that point to the centre of the flower where the nectar is. Bees drink up the sweet nectar using their proboscis - a long hollow mouth part a bit like an elephant's trunk!

Not all flowers have nectar guides. Some flowers are pollinated by wind so they don't need to attract bees or other pollinating insects. Plants with flowers pollinated by bees are called 'bee-friendly' plants.



Colour flower power



Here are some pictures of flowers in UV light – like bees see them! Look how the nectar guides in the middle of the flowers appear dark purple to help the bees find the nectar.

Draw lines to match the UV flowers on the left with the flowers on the right. Then, turn the page to find out what they are called and why bees like them.

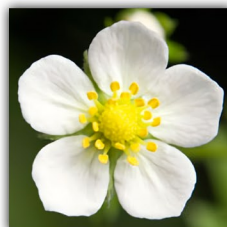
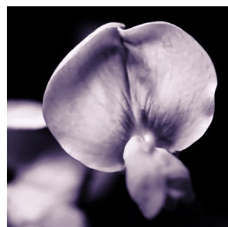
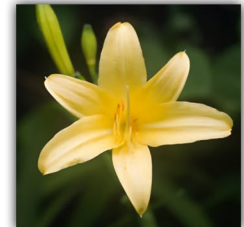
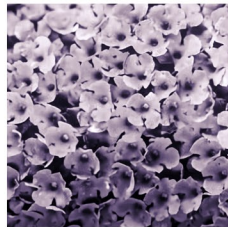
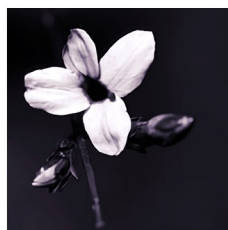
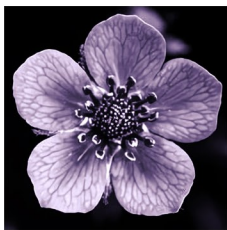


IMAGE CREDITS

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Colour flower power ANSWERS



Winter jasmine (*Jasminum nudiflorum*) is a good source of nectar for bees in late winter when there aren't many other plants in flower.



Yellow daylily (*Hemerocallis lilioasphodelus*) have large, trumpet-like yellow flowers that are rich in pollen and nectar. Bees love them!



Butterfly bush (*Buddleja davidii*). Bees and butterflies love Buddleja for its clusters of nectar-rich flowers.



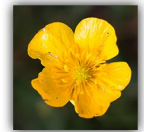
Mock orange (*Philadelphus coronarius*) is covered in sweet-smelling flowers each spring. Bees and butterflies adore them!



Wild strawberry (*Fragaria vesca*) grows naturally in woodland and hedgerows around Britain. The nectar-rich flowers are great for bees and other pollinating insects. Bees have shorter probosces and find it harder to reach nectar inside the flowers. because they have very long probosces that can reach the nectar inside. Honey Cardinal flower (*Lobelia cardinalis*). Bumblebees love tubular flowers like Lobelia



Meadow buttercup (*Ranunculus acris*) is a native British wildflower with pollen- and nectar-rich flowers that are loved by bees.



White wisteria (*Wisteria floribunda* 'Alba') is a beautiful climbing plant with long clusters of fragrant, nectar-rich flowers that are loved by bees.

