



## Bees Trick Plants to Make Nectar, Study Says

### Do bees hibernate?

- In the spring, queen bumblebees come out of hibernation and start colonies.
- After this time, all the bees die out leaving only a new queen. The queen digs a 10cm deep hole into soil and hibernates for the autumn and winter.

Bumblebees are a familiar sight across the country in spring and summer. Their large fuzzy bodies and **distinctive** sound make them one of the most easily recognisable insects in these warmer months.

Bumblebees only eat pollen and drink nectar. This means that, when there is a lack of flowers around, they go hungry and thirsty.

However, it appears that bumblebees have developed a way to force some plants to speed up their flowering times.

Scientists from Switzerland observed the **novel** behaviour of bees biting holes in plants. When the bees didn't appear to be using the leafy mouthfuls for anything, they wondered what the bees were up to.

To the scientists' amazement, the nibbling of the leaves seemed to make some plants produce flowers up to 30 days earlier than they would naturally.

The researchers suggested that this was a tactic the bees had developed in order to create a ready supply of pollen and nectar when there wasn't enough around already.

Interestingly, the scientists are not entirely sure why this works. It's known that when a plant is under threat due to disease or **drought**, it may try to produce flowers early to help it survive.

The researchers think that maybe the plants



Photo: Bumblebees only eat pollen and nectar.

react to the bees' damage in a similar way. The answer may not be that simple though. The scientists themselves used sharp tools to try to **mimic** the holes that the bees had made in mustard leaves and tomato plants.

The scientists found this very confusing. Their man-made damage didn't speed up flowering as much as the bees' damage did.

They now think that there may be something special in the bees' saliva which encourages the plants to flower unusually early.

The next time you're chewing on a leafy salad, have a closer look and see if a bee has been there before you!

### Glossary

<b>distinctive</b>	A feature which makes something stand out and easy to recognise.
<b>novel</b>	An interesting or new way.
<b>drought</b>	A long period of low rainfall, leading to a shortage of water.
<b>mimic</b>	Replicate, imitate or copy.

# Questions

1. According to the article, how much earlier did some plants produce flowers after the bumblebees had nibbled on them?

---

2. 'They eat pollen and drink nectar, but if there aren't enough flowers around then this can be a problem for them.' This suggests that...

- The bees will go hungry.
- The bees will go thirsty.
- The bees will go hungry and thirsty.
- The bees will struggle to solve problems.

3. According to the article, what 'confused' the scientists?

---

---

---

4. 'The researchers suggested that this was a tactic the bees had developed in order to create a ready supply of pollen and nectar when there wasn't enough around already.' Tick the description which best describes the term 'ready supply' as it is used in the following sentence.

- a lack of
- a plentiful amount
- difficult to find
- eager but unprepared

5. Tick which headline does not summarise the story.

- Bees Nibble on Plants to Order Up Future Food
- Biting Bees Bother Plants into Blooming before They Want To
- Bees Speed Up Flowering on Purpose
- Bees Hibernate over Winter

6. Summarise the key information in this article using 15 words or fewer.

---

---

---

# Answers

1. According to the article, how much earlier did some plants produce flowers after the bumblebees had nibbled on them?

**30 days**

2. 'They eat pollen and drink nectar, but if there aren't enough flowers around then this can be a problem for them.' This suggests that...

- The bees will go hungry.
- The bees will go thirsty.
- The bees will go hungry and thirsty.**
- The bees will struggle to solve problems.

3. According to the article, what 'confused' the scientists?

**Accept an answer which references that when the scientists damaged the plants it didn't speed up the flowering as much as when the bees damaged the plants. e.g. Their man-made damage didn't speed up flowering as much as the bees' damage did.**

4. 'The researchers suggested that this was a tactic the bees had developed in order to create a ready supply of pollen and nectar when there wasn't enough around already.' Tick the description which best describes the term 'ready supply' as it is used in the following sentence.

- a lack of
- a plentiful amount**
- difficult to find
- eager but unprepared

5. Tick which headline does not summarise the story.

- Bees Nibble on Plants to Order Up Future Food
- Biting Bees Bother Plants into Blooming before They Want To
- Bees Speed Up Flowering on Purpose
- Bees Hibernate over Winter**

6. Summarise the key information in this article using 15 words or fewer.

**Accept a reasonable answer which includes the story's key information in 15 words or fewer, e.g. Bees bite holes in plants to make them flower earlier.**