

# Bean Plant Life Cycle

Beans are legumes: a type of plant with double-seamed pods, containing a single row of seeds.

1



## The Seed Germinates

The plant starts life as a seed. The runner bean plant seeds are round, hard and multicoloured, usually red or purple with black spots. The seed begins to germinate and a shoot emerges, usually after about 2 to 3 days.



2



## The Plant Grows

The seedling continues to grow and a stem and leaves appear. Roots continue to grow underground. Runner bean plants usually grow to around 3 metres.



3



## The Plant Flowers

The plant produces flowers. The runner bean plant usually has red petals, but they can also be white. You can usually see flowers after 6 to 8 weeks.



4



## The Flower Produces Fruit

The bean plant produces pods of beans, which is what we can pick and eat, usually after 12 to 14 weeks.



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5



### The Fruit Releases Seeds

The flower shrivels and seeds fall onto the ground.



6



### The Plant Dies

The final stage is when the plant dies. The seeds that are left produce new plants.

### Did you know?

- **Annuals** complete their life cycle in one year.
- **Biennials** complete their life cycle in two years.



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# Bean Plant Life Cycle Questions

1. How many rows of seeds do beans have?

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2. What does the plant start life as?

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3. When does the shoot pop up?

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4. What grows underground?

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5. What colour are the flowers on a runner bean plant usually?

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6. When can we eat the beans?

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7. What happens to the seeds when the flower shrivels?

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8. What is the last stage?

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# Bean Plant Life Cycle **Answers**

1. How many rows of seeds do beans have?

**Beans have a single row of seeds.**

2. What does the plant start life as?

**The plant starts life as a seed.**

3. When does the shoot pop up?

**A shoot usually pops up after about 2-3 days.**

4. What grows underground?

**Roots grow underground.**

5. What colour are the flowers on a runner bean plant usually?

**The runner bean plant usually has red petals.**

6. When can we eat the beans?

**We can eat the beans after 12 to 14 weeks.**

7. What happens to the seeds when the flower shrivels?

**When the flower shrivels the seeds fall onto the ground.**

8. What is the last stage?

**In the last stage the plant dies.**

# Bean Plant Life Cycle

Beans are legumes: a type of plant with double-seamed pods, containing a single row of seeds.

1



## The Seed Germinates

The plant starts life as a seed. The runner bean plant seeds are round, hard and multicoloured, usually red or purple with black spots. The seed begins to germinate and a shoot emerges, usually after about 2 to 3 days.



2



## The Plant Grows

The seedling continues to grow above ground and a stem appears. Roots continue to grow underground. A few leaves appear on the stem of the plant, which gets thicker and stronger. Runner bean plants usually grow to around 3 metres.



3



## The Plant Flowers

The plant produces flowers. The runner bean plant usually has red petals, but they can also be white. The plant waits to be pollinated. You will begin to see flowers on the bean plant after about 6 to 8 weeks.



4



## The Flower Produces Fruit

After the flowers are pollinated or fertilised, the bean plant produces pods of beans, which is what we can pick and eat, usually after about 12 to 14 weeks. There are around 40,000 varieties of bean.



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### The Fruit Releases Seeds

The flower shrivels and seeds from some of the pods fall onto the ground and settle. The hard shell of the seed helps to protect it.



6



### The Plant Dies

The final stage is when the plant dies. The seeds that are left germinate to produce new plants and the life cycle begins again.

### Did you know?

- **Annuals** complete their life cycle in one year.
- **Biennials** complete their life cycle in two years. In their first year they germinate and grow roots and leaves. In their second year they flower, set seeds and die.
- **Perennials** live for many years after germinating.



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# Bean Plant Life Cycle Questions

1. What type of plant are beans?

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2. What does the plant start life as?

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3. What colours are the runner bean plant seeds?

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4. What usually grows to around 3 metres?

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5. When do you begin to see flowers?

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6. After the flowers are pollinated, what happens?

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7. How many varieties of bean are there?

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8. How do the new plants start their life cycle?

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9. Which beans have you eaten before?

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# Bean Plant Life Cycle **Answers**

1. What type of plant are beans?

**Beans are legumes: a type of plant with double-seamed pods containing a single row of seeds.**

2. What does the plant start life as?

**The plant starts life as a seed.**

3. What colours are the runner bean plant seeds?

**The runner bean plant seeds are round, hard and multicoloured, usually red or purple with black spots.**

4. What usually grows to around 3 metres?

**Runner bean plants usually grow to around 3 metres.**

5. When do you begin to see flowers?

**You will begin to see flowers on the bean plant after about 6 to 8 weeks.**

6. After the flowers are pollinated, what happens?

**After the flowers are pollinated or fertilised, the bean plant produces pods of beans.**

7. How many varieties of bean are there?

**There are around 40,000 varieties of bean.**

8. How do the new plants start their life cycle?

**The flower shrivels and seeds from some of the pods fall onto the ground and settle. The seeds that are left germinate to produce new plants and the life cycle begins again.**

9. Which beans have you eaten before?

**Pupil's own response.**

# Bean Plant Life Cycle

Beans are legumes: a type of plant with double-seamed pods containing, a single row of seeds.

1

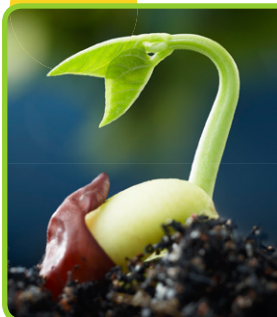


## The Seed Germinates

The plant starts life as a seed during the first stage of its life cycle. The seed is usually planted in soil or compost in spring, when it is warmer. The runner bean plant seeds are round, hard and multicoloured, usually red or purple with black spots. The seed begins to germinate and a shoot emerges, usually after about 2 to 3 days.



2



## The Plant Grows

The seedling continues to grow. Underground, roots also continue to grow to keep the plant rooted in the ground. A stem starts to grow above ground. A few leaves appear on the stem of the plant. The stem gets harder and thicker, making it stronger. Runner bean plants usually grow to around 3 metres.



3



## The Plant Flowers

During the third stage, the mature plant produces flowers. The runner bean plant usually has red petals, but they can also be white. The plant waits to be pollinated. Usually after between 6 to 8 weeks, you will begin to see flowers on the bean plant.



4



## The Flower Produces Fruit

After the flowers are pollinated or fertilised, plant seeds grow into a fruit or seedpod. The bean plant produces pods of beans, which is what we can pick and eat, usually after about 12 to 14 weeks. There are around 40,000 varieties of bean.



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### The Fruit Releases Seeds

Eventually the flower shrivels and seeds from the remaining pods fall onto the ground. Some of them settle and then begin the next plant's life cycle. The hard shell of the seed helps to protect it.



6



### The Plant Dies

The final stage of the bean plant life cycle is when the plant dies. The seeds that are left germinate to produce new plants and the life cycle begins again.

### Did you know?

- **Annuals** complete their life cycle in one year.
- **Biennials** complete their life cycle in two years. They germinate and grow roots and leaves in their first year. They flower, set seeds and die in their second year.
- **Perennials** live for many years after germinating.
- **Monocarpic** plants produce seeds only once, but may take years to become fully grown. Some even live to 60 years or more before they produce flowers and seeds.

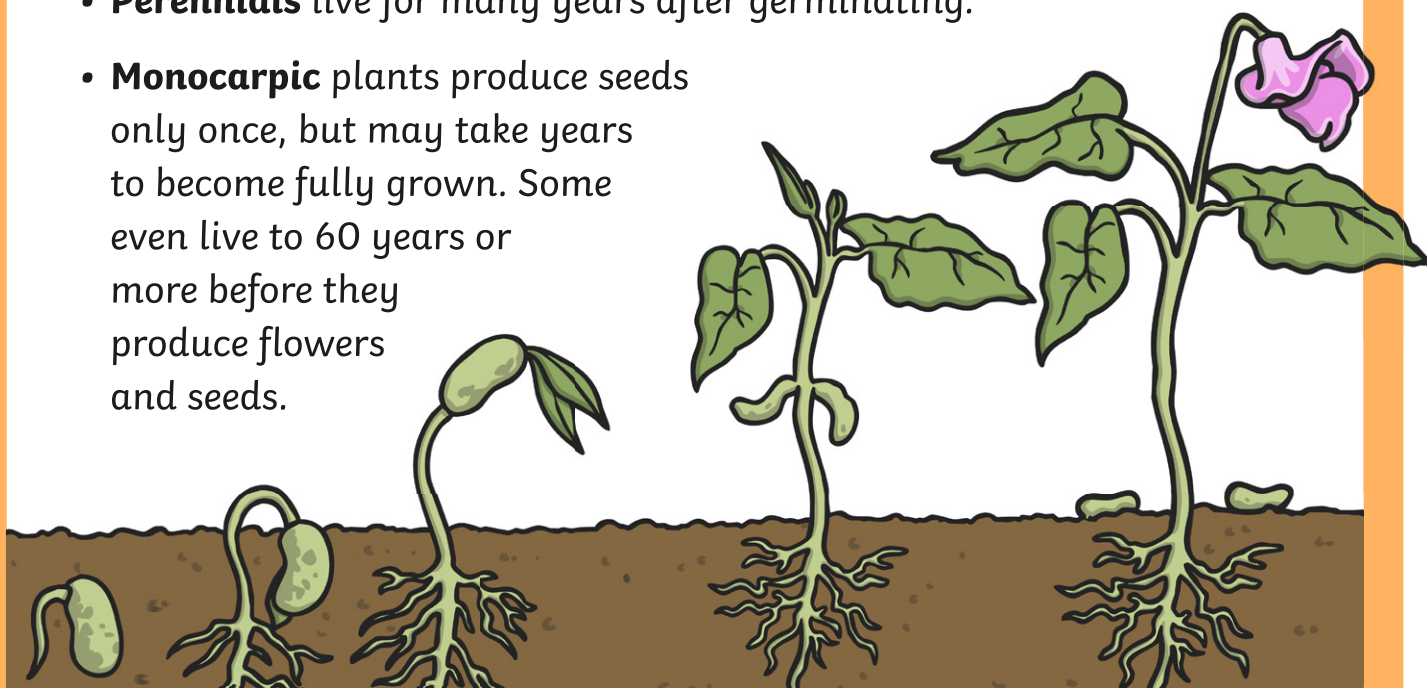


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# Bean Plant Life Cycle Questions

1. What are the first and last stages of the bean plant life cycle?  

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2. What does the plant start life as and what happens to it after 2-3 days?  

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3. What happens below ground and above ground in the second stage?  

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4. When do you begin to see flowers on the bean plant?  

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5. What do we eat on the plant and when?  

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6. Why do you think only some of the remaining pods settle on the ground?  

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7. What are biennials?  

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8. What type of plant produces seeds only once but takes years to grow?  

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9. What does it take 60 years for some plants to do?

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10. Which beans have you eaten before?

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# Bean Plant Life Cycle **Answers**

1. What are the first and last stages of the bean plant life cycle?

**The seed germinates and the plant dies.**

2. What does the plant start life as and what happens to it after 2-3 days?

**The plant starts life as a seed during the first stage of its life cycle. The seed begins to germinate and a shoot emerges usually after about 2-3 days.**

3. What happens below ground and above ground in the second stage?

**The seedling continues to grow. Underground, roots also continue to grow to keep the plant rooted in the ground. A stem starts to grow above ground. A few leaves appear on the stem of the plant.**

4. When do you begin to see flowers on the bean plant?

**After 6 to 8 weeks you will usually begin to see flowers on the bean plant.**

5. What do we eat on the plant and when?

**The bean plant produces pods of beans, which is what we can pick and eat, usually after about 12 to 14 weeks.**

6. Why do you think only some of the remaining pods settle on the ground?

**Pupil's own response.**

7. What are biennials?

**They are plants that complete their life cycle in two years. They germinate and grow roots and leaves in their first year. They flower, set seeds and die in their second year.**

8. What type of plant produces seeds only once but takes years to grow?

**Monocarpic plants produce seeds only once, but may take years to become fully grown.**

9. What does it take 60 years for some plants to do?

**Some even live to 60 years or more before they produce flowers and seeds.**

10. Which beans have you eaten before?

**Pupil's own response.**