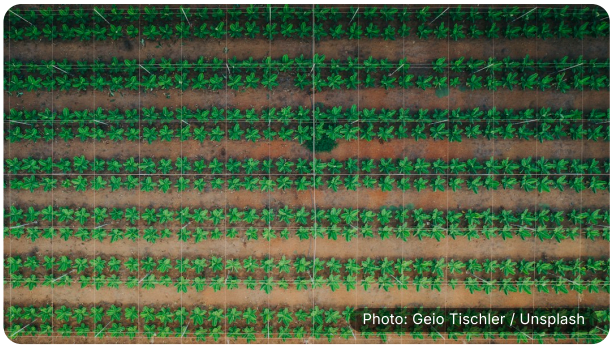
New breeding hope for Cavendish bananas

LEVEL B1


Photo: Geio Tischler / Unsplash

I. WARM-UP

1. What fruit do you buy most often? Why?
2. Have you ever tried a banana variety that was different?
3. How do diseases or weather affect food where you live?

II. KEY VOCABULARY

fertile
Able to produce seeds or offspring; can reproduce successfully.

collaboration
People or groups working together on a shared project.

breed
To produce new plants or animals by choosing parents to mix qualities.

resistant
Able to stop or fight a problem like a disease.

disease
An illness that harms a plant, animal, or person.

exporter
A country or company that sells goods to other countries.

approve
To officially say yes to something.

genome
All the genetic material in a plant or animal.

III. READING

Bananas are one of the world's favourite fruits, but climate change and new diseases put them at risk. Researchers say progress in breeding may protect future crops. Yelloway, a collaboration between Chiquita and KeyGene, says it has developed a fully fertile Cavendish banana.

This could allow cross-breeding to create new, resistant varieties. The world grows about 139m tonnes of bananas each year. Cavendish became dominant after the Gros Michel cultivar was devastated by Panama disease in the 1950s.

Now a dangerous strain, Tropical Race 4 (TR4), has spread from south-east Asia to Australia, Africa, the Middle East and Latin America. In December 2025 Ecuador, the largest exporter, confirmed TR4, threatening supplies and a staple food in the tropics. Teams are testing other routes.

At Queensland University of Technology, Prof James Dale's group made a GM Cavendish called QCAV-4, approved in Australia and New Zealand. Dr Jose De Vega at the Earlham Institute is exploring gene-editing of the Cavendish genome using immune genes from other cultivars. Because plantation bananas are clones, one disease can hit many farms at once.

Reading text adapted from reporting by **The Guardian***: "Have scientists finally found a way to save...". Original article linked at theenglishwire.com.*

IV. COMPREHENSION QUESTIONS

1. What did Yelloway announce about the Cavendish banana?
2. Which disease strain is threatening Cavendish bananas worldwide?
3. Which country reported TR4 in December 2025 and is the largest exporter?
4. What is the name of the GM Cavendish approved in Australia and New Zealand?
5. What method is Dr Jose De Vega exploring to help Cavendish bananas?

V. DISCUSSION

1. Would you eat a GM banana? Why or why not?
2. How could climate change affect food in your country?
3. Is relying on one crop variety a big risk? Explain.
4. What should scientists and companies do first to protect bananas?

VI. GRAMMAR FOCUS

Second conditional

Use it for unreal or unlikely situations now or in the future. Form: If + past simple, would + base verb.

"If TR4 reached more regions, supplies **would fall***."*

"If breeders found a resistant gene, prices **would stay** *stable."*

VII. GRAMMAR EXERCISE

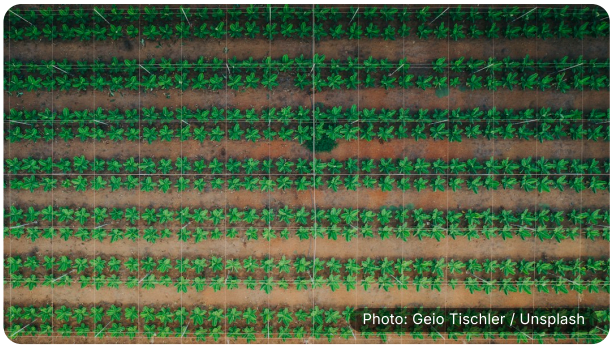
Complete each sentence using "would".

1. If TR4 hit more farms, exporters (raise) ___ alarms. _____
2. If plantations were diverse, disease (not/spread) ___ so fast. _____
3. If Yelloway shared seeds, breeders (test) ___ new crosses. _____
4. If QCAV-4 won approval worldwide, farmers (plant) ___ it widely. _____
5. If supplies fell, shoppers (choose) ___ other fruits. _____

Teacher's Notes

TEACHERS ONLY

These notes are designed to help you get the most out of this lesson. Please do not share this page with students.


Photo: Geio Tischler / Unsplash

I. LESSON GUIDE

- Timing: 8–10 minutes warm-up, 10 minutes vocabulary, 12–15 minutes reading, 8–10 minutes comprehension, 10 minutes grammar, 10 minutes discussion.
- Pre-teach or check: fertile, collaboration, breed, resistant, disease, exporter, approve, genome. Use pictures of banana varieties to support meaning.
- Run the reading in two passes: gist first (What is the main problem?); detail second (names, numbers, places). GM foods can feel personal, so start discussion in pairs and tell students they may talk about the news rather than their own diets.
- For differentiation, stronger students summarise each paragraph in one sentence; others highlight where each vocabulary item appears before answering questions.

II. DISCUSSION FACILITATION TIPS

1. Expect quick yes/no answers; push for conditions (price, labels, safety) and pair pro/cons to swap views.
2. Prompt concrete effects: droughts, floods, pests, prices, seasons; ask for one local example each.
3. Elicit the Cavendish/TR4 case from the text, then ask for a local parallel and an 'if...would...' risk.
4. Have groups rank two top actions (breeding, gene-editing, biosecurity, diversity) and justify their choice.

III. EXTENSION ACTIVITIES

Role-play: In groups, run a 5-minute Yelloway press briefing: one scientist gives a 60-second update; others ask three questions.

Writing: In pairs, write a 90-word explainer for shoppers about TR4 and QCAV-4, including one benefit and one concern.

IV. ANSWER KEY OVERVIEW

Comprehension questions: short factual answers from the text.

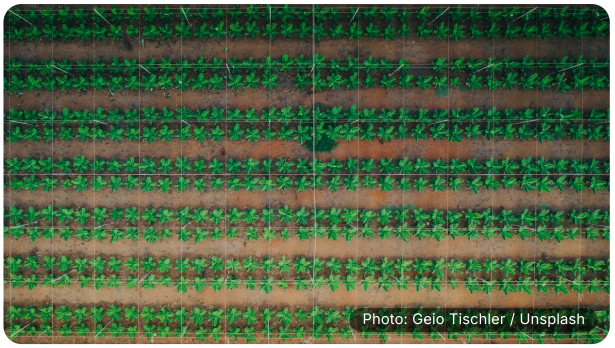
Grammar exercise: Second conditional

Discussion: open-ended. Accept any reasonable ideas supported by examples and reasoning.

Answer Key

TEACHERS ONLY

These answers are for teachers only. Please do not share this page with students.


Photo: Geio Tischler / Unsplash

IV. COMPREHENSION QUESTIONS

1. What did Yelloway announce about the Cavendish banana?
   It developed a fully fertile Cavendish to enable cross-breeding.
2. Which disease strain is threatening Cavendish bananas worldwide?
   Tropical Race 4 (TR4), a strain of Panama disease.
3. Which country reported TR4 in December 2025 and is the largest exporter?
   Ecuador.
4. What is the name of the GM Cavendish approved in Australia and New Zealand?
   QCAV-4.
5. What method is Dr Jose De Vega exploring to help Cavendish bananas?
   Gene-editing of the Cavendish genome using immune genes from other cultivars.

V. DISCUSSION

Open answers. Accept any reasonable ideas supported by examples and reasoning.

VI. GRAMMAR FOCUS

Key point: Use it for unreal or unlikely situations now or in the future. Form: If + past simple, would + base verb. (Examples constructed.)

> *"If TR4 reached more regions, supplies* **would fall***."*
> *"If breeders found a resistant gene, prices* **would stay** *stable."*

VII. GRAMMAR EXERCISE

Complete each sentence using "would".

1. If TR4 hit more farms, exporters ___ alarms. **would raise**
2. If plantations were diverse, disease ___ so fast. **wouldn't spread / would not spread**
3. If Yelloway shared seeds, breeders ___ new crosses. **would test**
4. If QCAV-4 won approval worldwide, farmers ___ it widely. **would plant**
5. If supplies fell, shoppers ___ other fruits. **would choose**