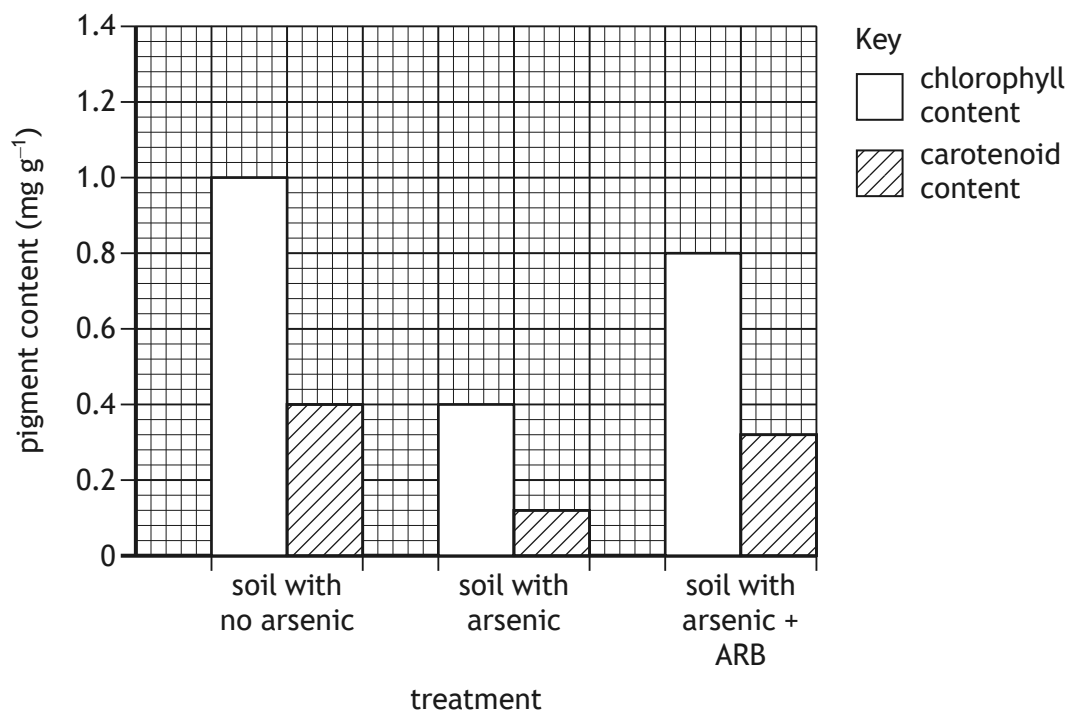


- A strain of bacteria, called ARB, breaks down arsenic in contaminated soils.

The results are shown in the graph.



- 1

Space for calculation

$$\frac{\text{soil with no arsenic}}{\text{soil with arsenic}} : \frac{\text{soil with arsenic}}{\text{soil with arsenic} + \text{ARB}}$$

- 1



9. (a) (continued)

- (iii) Explain why the presence of carotenoids increases the rate of photosynthesis.

2

- (b) Describe how the absorbed light leads to the production of ATP, which is required for carbon fixation.

2

[Turn over

