

1 Scientists use classification systems to study relationships between different groups of organisms.

(a) State the **two** parts of a scientific name used in the binomial system.

..... [1]

(b) Scientists discover a new species. It is multicellular, and has cell walls that are **not** made of cellulose. This new species feeds by releasing digestive enzymes into its surroundings and then absorbing the digested nutrients.

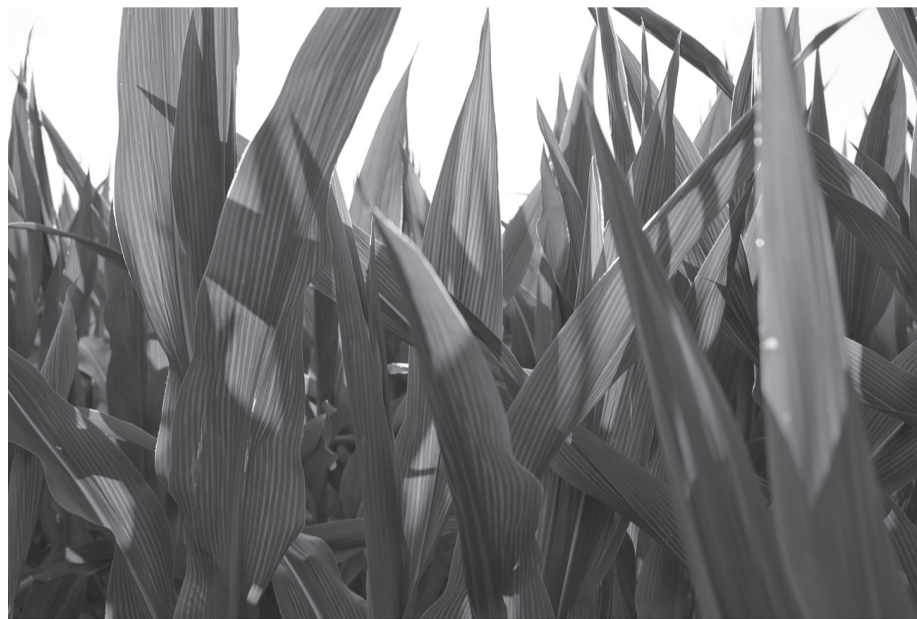
Identify the kingdom that the new species belongs to.

..... [1]

(c) Fig. 1.1 shows photographs of two different species, **X** and **Y**.



species **X**



species **Y**

Fig. 1.1

(i) Species **X** and **Y** belong to the plant kingdom.

State **two** structures found in cells from species **X** and **Y** that are **not** found in animal cells.

1

2

[2]

(ii) Using features visible in Fig. 1.1, identify the group in the plant kingdom that species **X** and **Y** belong to.

Explain your answer.

species **X**

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.....

.....

species **Y**.....

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..... [4]

(iii) Understanding evolutionary relationships between crop plants can help scientists and farmers improve agriculture.

Explain how a scientist could determine if different crop plant species share a recent ancestor (are closely related).

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..... [2]