

7 Sweet pea plants were originally found in Sicily and southern Italy.

They are used to investigate genetic inheritance and linkage.

The photograph shows a flowering sweet pea plant.



(Source: © Tim Gainey/Alamy Stock Photo)

Sweet pea plant flowers can be different colours and have a variety of pollen grain shapes.

(a) (i) How many of the following statements about a pollen grain are correct?

- contains a tube nucleus and a generative nucleus
- the generative nucleus divides by mitosis to form two female gametes
- can produce diploid gametes

(1)

- A** none
- B** one
- C** two
- D** three