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1

Plants can produce offspring (new plants) by sexual reproduction. Give the main points about offspring produced by sexual reproduction

[3 marks]

The joining (fusion) of male and female gametes or egg and sperm or egg and pollen grains. [1]

Two parents required / involved. [1]

Genetic material / DNA / chromosomes are mixed. [1]

Leads to variety or variation in the offspring. [1]

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2

Spider plants can reproduce asexually. Give the advantages of spider plants being able to reproduce asexually.

[2 marks]

Reproduce quickly [1]

Only one parent needed [1]

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3

Explain why the malarial parasite, *Plasmodium*, reproduces sexually in a mosquito and asexually in a human

[4 marks]

any 2 points for each type of reproduction:

mosquito moves from person to person [1]

so will have collected variety of parasites/*Plasmodium* (from these people) [1]

varied gametes fuse to produce varied offspring/parasite [1]

more chance of having resistance to (anti-malarial) medicines/drugs [1]

rapid growth in humans [1]

means more parasite collected at mosquitos next feed [1]

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4

Fungi have a tendency to reproduce asexually most of the time. However, there are situations where some fungi can also reproduce sexually. Describe how this occurs and explain why this occurs

[4 marks]

describe:

fungal spores are haploid/n [1]

these germinate into hyphae which are haploid/n [1]

when 2 hyphae meet [1]

they form a diploid cell [1]

explain:

increased variation in genes [1]

means fungi more likely to survive changes (in environment) [1]