

(Plant disease and plant defences)

Q1.(2018)

(oil) prevents aphids from
attaching to leaf **or** causes
aphids to slide off leaf
or
idea that oil may harm / kill the
aphid

Q2.(2018)

(plant / stem has) thorns

Q3.a)(2018)

C

(fungi / spores) blown by / in
direction of the wind
or
it's the closest plant (to A)

Q3.b)(2018)

any **one** from:

- spread rose bushes out
more
- remove any infected parts of
the plant
- use a fungicide

Q4.(2019)

any **one** from:

- spikes / points / thorns / sharp
 - poisonous / toxic
 - brightly coloured berries
 - leaves are tough / leathery
- or** leaves are hard to chew

Q5.a)(2020)

will stop animals / herbivores eating it

Q5.b)(2020)

chemical

Q6.a)(2020)

**thorns / spikes / spines / prickles
(to stop animals / herbivores eating it)**

Q6.b)(2020)

for respiration

to store as starch

Q6.c)(2020)

add Benedict's (solution / reagent to the liquid)

boil / heat

**(if glucose is present the blue)
colour changes to yellow / green
/ orange / brown / (brick)red**

Q6.d)(2020)

(nitrate ions are needed) to
make proteins / amino acids

which are needed for growth /
enzymes / new cells

Q6.e)(2020)

in / on the (soil) water

Q6.f)(2020)

dosage

toxicity

Q6.g)(2020)

placebos

Q7.(2021)

leaf

Q8.a)(2021)

y-axis labelled rate of
photosynthesis in arbitrary units

correct scale

all bars plotted correctly

all bars correctly labelled

Q8.b)(2021)

as the level of infection (with
TMV) increases, (the rate of)
photosynthesis decreases

Q8.c)(2021)

less chlorophyll

(so) less glucose / starch /
protein made

Q9.a)(2021)

(has) spikes / thorns / prickles

Q9.b)(2021)

chlorophyll / chloroplasts

Q9.c)(2021)

to allow it to photosynthesise
or
to make sugar / glucose /
carbohydrate / starch

Q9.d)(2021)

organ

Q9.e)(2021)

water / mineral ions

Q9.f)(2021)

phloem (tissue)

Q10.(2021)

chemical

Q11.(2022)

(spines) stop the plant being
eaten

or

(spines) prevent animals
damaging the plant